



Plant Inventory No. 210

Plant Materials Introduced in 2001
(Nos. 615162 - 628613)



Foreword

Plant Inventory No. 210 is the official listing of plant materials accepted into the U.S. National Plant Germplasm System (NPGS) between January 1 and December 31, 2001 and includes PI 615162 to PI 628613. The NPGS is managed by the U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS). The information on each accession is essentially the information provided with the plant material when it was obtained by the NPGS. The information on an accession in the NPGS database may change as additional knowledge is obtained.

The Germplasm Resources Information Network (<http://www.ars-grin.gov/npgs/index.html>) is the database for the NPGS and should be consulted for the current accession and evaluation information and to request germplasm.

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The following were developed by Dale L. Reeves, South Dakota State University, Dept. of Plant Science, Plant Sci. Bldg., Box 2140C, NPB 247, Brookings, South Dakota 57007, United States. Received 01/02/2001.

PI 615162. *Avena sativa* L.

Breeding. Pureline. SD 92057; NSGC 8680. Pedigree - Dal/Ab71-36//Wix2221-2/Noble/3/SD955/Kelsey/4/Settler/5/WI-14/Spear/3/SD 6422//Kelsey. Spring oat. Early maturity, very high test weight, high groat percentage, high protein, medium high oil, and medium beta glucan. Moderately susceptible to BYDV, moderately susceptible to smut, moderately resistant to crown rust.

PI 615163. *Avena sativa* L.

Breeding. Pureline. SD 92287; NSGC 8681. Pedigree - Dal/Nodaway 70//Moore/3/Settler//Wix2221-2/Moore/4/Troy. Spring oat. Mid-season maturity, very high test weight, medium lodging, high groat percentage, high protein, medium low oil, medium beta glucan. Moderately susceptible to crown rust, resistant to smut, and susceptible to stem rust.

The following were developed by Dale L. Reeves, South Dakota State University, Dept. of Plant Science, Plant Sci. Bldg., Box 2140C, NPB 247, Brookings, South Dakota 57007, United States; Deon D. Stuthman, University of Minnesota, Department of Agronomy, and Plant Genetics, St. Paul, Minnesota 55108, United States. Received 01/02/2001.

PI 615164. *Avena sativa* L.

Breeding. Pureline. SD 93311; NSGC 8682. Pedigree - Troy/PA8393-1761. Spring oat. Moderately late, good test weight, good straw strength, average groat percentage, high protein, low oil, and medium low beta glucan. Moderately resistant to crown rust, resistant to smut, and moderately susceptible to BYDV.

The following were developed by Dale L. Reeves, South Dakota State University, Dept. of Plant Science, Plant Sci. Bldg., Box 2140C, NPB 247, Brookings, South Dakota 57007, United States. Received 01/02/2001.

PI 615165. *Avena sativa* L.

Breeding. Pureline. SD 93018; NSGC 8683. Pedigree - Don/5/Dal/Allen//MN78142/4/Spear/Kelsey/3/Wix2221-2/Froker//ND770015. Spring oat. Very early maturity, excellent test weight, white seeds, stands well, high groat percentage, high protein, medium oil, and medium beta glucan. Intermediate in resistance to BYDV, 5% smut, and is moderately resistant to crown rust.

PI 615166. *Avena sativa* L.

Breeding. Pureline. SD 94152; NSGC 8684. Pedigree - IA681/Settler//Don/PI502958. Spring oat. Early midseason maturity, good test weight, red seed, moderate lodging, good groat percentage, medium high protein, low oil, and medium beta glucan. Susceptible to smut, resistant to crown rust, and moderately susceptible to BYDV.

PI 615167. *Avena sativa* L.

Breeding. Pureline. SD 94155; NSGC 8685. Pedigree - IA681/Settler//Don/PI502958. Spring oat. Very early maturity, red grain, good test weight, medium straw strength, good groat percentage,

medium protein, low oil, and medium beta glucan. Resistant to crown rust, susceptible to smut, and moderately susceptible to BYDV.

PI 615168. *Avena sativa* L.

Breeding. Pureline. SD 91228; NSGC 8686. Pedigree - WIX2221-2/Noble/3/Dal/Allen//MN78142. Spring oat. Medium maturity, very high test weight, moderate straw strength, high protein, moderately high groat percentage, medium high oil, and medium beta glucan. Moderately resistant to crown rust, resistant to smut, and moderately susceptible to BYDV.

PI 615169. *Avena sativa* L.

Breeding. Pureline. SD 89504; NSGC 8687. Pedigree - Settler/4/Nodaway 70/Dal//Moore/3/Dumont. Spring oat. Very high test weight, moderately late heading, medium straw strength, high groat percentage, high protein, medium oil, and medium beta glucan. Resistant to smut, resistant to moderately resistant to crown rust, and moderately susceptible to BYDV.

PI 615170. *Avena sativa* L.

Breeding. Pureline. SD 91008; NSGC 8688. Pedigree - Don/PI502958. Spring oat. High test weight, very early maturity, medium straw strength, medium groat percentage, high protein, medium oil, and medium beta glucan. Resistant to smut, susceptible to BYDV, and resistant to moderately resistant to crown rust.

The following were donated by N. Quat Ng, International Institute of Tropical Agriculture, Oyo Road, PMB 5320, Ibadan, Oyo, Nigeria. Received 09/28/1992.

PI 615171. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 7362; Grif 12070.

PI 615172. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 7363; Grif 12071.

PI 615173. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 7427; Grif 12072.

PI 615174. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 7859; Grif 12073.

PI 615175. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 11563; Grif 12074.

PI 615176. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 11730; Grif 12075.

PI 615177. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 13815; VCR 193-T-7; Grif 12171.

PI 615178. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 13816; VCR 204-T-2; Grif 12172.

PI 615179. *Vigna unguiculata* (L.) Walp. subsp. *unguiculata*
TVu 13817; VCR 206A-T-5; Grif 12173.

- PI 615180. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13818; Piteinba; Grif 12174.
- PI 615181. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13819; Ovebra Codeira; Grif 12175.
- PI 615182. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13823; AJ 01; Grif 12178.
- PI 615183. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13834; G-31; Grif 12187.
- PI 615184. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13840; G-39; Grif 12192.
- PI 615185. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13841; G-44; Grif 12193.
- PI 615186. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13843; G-53; Grif 12195.
- PI 615187. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13854; G-96; Grif 12206.
- PI 615188. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13874; G-176; Grif 12223.
- PI 615189. *Vigna unguiculata* (L.) Walp. **subsp. unguiculata**
TVu 13875; G-179; Grif 12224.

The following were developed by Arnel R. Hallauer, Iowa State University, Department of Agronomy, 1401 Agronomy Hall, Ames, Iowa 50011-1010, United States; Paul R. White, Iowa State University, Dept. of Agronomy, Ames, Iowa 50011, United States; Kendall R. Lamkey, USDA, ARS, Iowa State University, 1555 Agronomy, Ames, Iowa 50011, United States. Donated by Arnel R. Hallauer, Iowa State University, Department of Agronomy, 1401 Agronomy Hall, Ames, Iowa 50011-1010, United States. Received 12/21/2000.

- PI 615190. *Zea mays* L. **subsp. mays**
Breeding. Inbred. B115; 2854-1/01; 2000:154; Ames 26141. PL-304.
Pedigree - BS11(FR)C9-3227-9-1-1-1-1-1-1-1-1-1. Height medium with excellent plant health for moderate resistance to 1st and 2nd generations of European corn borer and fungal leaf diseases. Flowers 90 to 95 days after planting. Flint yellow kernels on red cobs. Exhibits good combining ability with lines derived from Iowa Stiff Stalk Synthetic.

The following were donated by Joshua Tao, 8922 Diamond Lake Lane, Houston, Texas 77083, United States. Received 09/05/1996.

- PI 615191. *Oryza sativa* L.
Cultivar. Pureline. "B5-XIEQINZAO"; SQ96-7; NSGC 6148. Developed in China.

- PI 615192. *Oryza sativa* L.**
Cultivar. Pureline. "YOU-I B"; SQ96-10; NSGC 6151. Developed in China.
- PI 615193. *Oryza sativa* L.**
Cultivar. Pureline. "JIN-23 B"; SQ96-11; NSGC 6152. Developed in China.
- PI 615194. *Oryza sativa* L.**
Cultivar. Pureline. "BO B"; SQ96-14; NSGC 6155. Developed in China.
- PI 615195. *Oryza sativa* L.**
Cultivar. Pureline. "R 647"; SQ96-15; NSGC 6156. Developed in China.
- PI 615196. *Oryza sativa* L.**
Cultivar. Pureline. "CE 64"; IR9761; SQ96-16; NSGC 6157. Developed in China. Pedigree - IR8464/IR36.

The following were donated by China National Rice Research Institute, Hangzhou, Zhejiang, China. Received 09/05/1996.

- PI 615197. *Oryza sativa* L.**
Cultivar. Pureline. "NANJING 11"; SQ96-23; NSGC 6164. Developed in China. Pedigree - Liang Zuo/Ai Zi Zhong Shan Xuan = DW333/DW334.
- PI 615198. *Oryza sativa* L.**
Cultivar. Pureline. "CHUNJIANGZAO NO. 1"; SQ96-25; NSGC 6166. Developed in China.
- PI 615199. *Oryza sativa* L.**
Cultivar. Pureline. "LUHONGZAO"; SQ96-30; NSGC 6171. Developed in China.
- PI 615200. *Oryza sativa* L.**
Cultivar. Pureline. "ZHONG 156"; SQ96-35; NSGC 6176. Developed in China.
- PI 615201. *Oryza sativa* L.**
Cultivar. Pureline. "ZHONGYOUWAN NO. 1"; SQ96-36; NSGC 6177. Developed in China.
- PI 615202. *Oryza sativa* L.**
Cultivar. Pureline. "ZHONG 86-44"; SQ96-37; NSGC 6178. Developed in China. Pedigree - Zhefu 802/Guang Lu Ai 4//HA79317-7.
- PI 615203. *Oryza sativa* L.**
Cultivar. Pureline. "ZHONGYOUZAO NO. 5"; SQ96-39; NSGC 6180. Developed in China.
- PI 615204. *Oryza sativa* L.**
Cultivar. Pureline. "ZHONG 413"; SQ96-40; NSGC 6181. Developed in China.
- PI 615205. *Oryza sativa* L.**
Cultivar. Pureline. "JING 185-7"; SQ96-43; NSGC 6184. Developed in China.
- PI 615206. *Oryza sativa* L.**
Cultivar. Pureline. "MINKEZAO NO. 22"; SQ96-46; NSGC 6187. Developed in China.

- PI 615207. *Oryza sativa* L.**
Cultivar. Pureline. "LONGQING NO. 3"; SQ96-49; NSGC 6190. Developed in China.
- PI 615208. *Oryza sativa* L.**
Cultivar. Pureline. "LUDAO"; GSOR 311506; SQ96-50; NSGC 6191. Developed in China. Upland rice.
- PI 615209. *Oryza sativa* L.**
Cultivar. Pureline. "BENCHANGKUIFU NO. 3"; SQ96-51; NSGC 6192. Developed in China.
- PI 615210. *Oryza sativa* L.**
Cultivar. Pureline. "SHANGYU 394"; SQ96-55; NSGC 6196. Developed in China.
- PI 615211. *Oryza sativa* L.**
Cultivar. Pureline. "W48-3"; SQ96-59; NSGC 6200. Developed in China.
- PI 615212. *Oryza sativa* L.**
Cultivar. Pureline. "XIFENG 43"; SQ96-60; NSGC 6201. Developed in China.
- PI 615213. *Oryza sativa* L.**
Cultivar. Pureline. "XIANDAN"; SQ96-62; NSGC 6203. Developed in China.
- PI 615214. *Oryza sativa* L.**
Cultivar. Pureline. "DANWANBAO 24"; SQ96-66; NSGC 6207. Developed in China.

The following were donated by Chengdu Institute of Biology, Academia Sinica, P.O. Box 416, Chengdu, Sichuan, China. Received 09/05/1996.

- PI 615215. *Oryza sativa* L.**
Cultivar. Pureline. "MPH 501"; SQ96-75; NSGC 6216. Developed in China.
- PI 615216. *Oryza sativa* L.**
Cultivar. Pureline. "97B"; SQ96-79; NSGC 6220. Developed in China.
- PI 615217. *Oryza sativa* L.**
Cultivar. Pureline. "II-32B"; SQ96-80; NSGC 6221. Developed in China.
- PI 615218. *Oryza sativa* L.**
Cultivar. Pureline. "ZAO 402"; SQ96-81; NSGC 6222. Developed in China.
- PI 615219. *Oryza sativa* L.**
Cultivar. Pureline. "CHAOYANG NO. 1"; SQ96-92; NSGC 6233. Developed in China.
- PI 615220. *Oryza sativa* L.**
Cultivar. Pureline. "VRH 701"; SQ96-95; NSGC 6236. Developed in China.
- PI 615221. *Oryza sativa* L.**
Cultivar. Pureline. "SHENG H411"; SQ96-101; NSGC 6242. Developed in China.

PI 615222. *Oryza sativa* L.

Cultivar. Pureline. "ZHONGBAI NO. 4"; SQ96-104; NSGC 6245. Developed in China. Pedigree - Kiho/Nanjing 15.

The following were donated by Sichuan Agricultural University, Rice Research Institute, Wenjiang, Sichuan 611130, China. Received 09/05/1996.

PI 615223. *Oryza sativa* L.

Cultivar. Pureline. "DUOYINGLINSHUIDAO"; SQ96-120; NSGC 6261. Developed in China.

The following were donated by Joshua Tao, 8922 Diamond Lake Lane, Houston, Texas 77083, United States. Received 09/05/1996.

PI 615224. *Oryza sativa* L.

Breeding. Pureline. GL 2; SQ96-169; NSGC 6310. Developed in China.

PI 615225. *Oryza sativa* L.

Breeding. Pureline. 493; SQ96-172; NSGC 6313. Developed in China.

PI 615226. *Oryza sativa* L.

Breeding. Pureline. 4429-3; SQ96-176; NSGC 6317. Developed in China.

The following were donated by Institute for Plant Production & Qualification, Research Centre for Agrobotany, Tapioszele, Pest H-2766, Hungary. Received 10/26/1995.

PI 615227. *Triticum aestivum* L. subsp. *aestivum*

Landrace. 28749; RCAT004795; Nagyatadi TF. Collected in Hungary. Latitude 47° 0' N. Longitude 20° 0' E.

The following were collected by Zhejiang Agricultural University, Hangzhou, Zhejiang, China. Donated by Chia-Tsang Liu, University of Idaho, Ag. Coop. Extension, 1214 Joseph St., Moscow, Idaho 83843, United States. Received 09/21/1998.

PI 615228. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. "ZHE PA TA MAI"; NSGC 7386. Collected in Zhejiang, China. Collected in Japan.

The following were collected by Bundesamt fur Agrarbiologie, Referat Genbank, Wieningerstr. 8, Linz, Upper Austria A-4020, Austria. Donated by Heinrich Grausgruber, BOKU - Univ. of Natural Resources & Applied Life Sciences, Dept. of Applied Plant Sciences & Plant Biotechnology, Institute of Agronomy & Plant Breeding, Wien, Vienna A-1180, Austria. Received 01/27/1997.

PI 615229. *Triticum aestivum* L. subsp. *aestivum*

Landrace. BVAL 213064; Bartweizen; NSGC 7389. Collected in Upper Austria, Austria. Latitude 47° 55' 48" N. Longitude 13° 31' 12" E. Elevation 575 m. Strass/Attergau. Resistant to scab in Austria.

PI 615230. *Triticum aestivum* L. subsp. *aestivum*

Landrace. BVAL 213123; Sipbachzeller; NSGC 7390. Collected in Upper Austria, Austria. Latitude 48° 4' N. Longitude 12° 58' E. Elevation 480 m. Ibm. Resistant to scab in Austria.

PI 615231. *Triticum aestivum* L. subsp. *aestivum*

Landrace. BVAL 213142; Sipbachzeller; NSGC 7391. Collected in Styria, Austria. Latitude 47° 33' N. Longitude 14° 12' E. Elevation 1024 m. Ennstal. Resistant to scab in Austria.

PI 615232. *Triticum aestivum* L. subsp. *aestivum*

Landrace. BVAL 213149; Sipbachzeller; NSGC 7392. Collected in Upper Austria, Austria. Latitude 47° 53' N. Longitude 14° 43' E. Elevation 602 m. Gaflenz. Resistant to scab in Austria.

The following were donated by Denis de Froidmont, Centre de Recherches Agronomiques, Station d'Amelioration des Plantes, 4 rue du Bordia, Gembloux, Namur B-5030, Belgium. Received 11/20/1997.

PI 615233. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0002; 111; NSGC 7393. Collected in Luxembourg, Belgium. Latitude 50° 5' N. Longitude 5° 8' E. Elevation 228 m. Halma.

PI 615234. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0003; 115; NSGC 7394. Collected in Namur, Belgium. Latitude 50° 7' N. Longitude 5° 9' E. Elevation 228 m. Ave et Auffe.

PI 615235. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0004; 118; NSGC 7395. Collected in Luxembourg, Belgium. Latitude 50° 5' N. Longitude 5° 8' E. Elevation 228 m. Halma.

PI 615236. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0005; 122; NSGC 7396. Collected in Luxembourg, Belgium. Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.

PI 615237. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0006; 123.1; NSGC 7397. Collected in Luxembourg, Belgium. Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.

PI 615238. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0007; 123.2; NSGC 7398. Collected in Luxembourg, Belgium. Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.

PI 615239. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0008; 128.1; NSGC 7399. Collected in Luxembourg, Belgium. Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.

PI 615240. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0009; 128.2; NSGC 7400. Collected in Luxembourg, Belgium. Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.

PI 615241. *Triticum aestivum* subsp. *spelta* (L.) Thell.

Landrace. GBXTS-0010; 128.3; NSGC 7401. Collected in Luxembourg, Belgium. Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.

- PI 615242. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0011; 129; NSGC 7402. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m.
Transinne.
- PI 615243. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0012; 130.1; NSGC 7403. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615244. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0013; 130.2; NSGC 7404. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615245. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0014; 131; NSGC 7405. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615246. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0015; 133; NSGC 7406. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 10' E. Elevation 407 m. Redu.
- PI 615247. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0016; 134; NSGC 7407. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 10' E. Elevation 407 m. Redu.
- PI 615248. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0017; NSGC 7408. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 10' E. Elevation 407 m. Redu.
- PI 615249. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0018; 136; NSGC 7409. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 10' E. Elevation 407 m. Redu.
- PI 615250. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0019; 138; NSGC 7410. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 10' E. Elevation 407 m. Redu.
- PI 615251. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0020; 140; NSGC 7411. Collected in Namur, Belgium.
Latitude 50° 7' N. Longitude 5° 9' E. Elevation 228 m. Ave et Auffe.
- PI 615252. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0021; 144; NSGC 7412. Collected in Namur, Belgium.
Latitude 50° 7' N. Longitude 5° 9' E. Elevation 228 m. Ave et Auffe.
- PI 615253. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0022; 150; NSGC 7413. Collected in Luxembourg, Belgium.
Latitude 50° 5' N. Longitude 5° 8' E. Elevation 228 m. Halma.
- PI 615254. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0023; 153; NSGC 7414. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615255. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0024; 154.1; NSGC 7415. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.

- PI 615256. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0025; 154.2; NSGC 7416. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615257. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0026; 154.3; NSGC 7417. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615258. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0027; 154.4; NSGC 7418. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615259. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0028; 154.5; NSGC 7419. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615260. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0029; 154.6; NSGC 7420. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615261. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0030; 155; NSGC 7421. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615262. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0031; 158; NSGC 7422. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615263. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0032; 159; NSGC 7423. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 12' E. Elevation 407 m. Transinne.
- PI 615264. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0033; 160; NSGC 7424. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 10' E. Elevation 407 m. Redu.
- PI 615265. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0034; 203.1; NSGC 7425. Collected in Luxembourg, Belgium.
Latitude 50° 14' N. Longitude 5° 25' E. Elevation 348 m. A. Marenne
Thilessart.
- PI 615266. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0035; 203.2; NSGC 7426. Collected in Luxembourg, Belgium.
Latitude 50° 14' N. Longitude 5° 25' E. Elevation 348 m. A. Marenne
Thilessart.
- PI 615267. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0036; 207; NSGC 7427. Collected in Luxembourg, Belgium.
Latitude 49° 54' N. Longitude 5° 8' E. Elevation 409 m. Paliseul
- PI 615268. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0037; 208.1; NSGC 7428. Collected in Luxembourg, Belgium.
Latitude 49° 54' N. Longitude 5° 8' E. Elevation 409 m. Paliseul.
- PI 615269. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0038; 208.2; NSGC 7429. Collected in Luxembourg, Belgium.
Latitude 49° 54' N. Longitude 5° 8' E. Elevation 409 m. Paliseul.

- PI 615270. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0039; 208.3; NSGC 7430. Collected in Luxembourg, Belgium.
Latitude 49° 54' N. Longitude 5° 8' E. Elevation 409 m. Paliseul.
- PI 615271. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0040; 214.1; NSGC 7431. Collected in Luxembourg, Belgium.
Latitude 50° 17' N. Longitude 5° 31' E. Elevation 277 m. Soy.
- PI 615272. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0041; 214.2; NSGC 7432. Collected in Luxembourg, Belgium.
Latitude 50° 17' N. Longitude 5° 31' E. Elevation 277 m. Soy.
- PI 615273. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0042; 217; NSGC 7433. Collected in Belgium. E. Baltazard.
- PI 615274. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0043; 223; NSGC 7434. Collected in Luxembourg, Belgium.
Latitude 50° 5' N. Longitude 5° 8' E. Elevation 228 m. Halma.
- PI 615275. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0044; 226; NSGC 7435. Collected in Luxembourg, Belgium.
Latitude 49° 54' N. Longitude 5° 8' E. Elevation 409 m. Paliseul.
- PI 615276. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0045; 228; NSGC 7436. Collected in Luxembourg, Belgium.
Latitude 49° 54' N. Longitude 5° 8' E. Elevation 409 m. region
of Paliseul.
- PI 615277. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0046; 229; NSGC 7437. Collected in Luxembourg, Belgium.
Latitude 49° 58' N. Longitude 5° 13' E. Elevation 407 m. Villance.
- PI 615278. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0047; 234; NSGC 7438. Collected in Namur, Belgium.
Latitude 50° 15' N. Longitude 5° 0' E. Elevation 199 m. Foy Notre Dame.
- PI 615279. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0048; 238; NSGC 7439. Collected in Namur, Belgium.
Latitude 50° 15' N. Longitude 5° 6' E. Elevation 261 m.
Corbion-Leignon.
- PI 615280. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0049; 239; NSGC 7440. Collected in Namur, Belgium.
Latitude 50° 13' N. Longitude 5° 3' E. Elevation 242 m. Custinne.
- PI 615281. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0050; 240; NSGC 7441. Collected in Namur, Belgium.
Latitude 50° 10' N. Longitude 5° 13' E. Elevation 234 m. region
of Rochefort.
- PI 615282. *Triticum aestivum* subsp. *spelta* (L.) Thell.
Landrace. GBXTS-0051f; 244; NSGC 7442. Collected in Namur, Belgium.
Latitude 50° 13' N. Longitude 5° 7' E. Elevation 242 m. Chevetogne.

- PI 615283. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0052; 253; NSGC 7443. Collected in Namur, Belgium.
Latitude 50° 13' N. Longitude 5° 8' E. Elevation 242 m. Montgauthier.
- PI 615284. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0053; 258.1; NSGC 7444. Collected in Antwerp, Belgium.
Latitude 51° 2' N. Longitude 4° 28' E. Elevation 8 m. Malinnes.
- PI 615285. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0054; 258.2; NSGC 7445. Collected in Antwerp, Belgium.
Latitude 51° 2' N. Longitude 4° 28' E. Elevation 8 m. Malinnes.
- PI 615286. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0055; 259; NSGC 7446. Collected in Luxembourg, Belgium.
Latitude 49° 48' N. Longitude 5° 30' E. Elevation 416 m. Lavaux.
- PI 615287. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0056; 260.1; NSGC 7447. Collected in Luxembourg, Belgium.
Latitude 49° 55' N. Longitude 5° 27' E. Elevation 475 m. Renaumont-Sainte Marie.
- PI 615288. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0057; 260.2; NSGC 7448. Collected in Luxembourg, Belgium.
Latitude 49° 55' N. Longitude 5° 27' E. Elevation 475 m. Renaumont-Sainte Marie.
- PI 615289. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0058; 262; NSGC 7449. Collected in Namur, Belgium.
Latitude 50° 18' N. Longitude 5° 6' E. Elevation 261 m. vicinity of Ciney.
- PI 615290. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0059; 263; NSGC 7450. Collected in Namur, Belgium.
Latitude 50° 20' N. Longitude 5° 11' E. Elevation 317 m. Morin Achet.
- PI 615291. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0060; 264; NSGC 7451. Collected in Namur, Belgium.
Latitude 50° 15' N. Longitude 5° 6' E. Elevation 261 m. Corbion-Leignon.
- PI 615292. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0061; 265; NSGC 7452. Collected in Namur, Belgium.
Latitude 50° 18' N. Longitude 5° 2' E. Elevation 246 m. Sovet.
- PI 615293. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0062; 267.1; NSGC 7453. Collected in Luxembourg, Belgium.
Latitude 49° 47' N. Longitude 5° 37' E. Elevation 445 m. Anlier.
- PI 615294. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0063; 267.2; NSGC 7454. Collected in Luxembourg, Belgium.
Latitude 49° 47' N. Longitude 5° 37' E. Elevation 445 m. Anlier.
- PI 615295. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0064; 268; NSGC 7455. Collected in Namur, Belgium.
Latitude 50° 16' N. Longitude 4° 30' E. Elevation 236 m. Fraire.

- PI 615296. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0065; 269; NSGC 7456. Collected in Namur, Belgium.
Latitude 50° 11' N. Longitude 4° 37' E. Elevation 276 m.
Merlemont.
- PI 615297. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0066; 270; NSGC 7457. Collected in Namur, Belgium.
Latitude 50° 18' N. Longitude 4° 28' E. Elevation 236 m. Somzee.
- PI 615298. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0067; 271; NSGC 7458. Collected in Namur, Belgium.
Latitude 49° 54' N. Longitude 5° 1' E. Elevation 352 m. Oizy.
- PI 615299. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0068; 272; NSGC 7459. Collected in Namur, Belgium.
Latitude 50° 16' N. Longitude 5° 7' E. Elevation 261 m. Leignon.
- PI 615300. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0069; 273; NSGC 7460. Collected in Namur, Belgium.
Latitude 50° 7' N. Longitude 5° 13' E. Elevation 225 m.
Belvaux-Wavreille.
- PI 615301. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0070; 274; NSGC 7461. Collected in Luxembourg, Belgium.
Latitude 49° 52' N. Longitude 5° 13' E. Elevation 433 m.
Glaumont.
- PI 615302. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0071; 275.1; NSGC 7462. Collected in Luxembourg, Belgium.
Latitude 49° 52' N. Longitude 5° 13' E. Elevation 433 m. Glaumont.
- PI 615303. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0072; 275.2; NSGC 7463. Collected in Luxembourg, Belgium.
Latitude 49° 52' N. Longitude 5° 13' E. Elevation 433 m. Glaumont.
- PI 615304. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0073; 276; NSGC 7464. Collected in Namur, Belgium.
Latitude 49° 54' N. Longitude 5° 2' E. Elevation 352 m. Baillamont.
- PI 615305. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0074; 278; NSGC 7465. Collected in Namur, Belgium.
Latitude 49° 54' N. Longitude 5° 2' E. Elevation 352 m. Baillamont.
- PI 615306. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0075; 280; NSGC 7466. Collected in Namur, Belgium.
Latitude 50° 4' N. Longitude 4° 25' E. Elevation 249 m. Aublain.
- PI 615307. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0076; 283; NSGC 7467. Collected in Namur, Belgium.
Latitude 50° 14' N. Longitude 4° 41' E. Elevation 220 m. Rosee.
- PI 615308. *Triticum aestivum* subsp. *spelta* (L.) Thell.**
Landrace. GBXTS-0077; 284; NSGC 7468. Collected in Namur, Belgium.
Latitude 50° 13' N. Longitude 4° 32' E. Elevation 270 m. Jamagne.

- PI 615309. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Landrace. GBXTS-0078; 285; NSGC 7469. Collected in Luxembourg, Belgium.
Latitude 49° 58' N. Longitude 5° 13' E. Elevation 407 m. Villance.
- PI 615310. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Landrace. GBXTS-0079; 266.1; NSGC 7470. Collected in Luxembourg, Belgium.
Latitude 50° 7' N. Longitude 5° 33' E. Elevation 399 m. Erneuville.
- PI 615311. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Landrace. GBXTS-0080; 289; NSGC 7471. Collected in Luxembourg, Belgium.
Latitude 49° 48' N. Longitude 5° 28' E. Elevation 416 m.
Lavaux-Assenois.
- PI 615312. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0081; 290; NSGC 7472. Collected in Belgium. Lignee 73,
Armon. Gerard a Baude.
- PI 615313. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0082; 291; NSGC 7473. Collected in Belgium. Lignee 73,
Rene Hattert a Baude.
- PI 615314. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0083; 292; NSGC 7474. Collected in Belgium. Charles
Burnotte a Baude.
- PI 615315. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0084; 293; NSGC 7475. Collected in Belgium. Leon
Collard - Harin.
- PI 615316. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0085; 294; NSGC 7476. Collected in Belgium. Leon
Georges.
- PI 615317. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0086; 295; NSGC 7477. Collected in Belgium. Charles
Burnotte.
- PI 615318. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0087; 296; NSGC 7478. Collected in Belgium. Jacques
Collin a Halleu.
- PI 615319. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Cultivated. GBXTS-0088; 297; NSGC 7479. Collected in Belgium. Jacques
Collin a Halleu.
- PI 615320. *Triticum aestivum* subsp. *spelta*** (L.) Thell.
Landrace. GBXTS-0089; 298; NSGC 7480. Collected in Luxembourg, Belgium.
Latitude 50° 0' N. Longitude 5° 43' E. Elevation 508 m. Bastogne.

The following were collected by Chinese Academy of Agricultural Sciences, Institute of Crop Germplasm Resources, Crop Introduction Laboratory, Beijing, Beijing 100081, China. Donated by Richard Wang, USDA-ARS, Forage & Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 04/30/1996.

- PI 615321. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "BAI MONG MAI"; Jing 217; NSGC 7586. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. High protein.
- PI 615322. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "LIANG MAI"; Jing 1467; NSGC 7587. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. High protein.
- PI 615323. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "KER YI 26"; Jing 2918; NSGC 7589. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. Salt tolerant.
- PI 615324. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "ZHONG ZHO 634"; Jing 3555; NSGC 7590. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. Stress tolerant.
- PI 615325. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "YUAN DONG 847"; Jing 3915; NSGC 7591. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. Stress tolerant.
- PI 615326. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "FONG KONG 8"; Jing 3467; NSGC 7592. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. High yield.
- PI 615327. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "DONG SHIEH 1"; Jing 3610; NSGC 7595. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. High yield.
- PI 615328. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "BEIJING 837"; Jing 3556; NSGC 7596. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. Pedigree - Fang-Kang
7/Dongxie 3. High yield.
- PI 615329. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "PING YI 79-5049"; Jing 3823; NSGC 7598. Collected in China.
Latitude 35° 0' N. Longitude 105° 0' E. Early maturity.
- PI 615330. *Triticum aestivum* L. subsp. *aestivum***
Cultivar. "JING HER 90 JIAN 4"; Jing 4682; NSGC 7600. Collected in
China. Latitude 35° 0' N. Longitude 105° 0' E. Early maturity.

The following were donated by Institute for Agrobotany, Kulsomezo 15,
Tapioszele, Pest 2766, Hungary. Received 06/10/1999.

- PI 615331. *Secale cereale* L. subsp. *cereale***
Landrace. RCAT013928; NSGC 7694. Collected in Bacs-Kiskun, Hungary.
Latitude 46° 41' N. Longitude 19° 41' E. Elevation 107 m. Bugac.
- PI 615332. *Secale sylvestre* Host**
Wild. RCAT042415; NSGC 7698. Collected in Pest, Hungary. Latitude
47° 31' N. Longitude 19° 33' E. Elevation 155 m. Dany.
- PI 615333. *Secale sylvestre* Host**
Wild. RCAT042416; NSGC 7699. Collected in Pest, Hungary. Latitude
47° 22' N. Longitude 19° 51' E. Elevation 101 m. Farnos.

- PI 615334. *Secale sylvestre* Host**
Wild. RCAT042417; NSGC 7700. Collected in Pest, Hungary. Latitude 47° 38' N. Longitude 19° 36' E. Elevation 105 m. Tura.
- PI 615335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000120; NSGC 7701. Collected in Bekes, Hungary. Latitude 47° 7' N. Longitude 21° 13' E. Elevation 96 m. Fuzesgyarmat.
- PI 615336. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000132; NSGC 7702. Collected in Szabolcs-Szatmar, Hungary. Latitude 48° 2' N. Longitude 21° 14' E. Elevation 100 m. Tiszadada.
- PI 615337. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000396; NSGC 7703. Collected in Szolnok, Hungary. Latitude 47° 17' N. Longitude 20° 27' E. Elevation 85 m. Nagykoru.
- PI 615338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000403; NSGC 7704. Collected in Hajdu-Bihar, Hungary. Latitude 47° 1' N. Longitude 21° 32' E. Elevation 94 m. Komadi.
- PI 615339. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000411; NSGC 7705. Collected in Veszprem, Hungary. Latitude 47° 0' N. Longitude 17° 26' E. Elevation 191 m. Nyirad.
- PI 615340. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000038; NSGC 7706. Collected in Zala, Hungary. Latitude 46° 58' N. Longitude 17° 1' E. Elevation 156 m. Zalaber.
- PI 615341. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000051; NSGC 7707. Collected in Borsod-Abauj-Zemplen, Hungary. Latitude 48° 0' N. Longitude 20° 55' E. Elevation 105 m. Onod.
- PI 615342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000052; NSGC 7708. Collected in Borsod-Abauj-Zemplen, Hungary. Latitude 47° 58' N. Longitude 20° 55' E. Elevation 105 m. Sajoszoged.
- PI 615343. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000055; NSGC 7709. Collected in Pest, Hungary. Latitude 48° 1' N. Longitude 18° 54' E. Elevation 345 m. Kemence.
- PI 615344. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000057; NSGC 7710. Collected in Csongrad, Hungary. Latitude 46° 35' N. Longitude 20° 21' E. Elevation 86 m. Derekegyhaz.
- PI 615345. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000059; NSGC 7711. Collected in Csongrad, Hungary. Latitude 46° 39' N. Longitude 20° 16' E. Elevation 85 m. Szentcs.
- PI 615346. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000060; NSGC 7712. Collected in Szabolcs-Szatmar, Hungary. Latitude 48° 2' N. Longitude 22° 36' E. Elevation 113 m. Komoro.
- PI 615347. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000062; NSGC 7713. Collected in Heves, Hungary. Latitude 47° 38' N. Longitude 20° 35' E. Elevation 76 m. Ujlorincfalva.

- PI 615348. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000064; NSGC 7714. Collected in Heves, Hungary. Latitude 47° 57' N. Longitude 20° 29' E. Elevation 244 m. Noszvaj.
- PI 615349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000065; NSGC 7715. Collected in Heves, Hungary. Latitude 48° 9' N. Longitude 20° 26' E. Elevation 512 m. Nagyvisnyo.
- PI 615350. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000066; NSGC 7716. Collected in Heves, Hungary. Latitude 48° 2' N. Longitude 20° 6' E. Elevation 199 m. Erdokovesd.
- PI 615351. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000067; NSGC 7717. Collected in Heves, Hungary. Latitude 47° 58' N. Longitude 20° 5' E. Elevation 199 m. Matraderecske.
- PI 615352. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000069; NSGC 7718. Collected in Heves, Hungary. Latitude 47° 58' N. Longitude 20° 10' E. Elevation 331 m. Szajla.
- PI 615353. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000070; NSGC 7719. Collected in Heves, Hungary. Latitude 47° 37' N. Longitude 20° 27' E. Elevation 80 m. Komlo.
- PI 615354. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000071; NSGC 7720. Collected in Heves, Hungary. Latitude 47° 43' N. Longitude 20° 29' E. Elevation 85 m. Meztarkany.
- PI 615355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000140; NSGC 7721. Collected in Borsod-Abauj-Zemplen, Hungary. Latitude 47° 50' N. Longitude 21° 1' E. Elevation 92 m. Tiszatarjan.
- PI 615356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000248; NSGC 7722. Collected in Fejer, Hungary. Latitude 47° 23' N. Longitude 18° 27' E. Elevation 175 m. Csakvar.
- PI 615357. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000394; NSGC 7723. Collected in Borsod-Abauj-Zemplen, Hungary. Latitude 48° 18' N. Longitude 21° 32' E. Elevation 143 m. Bodrogolaszi.
- PI 615358. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000397; NSGC 7724. Collected in Veszprem, Hungary. Latitude 47° 8' N. Longitude 17° 22' E. Elevation 160 m. Somlovasarhely.
- PI 615359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000398; NSGC 7725. Collected in Nograd, Hungary. Latitude 48° 4' N. Longitude 19° 3' E. Elevation 155 m. Dregelypalank.
- PI 615360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000399; NSGC 7726. Collected in Nograd, Hungary. Latitude 47° 59' N. Longitude 19° 7' E. Elevation 199 m. Borsosbereny.
- PI 615361. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT000400; NSGC 7727. Collected in Borsod-Abauj-Zemplen,

Hungary. Latitude 48° 21' N. Longitude 21° 56' E. Elevation 88 m. Nagyrozvagy.

PI 615362. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000401; NSGC 7728. Collected in Pest, Hungary. Latitude 47° 10' N. Longitude 19° 37' E. Elevation 117 m. Mikebuda.

PI 615363. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000404; NSGC 7729. Collected in Bacs-Kiskun, Hungary. Latitude 46° 8' N. Longitude 18° 53' E. Elevation 91 m. Szeremle.

PI 615364. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000405; NSGC 7730. Collected in Szabolcs-Szatmar, Hungary. Latitude 47° 52' N. Longitude 22° 1' E. Elevation 141 m. Pocspetri.

PI 615365. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000406; NSGC 7731. Collected in Somogy, Hungary. Latitude 46° 38' N. Longitude 17° 45' E. Elevation 193 m. Gamas.

PI 615366. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000408; NSGC 7732. Collected in Borsod-Abauj-Zemplen, Hungary. Latitude 47° 57' N. Longitude 20° 49' E. Elevation 97 m. Emod.

PI 615367. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000409; NSGC 7733. Collected in Gyor-Sopron, Hungary. Latitude 47° 34' N. Longitude 17° 43' E. Elevation 135 m. Ecs.

PI 615368. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000430; NSGC 7734. Collected in Szolnok, Hungary. Latitude 47° 18' N. Longitude 20° 4' E. Elevation 69 m. Ujszasz.

PI 615369. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000491; NSGC 7735. Collected in Gyor-Sopron, Hungary. Latitude 47° 55' N. Longitude 17° 25' E. Elevation 128 m. Kisbodak.

PI 615370. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT000412; NSGC 7736. Collected in Csongrad, Hungary. Latitude 46° 15' N. Longitude 20° 9' E. Elevation 81 m. Szeged (Szoreg).

PI 615371. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT001801; NSGC 7737. Collected in Szolnok, Hungary. Latitude 47° 28' N. Longitude 20° 43' E. Elevation 76 m. Jaszkiser.

PI 615372. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT003312; NSGC 7738. Collected in Csongrad, Hungary. Latitude 46° 36' N. Longitude 20° 17' E. Elevation 85 m. Csanytelek.

PI 615373. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT003313; NSGC 7739. Collected in Szabolcs-Szatmar, Hungary. Latitude 48° 6' N. Longitude 22° 46' E. Elevation 120 m. Milota.

PI 615374. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT003334; NSGC 7740. Collected in Bekes, Hungary. Latitude 47° 12' N. Longitude 21° 0' E. Elevation 88 m. Bucsa.

- PI 615375. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT003418; NSGC 7741. Collected in Bekes, Hungary. Latitude 46° 38' N. Longitude 21° 22' E. Elevation 85 m. Gyulavari.
- PI 615376. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT003768; NSGC 7742. Collected in Borsod-Abauj-Zemplen, Hungary. Latitude 48° 20' N. Longitude 21° 59' E. Elevation 106 m. Ricse.
- PI 615377. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT003782; NSGC 7743. Collected in Heves, Hungary. Latitude 47° 45' N. Longitude 20° 15' E. Elevation 154 m. Kompolt.
- PI 615378. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT003784; NSGC 7744. Collected in Csongrad, Hungary. Latitude 46° 11' N. Longitude 20° 26' E. Elevation 81 m. Kiszombor.
- PI 615379. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT003865; NSGC 7745. Collected in Bekes, Hungary. Latitude 46° 56' N. Longitude 20° 50' E. Elevation 91 m. Gyoma.
- PI 615380. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT003874; NSGC 7746. Collected in Szolnok, Hungary. Latitude 47° 19' N. Longitude 20° 55' E. Elevation 81 m. Karcag.
- PI 615381. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT003906; NSGC 7747. Collected in Bekes, Hungary. Latitude 46° 55' N. Longitude 21° 16' E. Elevation 90 m. Veszto.
- PI 615382. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT004126; NSGC 7748. Collected in Zala, Hungary. Latitude 46° 33' N. Longitude 17° 3' E. Elevation 194 m. Nagybakonak.
- PI 615383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT002105; NSGC 7749. Collected in Somogy, Hungary. Latitude 46° 4' N. Longitude 17° 26' E. Elevation 133 m. Csokonyavisonta.
- PI 615384. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT002116; NSGC 7750. Collected in Pest, Hungary. Latitude 47° 22' N. Longitude 19° 53' E. Elevation 101 m. Taposzele.
- PI 615385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT004129; NSGC 7751. Collected in Nograd, Hungary. Latitude 47° 56' N. Longitude 19° 10' E. Elevation 225 m. Bank.
- PI 615386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT004555; NSGC 7752. Collected in Bacs-Kiskun, Hungary. Latitude 46° 54' N. Longitude 19° 41' E. Elevation 109 m. Kecskemet.
- PI 615387. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT004556; NSGC 7753. Collected in Nograd, Hungary. Latitude 47° 6' N. Longitude 19° 6' E. Elevation 90 m. Retsag.
- PI 615388. *Triticum aestivum* L. subsp. *aestivum***
Landrace. RCAT004759; NSGC 7754. Collected in Csongrad, Hungary. Latitude 46° 18' N. Longitude 20° 44' E. Elevation 86 m. Pitvaros.

PI 615389. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT004795; NSGC 7755. Collected in Somogy, Hungary. Latitude 46° 14' N. Longitude 17° 22' E. Elevation 137 m. Nagyatad.

PI 615390. *Triticum aestivum* L. subsp. *aestivum*

Landrace. RCAT004797; NSGC 7756. Collected in Fejer, Hungary. Latitude 47° 19' N. Longitude 18° 47' E. Elevation 121 m. Martonvasar.

The following were developed by Dermot P. Coyne, University of Nebraska, Department of Horticulture, 386 Plant Sciences Hall, Lincoln, Nebraska 68583-0724, United States. Received 06/27/2000.

PI 615391. *Phaseolus vulgaris* L.

Cultivar. Pureline. "EMERSON"; Nebr. BW-68-45; W6 22536. Pedigree - Great Northern 1140 / PI 165078. Large seeded (0.40-0.43 g/seed) of medium maturity (91-96 days), with a viny plant habit (type III). Resistant to all strains of bacterial wilt (*Curtobacterium flaccumfacies*), moderately resistant to common bacterial blight (*Xanthomonas campestris*), and resistant to bean common mosaic virus.

PI 615392. *Phaseolus vulgaris* L.

Cultivar. Pureline. "HARRIS"; W6 22537. Pedigree - Derived by bulking 100 moderately early plants in a field of Great Northern Valley. High yielding with a prostrate viny growth habit (type III), medium seed size (36-38 g/100 seed), and moderately late maturity (91-95 days). Possesses multiple disease resistance to common blight (*Xanthomonas campestris*), halo blight (*Pseudomonas syringae* pv. *phaseolicola*), brown spot (*Pseudomonas syringae* pv. *syringae*), and to bean common mosaic virus. Susceptible to rust (*Uromyces appendiculatus*) and to white mold (*Sclerotinia sclerotiorum*) due to dense canopy.

PI 615393. *Phaseolus vulgaris* L.

Cultivar. Pureline. "MONUMENT"; W6 22539. Pedigree - Aurora/3/small white #533*/small white #53/Meader #1. Released 2000. Small white dry bean (0.15 g/seed) with an upright and porous plant habit (type IIa), and early maturity (85-90 days). Resistant to some strains of rust (*Uromyces appendiculatus*), and to bean common mosaic virus, and has good avoidance to white mold (*Sclerotinia sclerotiorum*) due to upright plant habit. Susceptible to common blight (*Xanthomonas campestris*).

PI 615394. *Phaseolus vulgaris* L.

Cultivar. Pureline. "VALLEY"; W6 22542. Pedigree - GN 1140 / GN Nebr. #1 sel. 27. High yielding with prostrate very viny growth habit (type III), with medium seed size (30-38 g/100 seed), and moderately late maturity (93-100 days). Possesses multiple disease resistance to the bacterial pathogens common blight (*Xanthomonas campestris*), halo blight (*Pseudomonas syringae* pv. *phaseolicola*), brown spot (*Pseudomonas syringae* pv. *syringae*), and to bean common mosaic virus.

The following were donated by Waller Flowerseed Company, P.O. Box 935, 4th and Obispo Streets, Guadalupe, California 93434, United States. Received 1962.

PI 615395. *Lupinus mexicanus* Cerv. ex Lag.
Cultivar. NSL 15513; GIANT KING W-F FORMULA BLEND.

PI 615396. *Lupinus mexicanus* Cerv. ex Lag.
Cultivar. NSL 15514; GIANT KING BLUE.

PI 615397. *Lupinus mexicanus* Cerv. ex Lag.
Cultivar. NSL 15515; GIANT KING HELIOTROPE.

PI 615398. *Lupinus mexicanus* Cerv. ex Lag.
Cultivar. NSL 15516; GIANT KING SKY BLUE.

PI 615399. *Lupinus mexicanus* Cerv. ex Lag.
Cultivar. NSL 15517; GIANT KING WHITE.

The following were donated by University of Florida, Florida Agr. Exp. Sta., Department of Agronomy, Gainesville, Florida 32611, United States. Received 1963.

PI 615400. *Lupinus angustifolius* L.
Cultivar. NSL 26482; RITCHEY.

The following were donated by University of Arkansas, Arkansas Agr. Exp. Sta., Fayetteville, Arkansas 72701, United States. Received 1967.

PI 615401. *Lupinus albus* L.
Cultivated. NSL 56365; LINE NO 2.

PI 615402. *Lupinus albus* L.
Cultivated. NSL 56366; LINE NO 3.

PI 615403. *Lupinus albus* L.
Cultivated. NSL 56367; LINE NO 5.

PI 615404. *Lupinus albus* L.
Cultivated. NSL 56368; LINE NO 6.

PI 615405. *Lupinus albus* L.
Cultivated. NSL 56369; LINE NO 7.

PI 615406. *Lupinus albus* L.
Cultivated. NSL 56370; LINE NO 8.

The following were donated by University of Florida, Florida Agr. Exp. Sta., Department of Agronomy, Gainesville, Florida 32611, United States. Received 1969.

PI 615407. *Lupinus angustifolius* L.
Cultivar. "FROST"; REG NO 3; NSL 73047; NSL 90524. CV-3.

The following were donated by John D. Miller, USDA, ARS, Coastal Plain Experiment Station, Agronomy Dept., Tifton, Georgia 31793, United States. Received 1980.

PI 615408. *Lupinus angustifolius* L.
Cultivar. "TIFBLUE-78"; NSL 109787. CV-5.

PI 615409. *Lupinus albus* L.
Cultivar. "TIFWHITE-78"; NSL 109788. CV-6.

PI 615410. *Lupinus angustifolius* L.
Breeding. WH-1; NSL 117761. GP-1.

PI 615411. *Lupinus hispanicus* Boiss. & Reut.
Breeding. BICOLOR-1; NSL 166420. GP-2.

The following were donated by Susan Wallace, Bok Tower Gardens, P. O. Box 3810, Lake Wales, Florida 33859-3810, United States. Received 04/19/1990.

PI 615412 CPCG. *Lupinus westianus* Small var. *westianus*
Wild. LW 068909 S.

The following were collected by Teresa Kotlinska, Research Institute of Vegetable Crops, Plant Genetic Resources Laboratory, Konstytucji 3 Maja 1/3, Skierniewice, Skierniewice 96-100, Poland; Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States; Stelios Samaras, Center of Macedonia & Thrace, Greek Gene Bank, Thessaloniki, Macedonia 570 01, Greece. Received 09/15/1999.

PI 615413. *Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdc.
Uncertain. G046; GPS 133; Grif 14277. Collected 08/1999 in Greece. Latitude 39° 30' 39" N. Longitude 20° 26' 14" E. Elevation 180 m. Thesprotia Pref. in Neohori; seed from Lefteris Kotsis dealer. Phil Simon will supply passport data to the NPGS sites at some later date. (Date now: 10/01/1999).

The following were donated by Institute for Plant Production & Qualification, Research Centre for Agrobotany, Tapioszele, Pest H-2766, Hungary. Received 10/26/1995.

PI 615414. X *Triticosecale* sp.
Cultivar. "TRITICALE 64"; 14918; RCAT013681. Developed in Hungary.

The following were collected by John F. Swenson, 245 Hawthorn Avenue, Glencoe, Illinois 60022, United States; Leonard M. Pike, Texas A&M University, Department of Horticulture, College Station, Texas 77843-2119, United States; Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States. Received 09/06/1989.

PI 615415. *Allium sativum* L.
Cultivar. "MAISKI"; U025; W6 1860. Collected in Turkmenistan. Latitude 58° 20' N. Longitude 38° E. Ashkhabad, Turkmen.

The following were collected by I.G. Levichev. Donated by John F. Swenson, 245 Hawthorn Avenue, Glencoe, Illinois 60022, United States; Leonard M. Pike, Texas A&M University, Department of Horticulture, College Station, Texas 77843-2119, United States; Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States. Received 09/06/1989.

PI 615416. *Allium sativum* L.

Wild. U079; W6 1890. Collected in Uzbekistan. Latitude 70° 20' N. Longitude 41° 20' E. Elevation 1300 m. Eastern Tien Shan, Chatkal, Uzbek.

The following were donated by John F. Swenson, 245 Hawthorn Avenue, Glencoe, Illinois 60022, United States. Received 11/09/1989.

PI 615417. *Allium sativum* L.

Cultivar. #36; W6 2557; GOMECAI.

PI 615418. *Allium sativum* L.

Cultivar. #33; W6 2558; ACHAIAMI.

The following were donated by Central Siberian Botanical Gardens, Academy of Sciences of USSR, Siberian Branch, Novosibirsk, Novosibirsk 630090, Russian Federation. Received 05/14/1990.

PI 615419. *Allium sativum* L.

Wild. W6 4264. Collected in Siberia, Former Soviet Union.

PI 615420. *Allium sativum* L.

Cultivar. "SYBIRSKY"; W6 4285. Collected in Siberia, Former Soviet Union.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 07/12/1990.

PI 615421. *Allium sativum* L.

Cultivated. WJK-PRC-4; W6 4462. Collected 05/21/1990 in Beijing, China. Latitude 39° 56' N. Longitude 116° 24' E. Local outdoor market, Beijing, near the Ministry of Agriculture Building. Bulbs large, white with reddish neck area.

The following were donated by J. De Andalucia, CIDA, Alameda del Obisposin, Apdo 240, Cordoba, Cordoba 14070, Spain. Received 11/20/1991.

PI 615422. *Allium sativum* L.

Cultivar. "BLANCO DE HUELMA ZAMORA I"; W6 8407.

PI 615423. *Allium sativum* L.

Cultivar. "BLANCO DE HUELMA ZAMORA-2"; W6 8408.

PI 615424. Allium sativum L.

Cultivar. "FINO DE CHINCKO AJOFRIN"; W6 8412.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/24/1992.

PI 615425. Allium sativum L.

Wild. B92-18; No. 115; W6 10731. Collected 06/26/1992 in Razgrad, Bulgaria. Latitude 43° 31' N. Longitude 26° 33' E. Mortogonovo Village. Local landrace.

PI 615426. Allium sativum L.

Wild. B92-19; No. 116; W6 10732. Collected 06/26/1992 in Shumen, Bulgaria. Latitude 43° 20' N. Longitude 26° 14' E. Town of Popovo. Local landrace.

PI 615427. Allium sativum L.

Wild. B92-20; No. 117; W6 10733. Collected 06/26/1992 in Plovdiv, Bulgaria. Latitude 42° 13' N. Longitude 24° 38' E. Voysil Village. Local landrace.

PI 615428. Allium sativum L.

Cultivated. B92-97; W6 10738. Collected 07/01/1992 in Bulgaria. Latitude 43° 23' N. Longitude 28° 5' E. Behind Institute of Wheat and Sunflower (IWS) Guest house, Albena. Local landrace.

The following were collected by James McFerson, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456, United States. Donated by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Received 09/01/1995.

PI 615429. Allium sativum L.

Cultivated. Jian Shang Dong; W6 17260. Collected 10/19/1994 in New York, United States. Commonly grown cultivar in province. Bulbs from commercial stock.

The following were developed by INRA, France. Donated by Francisco Mansilla Sousa, Centro de Investigacion y desarrollo agr, Alameda del obispa s/n, Apartado 240, Cordoba, Cordoba 14071, Spain. Received 10/23/1989.

PI 615430. Allium sativum L.

Cultivar. W6 1962; GERMIDOUR. Collected in France.

The following were donated by Horace Shaw, Sweetwater Farms, Route 1, Box 27, Weston, Oregon 97886, United States. Received 10/18/1993.

PI 615431. Allium sativum L.

Cultivar. W6 12911; ASIAN TEMPEST. Collected in Korea, South.

The following were donated by Greg Lutofsky, Greg Anthony's Alliums, 2025 136th Avenue E., Sumner, Washington 98390, United States. Received 09/15/1994.

PI 615432. *Allium sativum* L.

Wild. W6 16275. Collected in Vietnam.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuvëli, Agricultural University of Tirana, Dept. of Agronomy, Rr."Myslym Shyri", Tirana, Albania. Received 09/1996.

PI 615433. *Allium sativum* L.

Cultivated. Al 020; W6 18618. Collected 08/25/1996 in Albania. Latitude 40° 32' 44" N. Longitude 19° 25' 6" E. Elevation 20 m. Vlore, market. Local variety. Fruit size small with many cloves.

PI 615434. *Allium sativum* L.

Cultivated. Al 078; W6 18643. Collected 08/28/1996 in Albania. Latitude 40° 37' 11" N. Longitude 20° 46' 56" E. Elevation 320 m. Korce, market. Local variety.

The following were donated by Truong Trong Ngon, Can Tho University, Department of Crop Sciences, 3/2 Street, Can Tho, Vietnam. Received 01/29/2001.

PI 615435. *Glycine max* (L.) Merr.

Cultivated. O mon 3; SY0101001.

PI 615436. *Glycine max* (L.) Merr.

Cultivated. A 79; SY0101002.

PI 615437. *Glycine max* (L.) Merr.

Cultivated. A 9; SY0101003.

PI 615438. *Glycine max* (L.) Merr.

Cultivated. Dong phu 1; SY0101004.

PI 615439. *Glycine max* (L.) Merr.

Cultivated. Dau Ghep; SY0101005.

PI 615440. *Glycine max* (L.) Merr.

Cultivated. Den van quan; SY0101006.

PI 615441. *Glycine max* (L.) Merr.

Cultivated. Ba Vi; SY0101007.

PI 615442. *Glycine max* (L.) Merr.

Cultivated. Ban thang; SY0101008.

PI 615443. *Glycine max* (L.) Merr.

Cultivated. Bac luong; SY0101009.

- PI 615444. *Glycine max* (L.) Merr.
Cultivated. Hong linh b; SY0101010.
- PI 615445. *Glycine max* (L.) Merr.
Cultivated. Hi long 3; SY0101011.
- PI 615446. *Glycine max* (L.) Merr.
Cultivated. Hoang mai; SY0101012.
- PI 615447. *Glycine max* (L.) Merr.
Cultivated. Mat den; SY0101013.
- PI 615448. *Glycine max* (L.) Merr.
Cultivated. MTD 455-3; SY0101014. Pedigree - DH.4/MTD.329.
- PI 615449. *Glycine max* (L.) Merr.
Cultivated. MTD 6; SY0101015.
- PI 615450. *Glycine max* (L.) Merr.
Cultivated. Nam can 4; SY0101016.
- PI 615451. *Glycine max* (L.) Merr.
Cultivated. Nam Vang-1; SY0101017.

Unknown source. Received 01/29/2001.

- PI 615451 A. *Glycine max* (L.) Merr.
Cultivated. Pureline. Nam vang 1.

Unknown source. Received 01/29/2001.

- PI 615451 B. *Glycine max* (L.) Merr.
Cultivated. Pureline. (Nam vang 1).

The following were donated by Truong Trong Ngon, Can Tho University, Department of Crop Sciences, 3/2 Street, Can Tho, Vietnam. Received 01/29/2001.

- PI 615452. *Glycine max* (L.) Merr.
Cultivated. Nam vang 2; SY0101018.
- PI 615453. *Glycine max* (L.) Merr.
Cultivated. Nau Tua Chua; SY0101019.
- PI 615454. *Glycine max* (L.) Merr.
Cultivated. Ngoc dong; SY0101020.
- PI 615455. *Glycine max* (L.) Merr.
Cultivated. Santa Maria; SY0101021.
- PI 615456. *Glycine max* (L.) Merr.
Cultivated. No. 82; SY0101022.

- PI 615457. **Glycine max** (L.) Merr.
Cultivated. No. 92; SY0101023.
- PI 615458. **Glycine max** (L.) Merr.
Cultivated. Tan uyen 2; SY0101024.
- PI 615459. **Glycine max** (L.) Merr.
Cultivated. Tho Xuan; SY0101025.
- PI 615460. **Glycine max** (L.) Merr.
Cultivated. Tra Linh; SY0101026.
- PI 615461. **Glycine max** (L.) Merr.
Cultivated. Trung quoc; SY0101027.
- PI 615462. **Glycine max** (L.) Merr.
Cultivated. V 70; SY0101028.
- PI 615463. **Glycine max** (L.) Merr.
Cultivated. Den Trung Quoc; SY0101029.
- PI 615464. **Glycine max** (L.) Merr.
Cultivated. Song boi; SY0101030.
- PI 615465. **Glycine max** (L.) Merr.
Cultivated. Den Cao Bang; SY0101031.
- PI 615466. **Glycine max** (L.) Merr.
Cultivated. Viet khai 1; SY0101032.
- PI 615467. **Glycine max** (L.) Merr.
Cultivated. Vang luc khu; SY0101033.
- PI 615468. **Glycine max** (L.) Merr.
Cultivated. Phi Hai; SY0101034.
- PI 615469. **Glycine max** (L.) Merr.
Cultivated. No. 144; SY0101035.
- PI 615470. **Glycine max** (L.) Merr.
Cultivated. No. 81; SY0101036.
- PI 615471. **Glycine max** (L.) Merr.
Cultivated. Xanh Cao Bang; SY0101037.
- PI 615471 A. **Glycine max** (L.) Merr.
Cultivated. Pureline. Xanh cao bang; (SY0101037).
- PI 615471 B. **Glycine max** (L.) Merr.
Cultivated. Pureline. (Xanh cao bang); (SY0101037).
- PI 615472. **Glycine max** (L.) Merr.
Cultivated. Thanh linh; SY0101038.
- PI 615473. **Glycine max** (L.) Merr.
Cultivated. T 4; SY0101039.

- PI 615474. **Glycine max** (L.) Merr.
Cultivated. Viet khai 5; SY0101040.
- PI 615475. **Glycine max** (L.) Merr.
Cultivated. Minh hai; SY0101041.
- PI 615476. **Glycine max** (L.) Merr.
Cultivated. No. 1; SY0101042.
- PI 615477. **Glycine max** (L.) Merr.
Cultivated. No. 290; SY0101043.
- PI 615478. **Glycine max** (L.) Merr.
Cultivated. T 105; SY0101044.
- PI 615479. **Glycine max** (L.) Merr.
Cultivated. Hau Giang 1; SY0101045.
- PI 615480. **Glycine max** (L.) Merr.
Cultivated. Xanh Ha Bac; SY0101046.
- PI 615481. **Glycine max** (L.) Merr.
Cultivated. Tu quy xanh; SY0101047.
- PI 615482. **Glycine max** (L.) Merr.
Cultivated. MTD 65; SY0101048. Pedigree - DH.4/Santa Maria.
- PI 615483. **Glycine max** (L.) Merr.
Cultivated. T 87; SY0101049.
- PI 615484. **Glycine max** (L.) Merr.
Cultivated. MTD 176; SY0101050. Pedigree - DH.4/CES 97-13.
- PI 615485. **Glycine max** (L.) Merr.
Cultivated. Xuan loc 2; SY0101051.
- PI 615486. **Glycine max** (L.) Merr.
Cultivated. Can Tho 4; SY0101052.
- PI 615487. **Glycine max** (L.) Merr.
Cultivated. Xanh tien dai; SY0101053.
- PI 615488. **Glycine max** (L.) Merr.
Cultivated. Ha lang; SY0101054.
- PI 615489. **Glycine max** (L.) Merr.
Cultivated. Thoung pham; SY0101055.
- PI 615490. **Glycine max** (L.) Merr.
Cultivated. Vang Moc Chau; SY0101056.
- PI 615491. **Glycine max** (L.) Merr.
Cultivated. Viet khai 7; SY0101057.
- PI 615492. **Glycine max** (L.) Merr.
Cultivated. Cao Qua Dia hoa tim; SY0101058.

- PI 615493. **Glycine max** (L.) Merr.
Cultivated. Trung quoc mat nau; SY0101059.
- PI 615494. **Glycine max** (L.) Merr.
Cultivated. Ba thang te nau; SY0101060.
- PI 615495. **Glycine max** (L.) Merr.
Cultivated. Vang pu nhung; SY0101061.
- PI 615496. **Glycine max** (L.) Merr.
Cultivated. Mo qua kien thuy hat nho long vang; SY0101062.
- PI 615497. **Glycine max** (L.) Merr.
Cultivated. Vang nguyen duong; SY0101063.
- PI 615498. **Glycine max** (L.) Merr.
Cultivated. Vang muong khuong; SY0101064.
- PI 615499. **Glycine max** (L.) Merr.
Cultivated. Van den tu liem; SY0101065.
- PI 615500. **Glycine max** (L.) Merr.
Cultivated. Chi thao long trang; SY0101066.
- PI 615501. **Glycine max** (L.) Merr.
Cultivated. Bach hoa vang; SY0101067.
- PI 615502. **Glycine max** (L.) Merr.
Cultivated. Mat trang binh dinh; SY0101068.
- PI 615503. **Glycine max** (L.) Merr.
Cultivated. Da trau bong tim; SY0101069.
- PI 615504. **Glycine max** (L.) Merr.
Cultivated. Nguu mao hong; SY0101070.
- PI 615505. **Glycine max** (L.) Merr.
Cultivated. Ban doc a hat vang; SY0101071.
- PI 615506. **Glycine max** (L.) Merr.
Cultivated. Mat hong Long Khanh; SY0101072.
- PI 615507. **Glycine max** (L.) Merr.
Cultivated. Ban doc hat den; SY0101073.
- PI 615508. **Glycine max** (L.) Merr.
Cultivated. Ban doc a hat den; SY0101074.
- PI 615509. **Glycine max** (L.) Merr.
Cultivated. Mo Qua Kien Thuy hat nho; SY0101075.

Unknown source. Received 01/29/2001.

- PI 615509 A. **Glycine max** (L.) Merr.
Cultivated. Pureline. Mo qua kien thuy hat nho.

Unknown source. Received 01/29/2001.

PI 615509 B. Glycine max (L.) Merr.
Cultivated. Pureline. (Mo qua kien thuy hat nho).

The following were donated by Truong Trong Ngon, Can Tho University, Department of Crop Sciences, 3/2 Street, Can Tho, Vietnam. Received 01/29/2001.

PI 615510. Glycine max (L.) Merr.
Cultivated. Hat to 2 vu te nau; SY0101076.

Unknown source. Received 01/29/2001.

PI 615510 A. Glycine max (L.) Merr.
Cultivated. Pureline.

Unknown source. Received 01/29/2001.

PI 615510 B. Glycine max (L.) Merr.
Cultivated. Pureline.

Unknown source. Received 01/29/2001.

PI 615510 C. Glycine max (L.) Merr.
Cultivated. Pureline.

The following were donated by Truong Trong Ngon, Can Tho University, Department of Crop Sciences, 3/2 Street, Can Tho, Vietnam. Received 01/29/2001.

PI 615511. Glycine max (L.) Merr.
Cultivated. Nam vang No. 4; SY0101077.

PI 615512. Glycine max (L.) Merr.
Cultivated. Soc Trang 1; ST #1; SY0101078.

PI 615513. Glycine max (L.) Merr.
Cultivated. Soc Trang 2; ST #2; SY0101079.

PI 615514. Glycine max (L.) Merr.
Cultivated. Soc Trang 3; ST #3; SY0101080.

PI 615515. Glycine max (L.) Merr.
Cultivated. Soc Trang 4; ST #4; SY0101081.

PI 615516. Glycine max (L.) Merr.
Cultivated. Soc Trang 5; ST #5; SY0101082.

PI 615517. Glycine max (L.) Merr.
Cultivated. Soc Trang 6; ST #6; SY0101083.

The following were donated by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 01/29/2001.

PI 615518. *Glycine max* (L.) Merr.
Cultivated. SY0102001.

Unknown source. Received 01/29/2001.

PI 615518 A. *Glycine max* (L.) Merr.
Cultivated. Pureline.

Unknown source. Received 01/29/2001.

PI 615518 B. *Glycine max* (L.) Merr.
Cultivated. Pureline.

The following were donated by Theodore Hymowitz, University Illinois, Department of Crop Sciences, 1102 South Goodwin Avenue, Urbana, Illinois 61801, United States. Received 01/29/2001.

PI 615519. *Glycine max* (L.) Merr.
Cultivated. SY0102002.

The following were developed by Robert T. Lewellen, USDA, ARS, Crop Improvement and Protection Research, 1639 E. Alisal St., Salinas, California 93905, United States. Received 02/02/2001.

PI 615520. *Beta vulgaris* L. subsp. *vulgaris*
Breeding. Population. CZ25-9; ZO25-9. GP-219. Pedigree - Multigerm, self-fertile, rhizomania, aa plants from population 912 x composite of ZZ Polish lines. High sugar S1 line with rhizomania resistance identified and increased in bulk. Multigerm, self-fertile, segregates for genetic male sterility (A-:aa), red hypocotyl, 2n = 2x = 18. Resistant to rhizomania. Moderately susceptible to CTV, VY, Erwinia, Powdery mildew, bolting. High sucrose concentration and sugar yield GCA.

PI 615521. *Beta vulgaris* L. subsp. *vulgaris*
Breeding. Population. CR09-1; CR009-1. GP-220. Pedigree - Cercospora resistant accession from Italy crossed and backcrossed to multigerm, self-fertile, rhizomania resistant, aa plants from populations similar to C918. S1 progeny and mass selection used to select for resistance to rhizomania and Cercospora beticola. Multigerm, self-fertile, segregates for genetic male sterility (A-:aa), 2n = 2x = 18. Resistant to rhizomania. Moderately resistant to Cercospora leaf spot, Erwinia and downy mildew. Moderately susceptible to CTV, powdery mildew, virus yellows, bolting. Erect canopy. Hybrids have good sugar yield and sucrose concentration. Red hypocotyls.

PI 615522. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Population. C833-5; 0833-5. PL-38. Pedigree - Selected from composite cross between population 867 and monogerm, O-type, nonbolting, curly top resistant inbred lines. S1 reselected for resistance to rhizomania and O-type. Increase of S1 monogerm, O-type, red hypocotyl, self-fertile line that segregates for genetic male sterility (A:aa). Resistant to rhizomania. Moderately resistant to Erwinia, bolting, powdery mildew. Intermediate reaction to curly top and VY. High sucrose concentration and sugar yield GCA.

PI 615523. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Population. C833-5CMS; 0833-5CMS; 0833-5HO. PL-39. Near cytoplasmic male sterile counterpart of O-type maintainer C833-5.

PI 615524. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. Population. C911-4-10; 0911-4-10. Pedigree - Monogerm line extracted from multigerm line C911-4. Monogerm segregates identified in S3 and isolated. Inbred monogerm line with resistance to rhizomania, bolting, Erwinia and downy mildew. Moderate resistance to VY, powdery mildew. Moderately susceptible to CTV. O-type unknown. Self-fertile, red hypocotyls, does not segregate for genetic male sterility.

The following were developed by G. E. Coe, USDA, ARS, Field Crops Lab., Lab. 6B, Bldg. 009, BARC-West, Beltsville, Maryland 20705, United States. Donated by Devon L. Doney, USDA, ARS, Northern Crops Research Laboratory, P.O. Box 5677, 331 Walster Hall, Fargo, North Dakota 58105, United States. Received 07/06/1995.

PI 615525. *Beta vulgaris* L. subsp. *vulgaris*

Cultivar. Population. SP 6322-0; SP22-0; SP5822-0; SP7822-0; 00-SP22-0; W6 17143. PL-7. Pedigree - Open-pollinated, self-sterile line developed by combining 7 pseud-self-fertile Cercospora leaf spot resistant progenies. Selection from SP 6122-0 for improvement in leaf spot resistance. Value of SP 6322-0 over SP 5822-0 or SP 6122-0 is the likelihood of improvement in leaf spot resistance. Moderately resistant to Cercospora beticola and Aphanomyces cochlioides. Susceptible to curly top virus. Early bolting.

The following were developed by John Foster, University of Nebraska-Lincoln, Department of Entomology, 321F Plant Industry Bldg., Lincoln, Nebraska 68583-0816, United States; Nora E. D'Croz-Mason, University of Nebraska, Department of Agronomy, Maize Breeding Project, Lincoln, Nebraska 68583-0915, United States; S.C. Mason, University of Nebraska-Lincoln, Dept. of Agronomy, Lincoln, Nebraska 68583-0915, United States. Donated by Nora E. D'Croz-Mason, University of Nebraska, Department of Agronomy, Maize Breeding Project, Lincoln, Nebraska 68583-0915, United States. Received 01/11/2001.

PI 615526. *Zea mays* L. subsp. *mays*

Breeding. Partinbred. N547; (NECBY5)-8-2-1-2-1. GP-367. Pedigree - Derived by selfing a selected full-sib family from the tropical population MBITA, developed by CYMMIT, Mexico, with multiple borer resistance to fall armyworm, southwestern corn borer and ECB. Line advanced ear-to-row by self-pollination to S5. Inbred germplasm with resistance to stalk and shank tunneling damage by the second generation of the European corn borer(ECB) Ostrinia nubilalis. S1, S3, and S5 were

manually infested with ECB larvae. Stalk and shank injury were determined by splitting both and counting the number of tunnels (cavities) per plant. Only plants with no tunnelling in either stalk or shank were advanced to the next generation. Susceptible check Missouri 17 averaged 6.0 inches of stalk tunneling and 0.3 inches of shank tunneling. Uniform, open yellow-reddish tassels, is a good pollen shedder requiring 72 days from planting to pollen shedding. Silks yellow-reddish and their emergence begins two to three days after pollen shed begins. Produces sturdy plants with an average plant height of 1.90 m and ear height of 0.78 m. Ears conical shaped, 0.15 to 0.17 m long, and have 12 to 14 kernel rows with relatively small yellow kernels on a white cob.

The following were developed by Central Valley Seeds, Inc., United States. Received 02/06/2001.

PI 615527 PVPO. *Lactuca sativa* L.
Cultivar. "LAGUNA FRESCA". PVP 200100044.

The following were developed by Abbott & Cobb, Inc., United States. Received 02/06/2001.

PI 615528 PVPO. *Citrullus lanatus* (Thunb.) Matsum. & Nakai
Cultivar. "4N63". PVP 200100047.

The following were developed by Plant Breeding and Acclimatization Institute, Poland. Received 02/06/2001.

PI 615529 PVPO. X *Triticosecale* sp.
Cultivar. "ALZO". PVP 200100051.

The following were developed by Pure Line Seeds, Inc., P.O. Box 8866, Moscow, Idaho 83843, United States. Received 02/06/2001.

PI 615530 PVPO. *Pisum sativum* L.
Cultivar. "PIVOT". PVP 200100052.

The following were developed by Syngenta Seeds, Inc., United States. Received 02/06/2001.

PI 615531 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "NP2167". PVP 200100054.

The following were developed by C.A. Rose-Fricker, Pure Seed Testing, Inc., 3057 G Street, Hubbard, Oregon 97032, United States; Melodee L. Fraser, Pure Seed Testing, Inc., P.O. Box 176, 606 Main Street, Rolesville, North Carolina 27571, United States. Received 02/06/2001.

PI 615532. *Poa pratensis* L.
Cultivar. "SHOWCASE"; PST-BO-141. PVP 200100055; CV-74. Pedigree -
Originated as a single highly apomictic plant selected from a nursery of

Unique Kentucky bluegrass. Shows good quality in U.S. turf trials maintained at mowing heights ranging from 1.3 cm to 5 cm. Good billbug (*Sphenophorus* spp.) resistance and has good resistance to dollar spot (*Sclerotinia homoeocarpa*), stripe smut (*Ustilago striiformis*), powdery mildew (*Erysiphe graminis*), summer patch (*Magnaporthe poae*) and necrotic ring spot (*Leptosphaeria korrae*) and moderate resistance to leaf spot (*Drechslera poae*) and *Rhizoctonia* sheath spot (*Rhizoctonia zeae*). Shows good turf quality in trials in the U.S. transition zone and has good summer turf performance, exhibiting good heat tolerance, summer density and drought tolerance. In North Carolina turf trials, showed excellent summer turf performance under heat and drought stress at mowing heights from 1.3 cm to 2.6 cm.

The following were developed by Speight Seed Farms, Inc., Box 507, Winterville, North Carolina 28590, United States. Received 02/06/2001.

PI 615533 PVPO. *Nicotiana tabacum* L.
Cultivar. "SPEIGHT 179". PVP 200100056.

The following were developed by California Cooperative Rice Research Foundation, Biggs, California, United States. Received 02/06/2001.

PI 615534 PVPO. *Oryza sativa* L.
Cultivar. Pureline. "M-104"; 95-Y-214. PVP 200100057. Pedigree - M-103/6/M-102/4/M-201/3/M7/M9//M7/5/M-103.

PI 615535 PVPO. *Oryza sativa* L.
Cultivar. Pureline. "M-205"; 94-Y-615. PVP 200100058. Pedigree - M-201/M7//M-201/3/M-202.

The following were developed by Busch Agricultural Resources, Inc., 3515 East County Road 52, Fort Collins, Colorado 80524, United States. Received 02/06/2001.

PI 615536. *Oryza sativa* L.
Cultivar. "AB6564". PVP 200100059.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 02/06/2001.

PI 615537 PVPO. *Glycine max* (L.) Merr.
Cultivar. "90B11". PVP 200100060.

PI 615538 PVPO. *Glycine max* (L.) Merr.
Cultivar. "91B12". PVP 200100061.

PI 615539 PVPO. *Glycine max* (L.) Merr.
Cultivar. "91B33". PVP 200100062.

PI 615540 PVPO. *Glycine max* (L.) Merr.
Cultivar. "91B92". PVP 200100063.

PI 615541 PVPO. *Glycine max* (L.) Merr.
Cultivar. "92B38". PVP 200100064.

PI 615542 PVPO. *Glycine max* (L.) Merr.
Cultivar. "92B95". PVP 200100065.

The following were developed by Richard C. Frohberg, North Dakota State University, Crop & Weed Science Department, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; NDSU Research Foundation, North Dakota, United States; R.W. Stack, North Dakota State University, Plant Pathology Department, Fargo, North Dakota 58105, United States; James D. Miller, USDA-ARS, Dept. of Plant Pathology, North Dakota State University, Fargo, North Dakota, United States; Mohamed Mergoum, North Dakota State University, Plant Sciences Dept., Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; T.C. Olson, North Dakota State University, Dept. of Cereal Science, Fargo, North Dakota 58105, United States. Received 02/06/2001.

PI 615543. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "ALSEN"; ND 716. PVP 200100066; CV-997. Pedigree - ND674//ND2710 (PI 633976)/ND688. Released 2000. Hard red spring wheat developed at North Dakota State University. Combines resistance to Fusarium head blight (FHB) [caused by *Fusarium graminearum*], high grain yield, and excellent end-use quality for the domestic and export wheat markets. Derived from the cross involving Sumai3 (PI 481542), a spring wheat from China, the source of resistance to FHB. Grain yield of Alsen was significantly higher than Grandin (PI 531005), Gunner (PI 594043), and Keene (PI 633862) but less than Parshall (PI 613587) and Reeder (PI 613586). Grain volume of Alsen was similar to Gunner, Keene, and Reeder; but significantly higher than Grandin; and less than. Protein content of Alsen was similar to Grandin and Butte 86, and higher than Trenton (PI 527693). Under all conditions (natural and artificial inoculation), the FHB severity of Alsen was higher than the most resistant line ND 2710 developed by NDSU; but significantly lower than the susceptible checks Grandin, Gunner, and 2375. Similarly, compared to the later checks, Alsen showed significantly lower levels of the trichothecene mycotoxin deoxynivalenol (DON) produced by FHB. Awned, medium-early maturing and semi-dwarf HRSW. The awns are white and 8 to 10 cm in length. The glumes are medium and yellow with elevated shoulder and acuminate beak. Medium glume width and shoulder length. The kernels are hard, red, and oval; germ is medium; brush is medium long. The crease is mid-deep and mid-wide and the cheek is angular. Has a lax spike type with plant height (78 cm) similar of to Reeder and Grandin (80 cm); 12 and 14 cm shorter than Parshall and Keene; and 3 cm taller than HJ98 (PI 608723). The number of days to heading of Alsen (61 d) is similar to Grandin, Reeder, and Parshall but 4 d earlier than McVey (PI 612966). Medium resistant to pathotype THBL, the predominant race of leaf rust (caused by *Puccinia recondita tritici*) in the region and resistant to stem rust (caused by *Puccinia graminis tritici*). Alsen is moderate susceptible.

The following were developed by Syngenta Seeds, Inc., United States. Received 02/07/2001.

PI 615544. *Zea mays* L. subsp. *mays*
Cultivar. "NP2171". PVP 200100068.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 02/07/2001.

PI 615545 PVPO. *Festuca rubra* L. subsp. *rubra*
Cultivar. "CAMILLA". PVP 200100069.

The following were developed by John Lloyd-Reilley, USDA, NRCS-NPMC, Kika de la Garza Plant Materials Center, 3409 N. FM1355, Kingsville, Texas 78363, United States; Elizabeth Kadin, USDA-NRCS-NPMC, Kika de la Garza Plant Materials Center, 3409 N. FM1355, Kingsville, Texas 78363, United States. Received 04/04/2000.

PI 615546. *Atriplex acanthocarpa* (Torr.) S. Watson
Cultivated. 9085310; NSL 403028. Pedigree - Composite of #9055720 from San Benito, Cameron Co., TX and #9055721 from Dimmit Co., TX.
Saline-tolerant, perennial evergreen shrub. Grows 3-10 dm in height. Herbaceous on top, woody below. Flowers from summer to fall; dioecious. Fruit is utricle enclosed in tubercled bracts. Seeds are 1.5-2 mm long, broad; radicle is superior. Extremely drought-tolerant; appears to be tolerant of most insect pests. Susceptible to Cotton Root Rot (*Phymatotrichum omnivorum*) which weakens root system and kills the plant. Uses: windbreak, to prevent soil erosion, as ornamental. Provides wildlife cover and is eaten by cattle.

The following were collected by Harold E. Bockelman, USDA, ARS, National Small Grains Collection, 1691 S 2700 W, Aberdeen, Idaho 83210, United States; Richard C. Johnson, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Roman Boguslavsky, National Centre for Plant Genetic Resources of Ukraine, Lab. for Introduction & Storage of Plant Genetic Resources, Yurjev Institute of Plant Production, Kharkiv, Kharkiv 61060, Ukraine; Vladislav Korzhenevsky, State Nikitsky Botanical Gardens, Department of Flora & Vegetation, Yalta, Krym 334267, Ukraine. Received 10/25/1999.

PI 615547. *Trifolium angustifolium* L.
Wild. UKR-99-035. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 40" N. Longitude 34° 0' 16" E. Elevation 195 m. Near Simeiz along road A-294. South slope, rocky, dry, highly diverse, calcareous.

PI 615548. *Trifolium arvense* L.
Wild. UKR-99-203. Collected 08/02/1999 in Krym, Ukraine. Latitude 44° 55' 34" N. Longitude 35° 14' E. Elevation 350 m. In military/nature reserve between Koktebel' and Kurortne and south of road A-294. North slope, moderately steep, rocky, dry, mixed forest and grassland.

PI 615549. *Trifolium arvense* L.
Wild. UKR-99-208. Collected 08/02/1999 in Krym, Ukraine. Latitude 44° 55' 25" N. Longitude 35° 13' 56" E. Elevation 320 m. In military/nature reserve between Koktebel' and Kurortne and south of road A-294. East slope, steep, rocky, basaltic cliffs dropping to sea along trail.

PI 615550. *Trifolium campestre* Schreb.

Wild. UKR-99-036. Collected 07/28/1999 in Krym, Ukraine. Latitude 44° 24' 40" N. Longitude 34° 0' 16" E. Elevation 195 m. Near Simeiz along road A-294. South slope, rocky, dry, highly diverse, calcareous.

PI 615551. *Trifolium campestre* Schreb.

Wild. UKR-99-129. Collected 07/31/1999 in Krym, Ukraine. Latitude 44° 30' 41" N. Longitude 33° 50' 5" E. Elevation 420 m. In lake valley near Peredove. South, grazed, rocky.

PI 615552. *Trifolium* sp.

Wild. UKR-99-215. Collected 08/02/1999 in Krym, Ukraine. Latitude 44° 55' 16" N. Longitude 35° 13' 54" E. Elevation 280 m. In military reserve between Koktebel' and Kurortne and south of road A-294. Opening in woods along trail.

The following were developed by Randall Nelson, USDA, ARS, National Soybean Research Center, University of Illinois, Urbana, Illinois 61801, United States; Gina L. Brown-Guedira, USDA, ARS, Kansas State University, Agronomy Department, Manhattan, Kansas 66506-5502, United States; Marilyn Warburton, Applied Biotechnology Center, Apdo. Postal 6-641, Mexico City, Federal District 06600, Mexico. Received 02/13/2001.

PI 615553. *Glycine max* (L.) Merr.

Breeding. Pureline. LG92-1255; SY0103001. GP-283. Pedigree - LG84-1291 (PI 68522 x Hobbit) x A3127. Combines high yield with unique genetic diversity not currently present in the commercially used gene pool in North America. Indeterminate stem termination. Late group II maturity. Purple flowers, tawny pubescence, tan pods, yellow seed coat and black hilum. Susceptible to races 4 and 7 of *Phytophthora sojae*.

PI 615554. *Glycine max* (L.) Merr.

Breeding. Pureline. LG93-7054; SY0103002. GP-284. Pedigree - LG85-3343 (PI 361064 x PI 407710) x S42-30. Combines high yield with unique genetic diversity not currently present in the commercially used gene pool in North America. Indeterminate stem termination. Late group II maturity. Purple flowers, gray pubescence, brown pods, yellow seed coat and imperfect black hilum. Susceptible to races 4 and 7 of *Phytophthora sojae*.

PI 615555. *Glycine max* (L.) Merr.

Breeding. Pureline. LG93-7654; SY0103003. GP-285. Pedigree - LG86-2734 (PI 424195B x PI 361066A) x A3205. Combines high yield with unique genetic diversity not currently present in the commercially used gene pool in North America. Indeterminate stem termination. Late group III maturity. Purple flowers, tawny pubescence, brown pods, yellow seed coat and brown hilum. Susceptible to races 4 and 7 of *Phytophthora sojae*.

PI 615556. *Glycine max* (L.) Merr.

Breeding. Pureline. LG93-7792; SY0103004. GP-286. Pedigree - LG86-6989 (PI 253655D x PI 283331) x A3205. Combines high yield with unique genetic diversity not currently present in the commercially used gene pool in North America. Indeterminate stem termination. Early group IV maturity. Purple flowers, tawny pubescence, brown pods, yellow seed coat and brown hilum. Susceptible to races 4 and 7 of *Phytophthora sojae*.

The following were donated by Waller Flowerseed Company, P.O. Box 935, 4th and Obispo Streets, Guadalupe, California 93434, United States. Received 1962.

- PI 615557. **Lathyrus odoratus** L.
Cultivar. EA MULTI SHIRLEY TEMPLE SUPREM.
- PI 615558. **Lathyrus odoratus** L.
Cultivar. EA MULTI DEEP ELKS PUR SUPREME.
- PI 615559. **Lathyrus odoratus** L.
Cultivar. EA MULTI CRANBERRY RED SUPREME.
- PI 615560. **Lathyrus odoratus** L.
Cultivar. SPENCER PIRATE GOLD.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 02/14/2001.

- PI 615561 PVPO. **Glycine max** (L.) Merr.
Cultivar. "93B67". PVP 200100070.
- PI 615562 PVPO. **Glycine max** (L.) Merr.
Cultivar. "93B72". PVP 200100071.
- PI 615563 PVPO. **Glycine max** (L.) Merr.
Cultivar. "95B96". PVP 200100072.
- PI 615564 PVPO. **Glycine max** (L.) Merr.
Cultivar. "93B85". PVP 200100073.
- PI 615565 PVPO. **Glycine max** (L.) Merr.
Cultivar. "94B23". PVP 200100074.
- PI 615566 PVPO. **Glycine max** (L.) Merr.
Cultivar. "95B34". PVP 200100075.

The following were developed by Syngenta Seeds, Inc., United States. Received 02/14/2001.

- PI 615567 PVPO. **Zea mays** L.
Cultivar. "NP2174". PVP 200100076.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 02/14/2001.

- PI 615568 PVPO. **Glycine max** (L.) Merr.
Cultivar. "97B52". PVP 200100077.
- PI 615569 PVPO. **Glycine max** (L.) Merr.
Cultivar. "96B51". PVP 200100078.

PI 615570 PVPO. Glycine max (L.) Merr.
Cultivar. "95B97". PVP 200100079.

PI 615571 PVPO. Glycine max (L.) Merr.
Cultivar. "94B73". PVP 200100080.

PI 615572 PVPO. Glycine max (L.) Merr.
Cultivar. "94B54". PVP 200100081.

PI 615573 PVPO. Glycine max (L.) Merr.
Cultivar. "94B24". PVP 200100082.

PI 615574 PVPO. Glycine max (L.) Merr.
Cultivar. "93B87". PVP 200100083.

PI 615575 PVPO. Glycine max (L.) Merr.
Cultivar. "93B86". PVP 200100084.

PI 615576 PVPO. Glycine max (L.) Merr.
Cultivar. "93B47". PVP 200100085.

PI 615577 PVPO. Glycine max (L.) Merr.
Cultivar. "93B15". PVP 200100086.

PI 615578 PVPO. Glycine max (L.) Merr.
Cultivar. "92B84". PVP 200100087.

PI 615579 PVPO. Glycine max (L.) Merr.
Cultivar. "92B76". PVP 200100088.

PI 615580 PVPO. Glycine max (L.) Merr.
Cultivar. "92B12". PVP 200100089.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 02/14/2001.

PI 615581 PVPO. Lactuca sativa L.
Cultivar. "ALPINE". PVP 200100090.

The following were developed by Don Domber, University of Arkansas, Arkansas, United States. Received 02/14/2001.

PI 615582. Glycine max (L.) Merr.
Cultivar. Pureline. "CAVINESS". PVP 200100091.

The following were developed by Jerome D. Franckowiak, North Dakota State University, Department of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; Richard D. Horsley, North Dakota State University, Department of Plant Sciences, 166 Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; Brian J. Steffenson, University of Minnesota, Department of Plant Pathology, 495 Borlaug Hall, St. Paul, Minnesota 55108-6030, United States; C.A. Urrea, International Maize & Wheat Improvement Center, South American Maize Program, Apdo. Postal 6-641, Mexico, Mexico. Received 02/01/2001.

PI 615583. *Hordeum vulgare* L. subsp. *vulgare*

Breeding. Pureline. C95-167-250-9; 6NDRFG-1. GP-136. Pedigree - Foster / CIho 4196. Six-rowed line with partial resistance to Fusarium head blight (FHB) (*Fusarium graminearum*), which accumulates reduced concentrations of the mycotoxin deoxynivalenol (DON) and does not have Chevron (PI 38061) in its pedigree. Many of the six-rowed genotypes with good FHB resistance derive their resistance from Chevron or Chevron-derived lines. Averaged across 5 environments, mean FHB was 20% (Foster, CIho 4196, and Chevron 51%, 8%, AND 14% respectively. In 1999 at Langdon and Osnabrock, mean days to heading was similar to Chevron and about 10 d later than Foster. Mean plant height was similar to Chevron (130 cm) and much taller than Foster (100 cm). Has sessile six-rowed spike (vvII), smooth lemma awns, and glume awn length equal to the length of the glume.

The following were developed by Jerome D. Franckowiak, North Dakota State University, Department of Plant Sciences, P.O. Box 5051, Fargo, North Dakota 58105-5051, United States; Richard D. Horsley, North Dakota State University, Department of Plant Sciences, 166 Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; P.B. Schwarz, North Dakota State University, Dept. of Cereal Science, Fargo, North Dakota 58105-5051, United States; Brian J. Steffenson, University of Minnesota, Department of Plant Pathology, 495 Borlaug Hall, St. Paul, Minnesota 55108-6030, United States. Received 02/02/2001.

PI 615584. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "DRUMMOND"; ND15477. PVP 200100098; CV-291. Pedigree - Hazen*2/WPG821/4/Stander/3/Bumper/Hazen//Azure. Released 2000. Semi-smooth awns, covered kernels, long-rachilla hairs, and white aleurone. 5 cm shorter, heads similar, has better straw, and yields about 5% more than Robust. Resistant to spot blotch (*Cochliobolus sativus*) and prevalent pathotypes of wheat stem rust (*Puccinia graminis*) in the Midwest U.S. except Pgt-QCC, moderately susceptible to net blotch (*Pyrenophora teres*) and susceptible to loose smut (*Ustilago nuda*).

The following were developed by Berlin D. Nelson, North Dakota State University, Department of Plant Pathology, Walster Hall 306, PO Box 5012, Fargo, North Dakota 58105-5012, United States; Theodore C. Helms, North Dakota State University, Dept. of Plant Science, Rm 166 Loftsgard Hall, Fargo, North Dakota 58105-5051, United States; Robert Jay Goos, North Dakota State University, Soil Science Dept, 127 Walster Hall, Fargo, North Dakota 58105, United States. Received 02/07/2001.

PI 615585. *Glycine max* (L.) Merr.

Cultivar. Pureline. "Sargent"; ND96-1593. PVP 200100099; CV-438. Pedigree - (Maple Amber * Evans -1-1-10) X Council). Has the Rps6 allele which confers resistance to phytophthora root rot. Flower color white, grey pubescence, brown pods at maturity, dull yellow seed coat with yellow hila, indeterminate growth habit and high seed coat peroxidase. Maturity 0.8 and moderately resistant to iron chlorosis on high pH soils.

PI 615586. *Glycine max* (L.) Merr.

Cultivar. Pureline. "Walsh"; ND96-8929. PVP 200100100; CV-437. Pedigree - (Maple Amber * Evans -1-1-10) X Council. Has the Rps6 allele which confers resistance to phytophthora root rot. Flower color purple, grey pubescence, brown pods at maturity, dull yellow seed coat color with yellow hila, indeterminate growth habit and high seed coat peroxidase. Maturity 0.0.

The following were developed by David A. Sleper, University of Missouri, Department of Agronomy, 271-F Life Sciences Center, Columbia, Missouri 65211, United States; Hank F. Mayland, USDA, ARS, Northwest Irrigation and Soils Research Lab., 3793 N. 3600 E., Kimberly, Idaho 83341-5076, United States; Glenn E. Shewmaker, University of Idaho, Twin Falls R&E Center, PO Box 1827, Twin Falls, Idaho 83303-3608, United States; R.J. Crawford, University of Missouri-Columbia, Southwest Missouri Agricultural Research and Education Ctr., Mt. Vernon, Missouri 65712, United States; M.D. Massie, University of Missouri-Columbia, the Southwest Research Center, Mt. Vernon, Missouri 65211, United States. Received 02/20/2001.

PI 615587. *Festuca arundinacea* Schreb.

Cultivar. Population. "HiMag". GP-79. Pedigree - Two cycles of recurrent selection. Parents for C1 cycle of selection included 11 plants from Kentucky-31 and 54 plants from Missouri-96 tall fescue cultivars. Forty-six parents were selected from the C1 population to develop the C2. Relatively high concentrations of Mg and Ca. Also relatively low cation ratio, K/(Ca+Mg), expressed as moles of charge. Good resistance to crown rust (*Puccinia coronata*). Medium to early maturity in comparison to other tall fescue cultivars. Harvested seed has the following characteristics: 400 seeds g⁻¹, 2.5 g 1000 seeds⁻¹, and 302 kg m⁻³. Grows well on both calcareous alkaline and acid soils.

The following were developed by Steven Leath, USDA, ARS, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695, United States; R.A. Navarro, North Carolina State University, North Carolina Agric. Exp. Station, Dept. of Crop Science, Raleigh, North Carolina 27695-7629, United States; Paul Murphy, North Carolina State University, Dept. of Crop Science, P.O. Box 7629, Raleigh, North Carolina 27695, United States. Received 02/12/2001.

PI 615588. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. NC99BGTAG11. GP-729. Pedigree - Saluda *3 / PI 427315. Released 2000. Soft red winter wheat adapted to the Southeastern U.S. Resistant to prevalent powdery mildew (*Blumeria graminis*) isolates found in cultivation in North Carolina during 1998-2000 season. The source of resistance was the *Triticum timopheevii* subsp. *armeniacum* accession PI 427315 collected in Iraq. F7-derived line. Heading date, plant height, and straw strength similar to recurrent parent Saluda.

The following were developed by Robert E. Allan, USDA-ARS, Dept. of Crop & Soil Science, 209 Johnson Hall, Pullman, Washington 99164, United States. Received 02/05/2001.

- PI 615589. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 96ARS 1032; 95 2118. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961032. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for the Rht B1a gene of Brevor (CI 12385) by backcrossing. Brevor is a soft white winter common cv. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate. Germ midsized. Differing from Brevor for plant height (35 vs. 106 cm), heading (4.5d later), grain yield (291 vs. 477g/m²), kernel wt. (28 vs. 37 mg), test wt. (739 vs. 807 g/L) and lodging (1 vs. 46%).
- PI 615590. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 96ARS 1033; 95 2127. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961033. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for the Rht B1a gene of Brevor (CI 12385) by backcrossing. Brevor is a soft white winter common cv. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate. Germ midsized. Differing from Brevor for plant ht (36 vs. 106 cm), heading (4d later), grain yield (302 vs. 477 g/m²), kernel wt. (31 vs. 37 mg), test wt. (751 vs. 807 g/L) and lodging (1 vs. 46%).
- PI 615591. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 96ARS 1034; 95 2130. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961034. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for the Rht B1a gene of Brevor (CI 12385) by backcrossing. Brevor is a soft white winter common cv. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate. Germ midsized. Differing from Brevor for plant ht. (37 vs. 106 cm), heading 4.5d later), grain yield (347 vs. 477 g/m²), kernel wt. (30 vs. 37 mg), test wt. (753 vs. 807 g/L) and lodging (1 vs. 46%).
- PI 615592. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 96ARS 1035; 95 2144. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961035. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for the Rht B1a gene of Brevor (CI 12385) by backcrossing. Brevor is a soft white winter common cv. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate, germ midsized. Differing from Brevor for plant ht. (34 vs. 106 cm), heading (5d later), grain yield (303 vs. 477g/m²), kernel wt. (31 vs. 37 mg), test wt. (738 vs. 807 g/L) and lodging (1 vs. 46%).
- PI 615593. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 96ARS 1037; 95 2156. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961037. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for the Rht B1a gene of Brevor (CI 12385) by backcrossing. Brevor is a soft white winter common cv. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate. Germ midsized. Differing from Brevor for plant ht. (34 vs. 106 cm), heading (4.5d later), grain yield (281 vs. 477 g/m²), kernel wt. (27 vs. 37 mg), test wt. (702 vs. 807 g/L) and lodging (1 vs. 46%).
- PI 615594. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 96ARS 1040; 95 2125. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961040. F3:6, BC6 near-isoline with normal height gene Rht B1a of Brevor (CI 12385) a soft white winter common cv. Sib to Brevor NILs with Rht B1c gene of Tom Thumb. Similar to Brevor for

spike awnletted, oblong, white. Kernels white, soft, ovate. Germ mid-sized. Agronomically similar to Brevor for plant ht., grain yield, kernel wt., test wt., lodging. Differing from Brevor for heading (1.2d later).

PI 615595. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1041; 95 2139. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961041. F3:6, BC6 near-isoline with normal height gene Rht Bla of Brevor (CI 12385) a soft white winter common cv. Sib to Brevor NILs with Rht Blc gene of Tom Thumb. Similar to Brevor for the spike awnletted, oblong, white. Kernels white, soft, ovate. Germ mid-sized. Agronomically similar to Brevor for plant ht., grain yield, kernel wt., test wt., lodging. Differing from Brevor for heading (1d later).

PI 615596. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1042; 95 2140. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961042. F3:6, BC6 near-isoline with normal height gene Rht Bla of Brevor (CI 12385) a soft white winter common cv. Sib to Brevor NILs with Rht Blc gene of Tom Thumb. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate. Germ mid-sized. Agronomically similar to Brevor for plant ht., heading, grain yield, kernel wt., test wt. Differing from Brevor for lodging (29 vs. 46%).

PI 615597. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1043; 95 2151. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961043. F3:6, BC6 near-isoline with normal height gene Rht Bla of Brevor (CI 12385) a soft white winter common cv. Sib to Brevor NILs with Rht Blc gene of Tom Thumb. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate. Germ mid-sized. Agronomically similar to Brevor for plant ht., grain yield, kernel wt., test wt. Differing from Brevor for heading (2d later), lodging (62 vs. 46%).

PI 615598. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1045; 95 2161. Pedigree - Brevor*4///Tom Thumb/7*Burt//3*Brevor, 961045. F3:6, BC6 near-isoline with normal height gene Rht Bla of Brevor (CI 12385) a soft white winter common cv. Sib to Brevor NILs with Rht Blc gene of Tom Thumb. Similar to Brevor for spike awnletted, oblong, white. Kernels white, soft, ovate. Germ mid-sized. Agronomically similar to Brevor for plant ht., grain yield, kernel wt., test wt., lodging. Differing from Brevor for heading 2d (later).

PI 615599. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1051; 95 2276. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961051. F3:6, BC6 near-isoline with reduced height gene (Rht Blc) of Tom Thumb backcrossed into Moro (CI 13740) a soft white winter club cv. Similar to Moro for spike awnletted, elliptical, dense, glumes brown. Kernels white, short, soft, ovate. Germ small. Differing from Moro for plant ht. (55 vs. 110 cm), grain yield (422 vs. 601 g/m²), kernel wt. (25 vs. 30 mg), test wt. (723 vs. 772 g/L), lodging (13 vs. 54%) and heading (1 d later).

PI 615600. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1052; 95 2277. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961052. F3:6, BC6 near-isoline with reduced height gene (Rht Blc) of Tom Thumb backcrossed into Moro (CI 13740) a soft

white winter club cv. Similar to Moro for spike awnletted, elliptical, dense, glumes brown. Kernels white, short, soft, ovate. Germ small. Differing from Moro for plant ht. (53 vs. 110 cm), grain yield (463 vs. 601 g/m²), kernel wt. (22 vs. 30 mg), test wt. (710 vs. 772 g/L), lodging (1 vs. 54%) and heading (1.8d later).

PI 615601. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1053; 95 2280. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961053. F3:6, BC6 near-isoline with reduced height gene (Rht Blc) of Tom Thumb backcrossed into Moro (CI 13740) a soft white winter club cv. Similar to Moro for spike awnletted, elliptical, dense, glumes brown. Kernels white, short, soft, ovate, germ small. Differing from Moro for plant ht. (52 vs. 110 cm), grain yield (404 vs. 601 g/m²), kernel wt. (22 vs. 30 mg), test wt. (715 vs. 772 g/L), lodging (1 vs. 54%) and heading (1d later).

PI 615602. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1054; 95 2282. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961054. F3:6, BC6 near-isoline with reduced height gene (Rht Blc) of Tom Thumb backcrossed into Moro (CI 13740) a soft white winter club cv. Similar to Moro for spike awnletted, elliptical, dense. Glumes brown. Kernels white, short, soft, ovate. Germ small. Differing from Moro for plant ht. (52 vs. 110 cm), grain yield (471 vs. 601 g/m²), kernel wt. (24 vs. 30 mg), test wt. (697 vs. 772 g/L), lodging (4 vs. 54%).

PI 615603. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1055; 95 2283. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961055. F3:6, BC6 near-isoline with reduced height gene (Rht Blc) of Tom Thumb backcrossed into Moro (CI 13740) a soft white winter club cv. Similar to Moro for spike awnletted, elliptical, dense. Glumes brown. Kernels white, short, soft, ovate. Germ small. Differing from Moro for plant ht. (56 vs. 110 cm), grain yield (446 vs. 601 g/m²), kernel wt. (23 vs. 30 mg), test wt. (696 vs. 772 g/L), lodging (2 vs. 54%).

PI 615604. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1058; 95 2264. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961058. F3:6, BC6 near-isoline which has normal height gene (Rht Bla) of Moro. Sib to Moro NILs with (Rht Blc) gene of Tom Thumb. Similar to Moro for spike awnletted, elliptical, dense. Glumes brown. Kernels white, short, soft, ovate. Germ small. Agronomically very similar to Moro except for grain yield (462 vs. 601 g/m²) and lodging (65 vs 54%).

PI 615605. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1060; 95 2270. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961060. F3:6, BC6 near-isoline which has normal height gene (Rht Bla) of Moro. Sib to Moro NILs with (Rht Blc) gene of Tom Thumb. Similar to Moro for spike awnletted, elliptical, dense. Glumes brown. Kernels white, short, soft, ovate. Germ small. Agronomically very similar to Moro except for lodging (72 vs. 54%) and plant ht. (114 vs. 110 cm).

PI 615606. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1061; 95 2273. Pedigree - Moro*5/3/Tom Thumb/7*Burt//2*Moro, 961061. F3:6, BC6 near-isoline which has normal

height gene (Rht Bla) of Moro. Sib to Moro NILs with (Rht Blc) gene of Tom Thumb. Similar to Moro for spike awnletted, elliptical, dense. Glumes brown. Kernels white, short, soft, ovate. Germ small. Agronomically very similar to Moro except for grain yield (466 vs. 601 g/m²) and lodging (66 vs. 54%).

PI 615607. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1063; 95 2287. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961063. F3:6, BC6 near-isoline which has normal height gene (Rht Bla) of Moro. Sib to Moro NILs with (Rht Blc) gene of Tom Thumb. Similar to Moro for spike awnletted, elliptical, dense. Glumes brown. Kernels white, short, soft, ovate. Germ small. Agronomically very similar to Moro except for heading (1-6 d earlier), grain yield (492 vs. 601 g/m²), lodging (66 vs. 54%).

PI 615608. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1065; 95 2291. Pedigree - Moro*5///Tom Thumb/7*Burt//2*Moro, 961065. F3:6, BC6 near-isoline which has normal height gene (Rht Bla) of Moro. Sib to Moro NILs with (Rht Blc) gene of Tom Thumb. Similar to Moro for spike awnletted, elliptical, dense. Glumes brown. Kernels white, short, soft, ovate. Germ small. Agronomically very similar to Moro except for heading (2.2 d earlier), lodging (66 vs. 54%).

PI 615609. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1067; 95 2169. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961067. F3:6, BC6 near-isoline combining reduced ht. genes Rht Blc of Tom Thumb with Rht D1b of Daws (CI 17419) by backcrossing. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (29 vs. 87 cm), heading (4d later), grain yield (437 vs. 758 g/m²), kernel wt. (36 vs. 40 mg), test wt. (752 vs. 801 g/L). Similar for kernel/spike, lodging.

PI 615610. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1068; 95 2170. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961068. F3:6, BC6 near-isoline combining reduced ht. genes Rht Blc of Tom Thumb with Rht D1b of Daws (CI 17419) by backcrossing. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (31 vs. 87 cm), heading (4d later), grain yield (392 vs. 758 g/m²), kernel wt. (34 vs. 40 mg), test wt. (768 vs. 801 g/L). Similar for kernel/spike, lodging.

PI 615611. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1069; 95 2174. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961069. F3:6, BC6 near-isoline combining reduced ht. genes Rht Blc of Tom Thumb with Rht D1b of Daws (CI 17419) by backcrossing. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (31 vs. 87 cm), heading (5d later), grain yield (422 vs. 758 g/m²), kernel wt. 34 vs. 40 mg), kernels/spike (35 vs. 41), test wt. (753 vs. 801 g/L). Similar lodging.

PI 615612. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1070; 95 2175. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961070. F3:6, BC6 near-isoline combining reduced ht. genes Rht B1c of Tom Thumb with Rht D1b of Daws (CI 17419) by backcrossing. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (30 vs. 87 cm), heading (4d later), grain yield (430 vs. 758 g/m²), kernel/spike (27 vs. 41). Similar to lodging, test wt., kernel wt.

PI 615613. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1073; 95 2237. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961073. F3:6, BC6 near-isoline combining reduced ht. genes Rht B1c of Tom Thumb with Rht D1b of Daws (CI 17419) by backcrossing. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (31 vs. 87 cm), heading (3d later), grain yield (468 vs. 758 g/m²), kernel wt. (31 vs. 40 mg), test wt. (741 vs. 801 g/L). Similar for kernel/spike, lodging.

PI 615614. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1076; 95 2179. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961076. F3:6, BC6 near-isoline identical to Daws (CI 17419) for height genes Rht B1a and Rht D1b. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for heading (1d earlier). Similar for plant ht., grain yield, test wt., kernel wt., kernels/spike, lodging.

PI 615615. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1077; 95 2180. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961077. F3:6, BC6 near-isoline identical to Daws (CI 17419) for height genes Rht B1a and Rht D1b. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for heading (1.6d earlier). Similar for plant ht., grain yield, test wt., kernel wt., kernels/spike, lodging.

PI 615616. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1078; 95 2212. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961078. F3:6, BC6 near-isoline identical to Daws (CI 17419) for height genes Rht B1a and Rht D1b. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for heading (2.5d earlier), kernel wt. (45 vs. 40 mg). Similar for plant ht., grain yield, test wt., kernels/spike, lodging.

PI 615617. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1079; 95 2224. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961079. F3:6, BC6 near-isoline identical to Daws (CI 17419) for height genes Rht B1a and Rht D1b. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for heading (1.4d later), kernels/spike (35 vs 41). Similar for plant ht., grain yield, test wt., lodging.

PI 615618. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1083; 95 2249. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961083. F3:6, BC6 near-isoline identical to Daws (CI 17419) for height genes Rht Bla and Rht Dlb. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for heading (1d earlier). Similar for plant ht., grain yield, test wt., kernel wt., kernels/spike, lodging.

PI 615619. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1086; 95 2196. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961086. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Daws (CI 17419) a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (53 vs. 87 cm), heading (1d later), grain yield (586 vs. 758 g/m²), test wt. (770 vs. 801 g/L). Similar for kernel wt., kernels/spike, lodging.

PI 615620. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1087; 95 2198. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961087. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Daws (CI 17419) a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant height (50 vs. 87 cm), heading (1d later), grain yield (621 vs. 758 g/m²), test wt. (720 vs. 801 g/L). Similar for kernel wt., kernels/spike, lodging.

PI 615621. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1088; 95 2199. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961088. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Daws (CI 17419) a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (50 vs. 87 cm), heading (1d earlier), grain yield (592 vs. 758 g/m²), kernel wt. (37 vs. 40 mg), test wt. (747 vs. 801 g/L). Similar for kernels/spike, lodging.

PI 615622. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1089; 95 2200. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961089. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Daws (CI 17419) a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (50 vs. 87 cm), grain yield (626 vs. 758g/m²), test wt. (748 vs. 801 g/L). Similar for heading, kernel wt., kernels/spike, lodging.

PI 615623. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1091; 95 2204. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961091. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Daws (CI 17419) a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing

agronomically from Daws for plant ht. (50 vs. 87 cm), heading (1d earlier), kernel wt. (36 vs. 40 mg), grain yield (678 vs. 758 g/m²), test wt. (750 vs. 801 g/L). Similar for kernels/spike, lodging.

PI 615624. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1094; 95 2186. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961094. F3:6, BC6 near-isoline with normal height genes Rht D1a of Tom Thumb and Rht B1a of Daws combined in Daws background. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (124 vs. 87 cm), heading (1.6d earlier), grain yield (440 vs. 758 g/m²), kernel wt. (47 vs. 40 mg), kernels/spike (23 vs. 41), lodging (46 vs 3%). Similar for test wt.

PI 615625. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1095; 95 2188. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961095. F3:6, BC6 near-isoline with normal height genes Rht D1a of Tom Thumb and Rht B1a of Daws combined in Daws background. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (126 vs. 87 cm), grain yield (420 vs. 758 g/m²), kernel wt. (48 vs. 40 mg), kernels/spike (24 vs. 41), lodging (44 vs 3%). Similar for heading, test wt.

PI 615626. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1096; 95 2189. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961096. F3:6, BC6 near-isoline with normal height genes Rht D1a of Tom Thumb and Rht B1a of Daws combined in Daws backcrossed. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (130 vs. 87 cm), heading (4d later), grain yield (313 vs. 758 g/m²), kernel wt. (47 vs. 40 mg), kernels/spike (20 vs. 41), lodging (44 vs. 3%). Similar for test wt.

PI 615627. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1097; 95 2190. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961097. F3:6, BC6 near-isoline with normal height genes Rht D1a of Tom Thumb and Rht B1a of Daws combined in Daws background. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (129 vs. 87 cm), grain yield (376 vs. 758 g/m²), kernel wt. (47 vs. 40 mg), kernels/spike (18 vs. 41), lodging 36 vs. 3%). Similar for heading, test wt.

PI 615628. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 96ARS 1099; 95 2209. Pedigree - Daws*5///Tom Thumb/7*Burt//2*Daws, 961099. F3:6, BC6 near-isoline with normal height genes Rht D1a of Tom Thumb and Rht B1a of Daws combined in Daws background. Daws is a soft white winter common cv. Similar to Daws for spike awned, oblong, glumes white. Kernels white, soft, midlong. Germ midsize. Differing agronomically from Daws for plant ht. (121 vs. 87 cm), grain yield (491 vs. 758 g/m²), kernel wt. (46 vs. 40 mg), kernels/spike (28 vs. 41), lodging (30 vs. 3%). Similar for heading, test wt.

PI 615629. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 131; 96 1158. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97131. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for Rht B1a gene of Olympia. Olympia is a tall, semihard white winter Finish cv. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically different from Olympia for plant ht. (64 vs. 140 cm), grain yield (448 vs. 326 g/m²), kernel wt. (24 vs. 30 mg), kernels/spike (41 vs. 31), test wt. (690 vs. 774 g/L), lodging (1 vs. 62%), heading (2d later).

PI 615630. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 140; 96 1173. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97140. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for Rht B1a gene of Olympia. Olympia is a tall, semihard white winter Finish cv. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically different from Olympia for plant ht. (68 vs. 140 cm), grain yield (448 vs. 326 g/m²), kernel wt. (26 vs. 30 mg), kernels/spike (52 vs. 31), test wt. (746 vs. 774 g/L), lodging (1 vs. 62%), heading (2d later).

PI 615631. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 148; 96 1188. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97148. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for Rht B1a gene of Olympia. Olympia is a tall, semihard white winter Finish cv. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically different from Olympia for plant ht. (69 vs. 140 cm), grain yield (416 vs. 326 g/m²), kernel wt. (24 vs. 30 mg), kernels/spike (43 vs. 31), test wt. (685 vs. 774 g/L), lodging (1 vs. 62%). Similar for heading.

PI 615632. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 149; 96 1190. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97149. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for Rht B1a gene of Olympia. Olympia is a tall, semihard white winter Finish cv. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically different from Olympia for plant ht. (67 vs. 140 cm), grain yield (380 vs. 326 g/m²), kernel wt. (25 vs. 30 mg), kernels/spike (39 vs. 31), test wt. (693 vs. 774 g/L), lodging (1 vs. 62%), heading (2d later).

PI 615633. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 155; 96 1200. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97155. F3:6, BC6 near-isoline with reduced height gene Rht B1c of Tom Thumb substituted for Rht B1a gene of Olympia. Olympia is a tall, semihard white winter Finish cv. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically different from Olympia for plant ht. (69 vs. 140 cm), grain yield (396 vs. 326 g/m²), kernel wt. (23 vs. 30 mg), kernels/spike (43 vs. 31), test wt. (697 vs. 774 g/L), lodging (1 vs. 62%), heading (4d later).

- PI 615634. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 135; 96 1164. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97135. F3:6, BC6 near-isoline with normal height gene Rht Bla of Olympia, a tall semihard, white winter Finish cv. Sib to NILs with Rht Blc gene of Tom Thumb in Olympia background. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically similar to Olympia for plant ht., heading, grain yield, kernel wt., kernels/spike, lodging. Differs for test wt. (726 vs. 774 g/L).
- PI 615635. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 136; 96 1165. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97136. F3:6, BC6 near-isoline with normal height gene Rht Bla of Olympia, a tall semihard, white winter Finish cv. Sib to NILs with Rht Blc gene of Tom Thumb in Olympia background. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically similar to Olympia for plant ht., heading, grain yield, kernel wt., kernels/spike, test wt., lodging.
- PI 615636. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 138; 96 1170. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97138. F3:6, BC6 near-isoline with normal height gene Rht Bla of Olympia, a tall semihard, white winter Finish cv. Sib to NILs with Rht Blc gene of Tom Thumb in Olympia background. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically similar to Olympia for plant ht., heading, grain yield, kernel wt., kernels/spike, test wt., lodging.
- PI 615637. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 159; 96 1206. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97159. F3:6, BC6 near-isoline with normal height gene Rht Bla of Olympia, a tall semihard, white winter Finish cv. Sib to NILs with Rht Blc gene of Tom Thumb in Olympia background. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically similar to Olympia for plant ht., heading, grain yield, kernel wt., kernels/spike, test wt., lodging.
- PI 615638. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 160; 96 1207. Pedigree - Olympia*5///Tom Thumb/7*Burt//2*Olympia, 97160. F3:6, BC6 near-isoline with normal height gene Rht Bla of Olympia, a tall semihard, white winter Finish cv. Sib to NILs with Rht Blc gene of Tom Thumb in Olympia background. Similar to Olympia for spike lax, fusiform, awnletted. Glumes brown. Kernels white, midlong. Germ midsize. Agronomically similar to Olympia for heading, grain yield, kernel wt., kernels/spike, test wt., lodging. Taller ht. (145 vs. 140 cm).
- PI 615639. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 169; 96 1227. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97169. F3:6, BC6 near-isoline with reduced height gene Rht Blc of Tom Thumb substituted for Rht Blb gene of Stephens (CI 17596). Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft ovate. Germ small. Agronomically

different from Stephens for plant ht. (45 vs. 82 cm), heading (2d later), grain yield (419 vs. 630 g/m²), kernel wt. (36 vs. 46 mg), test wt. (646 vs. 762 g/L). Similar for kernels/spike, lodging.

PI 615640. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 170; 96 1228. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97170. F3:6, BC6 near-isoline with reduced height gene Rht Blc of Tom Thumb substituted for Rht Blb gene of Stephens (CI 17596). Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft ovate. Germ small. Agronomically different from Stephens for plant ht. (43 vs. 82 cm), heading (3d later), grain yield (429 vs. 630 g/m²), kernel wt. (40 vs. 46 mg), test wt. (656 vs. 762 g/L). Similar for kernels/spike, lodging.

PI 615641. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 172; 96 1232. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97172. F3:6, BC6 near-isoline with reduced height gene Rht Blc of Tom Thumb substituted for Rht Blb gene of Stephens (CI 17596). Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft ovate. Germ small. Agronomically different from Stephens for plant ht. (45 vs. 82 cm), heading (3d later), grain yield (452 vs. 630 g/m²), kernel wt. (38 vs. 46 mg), kernels/spike (32 vs. 37), test wt. (662 vs. 762 g/L). Similar for lodging.

PI 615642. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 178; 96 1241. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97178. F3:6, BC6 near-isoline with reduced height gene Rht Blc of Tom Thumb substituted for Rht Blb gene of Stephens (CI 17596). Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft ovate. Germ small. Agronomically different from Stephens for plant ht. (42 vs. 82 cm), heading (3d later), grain yield (429 vs. 630 g/m²), kernel wt. (39 vs. 46 mg), test wt. (647 vs. 762 g/L). Similar for kernels/spike, lodging.

PI 615643. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 179; 96 1243. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97179. F3:6, BC6 near-isoline with reduced height gene Rht Blc of Tom Thumb substituted for Rht Blb gene of Stephens (CI 17596). Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, included, white glumes. Kernels white, long, soft ovate. Germ small. Agronomically different from Stephens for plant ht. (41 vs. 82 cm), heading (2d later), grain yield (418 vs. 630 g/m²), kernel wt. (38 vs. 46 mg), kernels/spike (31 vs. 38), test wt. (647 vs. 762 g/L). Similar for lodging.

PI 615644. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 165; 96 1220. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97165. F3:6, BC6 near-isoline having Rht Blb semidwarf gene of Stephens (CI 17596). A sib of NILs with Rht Blc gene in same Stephens background. Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft, ovate. Germ small.

Agronomically similar to Stephens for plant ht., grain yield, kernel wt., kernels/spike, test wt., lodging. Heads 1d later.

PI 615645. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 168; 96 1225. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97168. F3:6, BC6 near-isoline having Rht B1b semidwarf gene of Stephens (CI 17596). A sib of NILs with Rht B1c gene in same Stephens background. Stephens is a soft white winter common semi-dwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft, ovate. Germ small. Agronomically similar to Stephens for plant ht., grain yield, kernel wt., kernels/spike, test wt., lodging.

PI 615646. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 181; 96 1248. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97181. F3:6, BC6 near-isoline having Rht B1b semidwarf gene of Stephens (CI 17596). A sib of NILs with Rht B1c gene in same Stephens background. Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft, ovate. Germ small. Agronomically similar to Stephens for plant ht., grain yield, kernel wt., kernels/spike, test wt., lodging.

PI 615647. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 182; 96 1249. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97182. F3:6, BC6 near-isoline having Rht B1b semidwarf gene of Stephens (CI 17596). A sib of NILs with Rht B1c gene in same Stephens background. Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft, ovate. Germ small. Agronomically similar to Stephens for plant ht., grain yield, kernel wt., kernels/spike, test wt., lodging.

PI 615648. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 192; 96 1265. Pedigree - Stephens*5///Tom Thumb/7*Burt//2*Stephens, 97192. F3:6, BC6 near-isoline having Rht B1b semidwarf gene of Stephens (CI 17596). A sib of NILs with Rht B1c gene in same Stephens background. Stephens is a soft white winter common semidwarf cv. Similar to Stephens for spike awned, fusiform, middense, inclined, white glumes. Kernels white, long, soft, ovate. Germ small. Agronomically similar to Stephens for plant ht., grain yield, kernel wt., kernels/spike, test wt., lodging.

PI 615649. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 195; 96 1270. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97195. F3:6, BC6 near-isoline combining reduced ht. gene Rht B1c of Tom Thumb with Rht D1b gene of Tres (CI 17917) by backcrossing. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (35 vs. 92 cm), heading (3d later), grain yield (222 vs. 584 g/m²), kernels/spike (23 vs. 45), test wt. (729 vs. 785 g/L), lodging (1 vs. 11%).

PI 615650. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 196; 96 1273. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97196. F3:6, BC6 near-isoline combining reduced

ht. gene Rht B1c of Tom Thumb with Rht D1b gene of Tres (CI 17917) by backcrossing. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (34 vs. 92 cm), heading (3d later), grain yield (238 vs. 584 g/m²), kernels/spike (23 vs. 45), kernel wt. (28 vs. 32 mg), test wt. (726 vs. 785 g/L), lodging (1 vs. 11%).

PI 615651. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 214; 96 1302. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97214. F3:6, BC6 near-isoline combining reduced ht. gene Rht B1c of Tom Thumb with Rht D1b gene of Tres (CI 17917) by backcrossing. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (35 vs. 92 cm), heading (1.3d later), grain yield (242 vs. 584 g/m²), kernels/spike (27 vs. 45), kernel wt. (29 vs. 32 mg), test wt. (721 vs. 785 g/L), lodging (1 vs. 11%).

PI 615652. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 216; 96 1309. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97216. F3:6, BC6 near-isoline combining reduced ht. gene Rht B1c of Tom Thumb with Rht D1b gene of Tres (CI 17917) by backcrossing. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (34 vs. 92 cm), heading (2d later), grain yield (242 vs. 584 g/m²), kernels/spike (32 vs. 45), kernel wt. (27 vs. 32 mg), test wt. (717 vs. 785 g/L), lodging (1 vs. 11%).

PI 615653. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 227; 96 1328. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97227. F3:6, BC6 near-isoline combining reduced ht. gene Rht B1c of Tom Thumb with Rht D1b gene of Tres (CI 17917) by backcrossing. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (35 vs. 92 cm), heading (3.3d later), grain yield (251 vs. 584 g/m²), kernels/spike (29 vs. 45), kernel wt. (28 vs. 32 mg), test wt. (696 vs. 785 g/L), lodging (1 vs. 11%).

PI 615654. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 199; 96 1281. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97199. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Tres (CI 17917) a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (47 vs. 92 cm), heading (1.3d later), grain yield (329 vs. 584 g/m²), kernels/spike (32 vs. 45), kernel wt. (27 vs. 32 mg), test weight (730 vs. 785 g/L), lodging (1 vs. 11%).

PI 615655. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 200; 96 1282. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97200. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Tres (CI 17917) a soft white winter club cv. Similar to Tres for spike awnletted, elliptical,

dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (47 vs. 92 cm), heading (1.6d later), grain yield (337 vs. 584 g/m²), kernel wt. (24 vs. 32 mg), test wt. (698 vs. 785 g/L), lodging (1 vs. 11%). Similar for kernels/spike.

PI 615656. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 202; 96 1286. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97202. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Tres (CI 17917) a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (46 vs. 92 cm), heading (1.6d later), grain yield (367 vs. 584 g/m²), kernel wt. (27 vs. 32 mg), test wt. (737 vs. 785 g/L), lodging (1 vs. 11%). Similar for kernels/spike.

PI 615657. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 204; 96 1290. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97204. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Tres (CI 17917) a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (44 vs. 92 cm), heading (1d later), grain yield (353 vs. 584 g/m²), kernel wt. (27 vs. 32 mg), test wt. (729 vs. 785 g/L). Similar for kernels/spike.

PI 615658. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 205; 96 1291. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97205. F3:6, BC6 near-isoline with height genes Rht B1c and Rht D1a of Tom Thumb backcrossed into Tres (CI 17917) a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (45 vs. 92 cm), heading (1d later), grain yield (359 vs. 584 g/m²), kernel wt. (26 vs. 32 mg), test wt. (734 vs. 785 g/L), lodging (1 vs. 11%). Similar for kernels/spike.

PI 615659. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 197; 96 1276. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97197. F3:6, BC6 near-isoline identical to Tres (CI 17917) for height genes Rht B1a and Rht D1b. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Agronomically similar to Tres for plant ht., heading, grain yield, kernel wt., lodging, test wt. lower (760 vs. 785 g/L).

PI 615660. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 198; 96 1277. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97198. F3:6, BC6 near-isoline identical to Tres (CI 17917) for height genes Rht B1a and Rht D1b. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Agronomically similar to Tres for plant ht., heading, grain yield, kernel wt., lodging, test wt.

- PI 615661. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 219; 96 1315. Pedigree - Tres*5///Tom
 Thumb/7*Burt//2*Tres, 97219. F3:6, BC6 near-isoline identical to Tres
 (CI 17917) for height genes Rht Bla and Rht Dlb. Tres is a soft white
 winter club cv. Similar to Tres for spike awnletted, elliptical, dense,
 glumes white. Kernels white, short, soft, ovate. Germ small. Agrono
 mically similar to Tres for plant ht., heading, grain yield, kernel wt.,
 lodging, test wt.
- PI 615662. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 225; 96 1326. Pedigree - Tres*5///Tom
 Thumb/7*Burt//2*Tres, 97225. F3:6, BC6 near-isoline identical to Tres
 (CI 17917) for height genes Rht Bla and Rht Dlb. Tres is a soft white
 winter club cv. Similar to Tres for spike awnletted, elliptical, dense,
 glumes white. Kernels white, short, soft, ovate. Germ small. Agrono
 mically similar to Tres for plant ht., heading, kernel wt., lodging,
 test wt.
- PI 615663. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 230; 96 1334. Pedigree - Tres*5///Tom
 Thumb/7*Burt//2*Tres, 97230. F3:6, BC6, near-isoline identical to Tres
 (CI 17917) for height genes Rht Bla and Rht Dlb. Tres is a soft white
 winter club cv. Similar to Tres for spike awnletted, elliptical, dense,
 glumes white. Kernels white, short, soft, ovate. Germ small. Agrono
 mically similar to Tres for heading, grain yield, test wt. Slightly
 different for plant ht. (89 vs. 92 cm), kernel wt. (30 vs. 32 mg),
 lodging (4 vs. 11%).
- PI 615664. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 209; 96 1296. Pedigree - Tres*5///Tom
 Thumb/7*Burt//2*Tres, 97209. F3:6, BC6 near-isoline with normal height
 genes Rht Dla of Tom Thumb and Rht Bla of Tres in Tres (CI 17917)
 background. Tres is a soft white winter club cv. Similar to Tres for
 spike awnletted, elliptical, dense, glumes white. Kernels white, short,
 soft, ovate. Germ small. Differing agronomically from Tres for plant ht.
 (108 vs. 92 cm), grain yield (498 vs. 584 g/m²), lodging (25 vs. 11%).
 Similar for heading, kernel wt., test wt.
- PI 615665. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 210; 96 1297. Pedigree - Tres*5///Tom
 Thumb/7*Burt//2*Tres, 97210. F3:6, BC6 near-isoline with normal height
 genes Rht Dla of Tom Thumb and Rht Bla of Tres in Tres (CI 17917)
 background. Tres is a soft white winter club cv. Similar to Tres for
 spike awnletted, elliptical, dense, glumes white. Kernels white, short,
 soft, ovate. Germ small. Differing agronomically from Tres for plant ht.
 (109 vs. 92 cm), grain yield (445 vs. 584 g/m²), test wt. (806 vs. 785
 g/L). Similar for heading, kernel wt.
- PI 615666. *Triticum aestivum* L. subsp. *aestivum***
 Genetic. Pureline. 97ARS 211; 96 1299. Pedigree - Tres*5///Tom
 Thumb/7*Burt//2*Tres, 97211. F3:6, BC6 near-isoline with normal height
 genes Rht Dla of Tom Thumb and Rht Bla of Tres in Tres (CI 17917)
 background. Tres is a soft white winter club cv. Similar to Tres for
 spike awnletted, elliptical, dense, glumes white. Kernels white, short,
 soft, ovate. Germ small. Differing agronomically from Tres for plant ht.
 (109 vs. 92 cm), grain yield (475 vs. 584 g/m²), test wt. (774 vs. 785
 g/L), lodging (23 vs. 11%). Similar fo heading, kernel wt.

PI 615667. *Triticum aestivum* L. subsp. *aestivum*

Genetic. Pureline. 97ARS 212; 96 1300. Pedigree - Tres*5///Tom Thumb/7*Burt//2*Tres, 97212. F3:6, BC6 near-isoline with normal height genes Rht D1a of Tom Thumb and Rht B1a of Tres in Tres (CI 17917) background. Tres is a soft white winter club cv. Similar to Tres for spike awnletted, elliptical, dense, glumes white. Kernels white, short, soft, ovate. Germ small. Differing agronomically from Tres for plant ht. (107 vs. 92 cm), grain yield (475 vs. 584 g/m²). Similar for heading, kernel wt., test wt., lodging.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 09/15/1989.

PI 615668. *Lens culinaris* subsp. *orientalis* (Boiss.) Ponert

Wild. 060689-0201; Lo 0198; W6 2032. Collected 06/06/1989 in Mardin, Turkey. Latitude 37° 34' N. Longitude 41° 4' E. Elevation 1160 m. In shade of scattered oak shrub in rocky soil. Loose rubble. Rocky N facing limestone slope. Below man-made caves in N facing cliff. 2.7km W of Icorem or 18.3km NW of Senkoy. Common.

The following were collected by Gideon Ladizinsky, Hebrew University, Faculty of Agriculture, P.O. Box 12, Rehovot, Central, Israel; Dogan Sakar. Donated by David L. Hoffman, USDA-ARS, P.O. Box 307, Aberdeen, Idaho 83210, United States. Received 01/01/1986.

PI 615669. *Lens culinaris* subsp. *orientalis* (Boiss.) Ponert

Wild. km 20989; Hoffman # 81; Lo 0081; W6 3265. Collected 06/02/1981 in Turkey. Latitude 37° 22' N. Longitude 40° 32' E. Between Mardin and Midyat.

The following were collected by Nigel Maxted, Univ. of Southampton - Dept. of Biology, Med. & Biological Science Building, Bassett Crescent East, Southampton, England SO9 3TU, United Kingdom; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/04/1991.

PI 615670. *Lens culinaris* subsp. *orientalis* (Boiss.) Ponert

Wild. 8195; 918195; W6 8286. Collected 06/10/1991 in Tajikistan. Latitude 39° 28' N. Longitude 68° 6' E. Elevation 1520 m. 3km north of Vechkan. Southern aspect, in rocky scree of small river valley. *Associa*. Additional voucher locations: MO, G, ERE.

PI 615671. *Lens culinaris* subsp. *orientalis* (Boiss.) Ponert

Wild. 8203; 918203; W6 8287. Collected 06/10/1991 in Tajikistan. Latitude 39° 32' N. Longitude 67° 53' E. Elevation 1540 m. Urmitan, on northern edge of town. Western aspect, in loose scree of canyon. Associated with mixed. Additional voucher locations: MO, G, ERE.

PI 615672. *Lens culinaris* subsp. *orientalis* (Boiss.) Ponert
Wild. 8207; 918207; W6 8288. Collected 06/11/1991 in Tajikistan.
Latitude 39° 28' N. Longitude 67° 44' E. Elevation 1270 m. 52km
east of Penzikent near Erun. Northern aspect, rocky slope of shrub-
covered hillside adjacent. Additional voucher locations: MO, G, ERE.

The following were donated by Miho Mihov, Institute for Wheat and Sunflower,
"Dobroudja" 9520, General Toschevo, Tolbukhin 9520, Bulgaria. Received
12/11/1991.

PI 615673. *Lens culinaris* Medik. subsp. *culinaris*
Cultivated. SH 85-23-3; W6 8446. Pedigree - F7 generation of IWS
accession numbers 48/HCl414. Obr.chiflik 7/Naslada.

The following were collected by Richard M. Hannan, USDA, ARS, Washington
State University, Regional Plant Introduction Station, Pullman, Washington
99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State
University, Regional Plant Introduction Station, Pullman, Washington
99164-6402, United States. Received 08/24/1992.

PI 615674. *Lens culinaris* Medik. subsp. *culinaris*
Cultivated. B92-112; No. 2; W6 10801. Collected 07/02/1992 in France. Du
Puy-2. Location Uncertain - RW.

PI 615675. *Lens culinaris* Medik. subsp. *culinaris*
Cultivated. B92-130; No. 38; W6 10814. Collected 07/02/1992 in Russian
Federation. Latitude 40° 25' 8" N. Longitude 69° 56' 20" E.
Tadzhikskaja-95.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State
University, Regional Plant Introduction Station, Pullman, Washington
99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State
University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington
99164-6434, United States. Received 07/01/1987.

PI 615676. *Lens nigricans* (M. Bieb.) Godr.
Wild. 230785-0101; Ln 0110; W6 11543. Collected 07/23/1985 in Turkey.
Latitude 38° 12' N. Longitude 30° 11' E. Elevation 1010 m. 16km
from Dinar on way to Afyon, Afyon Province. Plants shattered and dry,
mostly small. Soil collected and sorted for seeds.

PI 615677. *Lens nigricans* (M. Bieb.) Godr.
Cultivated. 240785-0301; Ln 0116; W6 11545. Collected 07/24/1985 in
Turkey. Latitude 37° 46' N. Longitude 30° 32' E. Elevation 910
m. Rocky area 2km after intersection of Isparta-Burdur on way to
Isparta, hill on right side of road about 250m off road, Isparta
Province. Lat/lon accurate to Isparta. Plants large, dentate stipules.
Large population. Pods shattered, stipules oriented parallel to stem.
Seeds found in rocks beneath plants, soil sample taken.

The following were donated by International Board for Plant Genetic
Resources, AGPG, FAO, Via della terme de Caracalla, Rome, Latium 00100, Italy.
Received 05/27/1994.

PI 615678. *Lens culinaris* Medik. subsp. *culinaris*
Uncertain. 2723(1); W6 15652. Collected in Pakistan.

PI 615679. *Lens culinaris* Medik. subsp. *culinaris*
Uncertain. 2740(1); W6 15658. Collected in Pakistan.

The following were developed by Ross King, United States; Will Bilozir, United States. Received 02/28/2001.

PI 615680 PVPO. *Solanum tuberosum* L.
Cultivar. "TRUE BLUE". PVP 9700170.

The following were developed by HZPC Holland B.V., Netherlands. Received 02/28/2001.

PI 615681 PVPO. *Solanum tuberosum* L.
Cultivar. "MORENE". PVP 9600401.

PI 615682 PVPO. *Solanum tuberosum* L.
Cultivar. "MONDIAL". PVP 9700116.

The following were developed by Willhite Seed Company, Box 23, Poolville, Texas 76076, United States. Received 02/28/2001.

PI 615683 PVPO. *Cucurbita pepo* L.
Cultivar. "LITTLE OCTOBER". PVP 200100045.

The following were developed by Pure Line Seeds, Inc., P.O. Box 8866, Moscow, Idaho 83843, United States. Received 02/28/2001.

PI 615684 PVPO. *Pisum sativum* L.
Cultivar. "STRIKE". PVP 200100095.

The following were developed by New Mexico State University Agricultural Experiment Station, Las Cruces, New Mexico 88003, United States. Received 02/28/2001.

PI 615685 PVPO. *Allium cepa* L.
Cultivar. "NuMex Arthur". PVP 200100096.

PI 615686 PVPO. *Allium cepa* L.
Cultivar. "NuMex Freedom". PVP 200100097.

The following were developed by Louisiana State University Agricultural Center, Louisiana, United States. Received 02/28/2001.

PI 615687 PVPO. *Oryza sativa* L.
Cultivar. "CF 51". PVP 200100105. Pedigree - Cypress/92AS3510.

PI 615688 PVPO. *Oryza sativa* L.

Cultivar. "CL-121". PVP 200100106. Pedigree - Cocodrie/92AS3510.

PI 615689 PVPO. *Oryza sativa* L.

Cultivar. "CL-141". PVP 200100107. Pedigree - Maybelle*3/93AS3510.

The following were developed by Brotherton Seed Company, P.O. Box 1378, Moses Lake, Washington, United States. Received 02/28/2001.

PI 615690 PVPO. *Pisum sativum* L.

Cultivar. "JESSY". PVP 200100108.

The following were developed by Minnesota Agricultural Experiment Station, St. Anthony Park, Minnesota, United States. Received 02/28/2001.

PI 615691 PVPO. *Avena sativa* L.

Cultivar. "RICHARD". PVP 200100109.

The following were developed by Elsoms Limited, Spalding, Linco, England, United Kingdom. Received 02/28/2001.

PI 615692 PVPO. *Pisum sativum* L.

Cultivar. "KENNEDY". PVP 200100110.

The following were developed by Adolph Coors Brewing Co., Golden, Colorado, United States. Received 02/28/2001.

PI 615693 PVPO. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. "MORAVIAN 37". PVP 200100112.

The following were developed by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Xingliang Zhou, North Carolina State University, Dept. of Crop Science, Box 7629, Raleigh, North Carolina 27695-7629, United States; Daryl T. Bowman, North Carolina State University, Department of Crop Science, Box 8604, Raleigh, North Carolina 27695-8604, United States; X. Cui, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; M.R. Villagarcia, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; A.S. Niewoehner, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; M.O. Fountain, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States. Received 03/08/2001.

PI 615694. *Glycine max* (L.) Merr.

Cultivar. Pureline. "N7001"; N90-7199; SY0106001. PVP 200100221; CV-444. Pedigree - N77-114 (USDA-ARS breeding line) x PI 416937 (old cv. from Japan). High yield and diverse pedigree compared to other North American cultivars. Group VII adapted to the South Atlantic Coast and Southeastern U.S. Matures approx. 3 days later than Cook or Haskell and

is adapted to similar latitudes (approx. 31 deg. to 37 deg. N). In 21 regional USDA Coop. Uniform Soybean Yield Trials on the Atlantic coast, produced 4% lower yield than Haskell in wide-row (95 cm) spacings when grown under full season conditions. In 26 full-season wide-row (95 cm) and late-planted narrow-row (48 cm) yield trials in North Carolina, produced 2% higher yield than Haskell and the same yield as Cook. In 1998, was the highest yielding entry in its maturity class in the North Carolina Official Variety Testing Program. Lodging resistant, exhibiting an average lodging score similar to or better than Haskell or Cook in USDA Coop. Uniform Soybean Yield Trials. Averaged 10 cm shorter than Haskell in these same trials. Resistant to pod dehiscence (shattering) after maturation, even when harvest is delayed extensively in North Carolina. Seed yellow, imperfect black hila, purple flowers, gray pubescence, dark pod wall, and determinate growth habit. Seed slightly smaller (1 g per 100 seed) than those of Haskell and had similar oil and protein content in the USDA Coop. Uniform Soybean Yield Trials. Resistant to soybean mosaic virus, frog eye leaf spot (*Cercospora sojina*), and bacterial pustule (*Xanthomonas campestris*) but susceptible to the cyst (*Heterodera glycines*) and root rot (*Meloidogyne*) species of nematode.

PI 615695. *Glycine max* (L.) Merr.

Cultivar. Pureline. "N7103"; N94-7441; SY0106002. PVP 200100287; CV-445. Pedigree - NTCPR90-143 x Pearl. High yield relative to other specialty cvs. and potential use in Japanese soyfoods export market. Small-seeded maturity group VII adapted to South Atlantic Coast and Southeastern U.S. Matures approx. the same day as Haskell and is adapted to similar latitudes (approx. 31 deg. to 37 deg. N). In 21 regional USDA Coop. Uniform Soybean Yield Trials, produced 4% lower yield than Haskell in wide (95cm) row spacing when grown under full season conditions. In 15 environments in the North Carolina Official Variety Testing Program, produced 2% lower yield than Haskell or Cook. In four North Carolina environments, the 100-seed weight averaged 7.8 g and was smaller than Cook (16.1 g) or Pearl (8.1 g). Average seed protein concentration was higher, and oil concentration lower, than Haskell (437 and 171 g kg⁻¹ vs. 408 and 202 g kg⁻¹) in 1997 on a zero percent moisture basis. More lodging resistant than Haskell in 1997, exhibiting an average lodging score of 1, compared to Haskell's average score of 2 (a score of 1 indicates no lodging while 5 indicates a prostrate plant). Plant height averages 17 cm shorter than Haskell. Resistant to pod dehiscence (shattering) after maturation, even when harvest is delayed extensively. Seed yellow with shiny luster and clear hila, white flowers, gray pubescence, determinate growth habit, and narrow leaves. Resistant to soybean mosaic virus, frog eye leaf spot (*Cercospora sojina*), and bacterial pustule (*Xanthomonas campestris*), but susceptible to root knot (*Meloidogyne*) species of nematode. Small seed size, compared to commodity-type varieties, limits its use to specialty purposes.

The following were developed by NBPGR, Regional Station, Phagli, Simla, Himachal Pradesh 171 004, India. Donated by B.D. Joshi, National Bureau of Plant Genetic Res., Regional Station, Phagli, Simla, Himachal Pradesh 171004, India. Received 05/14/1993.

PI 615696. *Amaranthus hypochondriacus* L.

Cultivar. "Annapurna"; Ames 21046. Released 1985. Whitish cream seeds. Fast growing. Drought and disease resistant. Good crop for stress

conditions. High yield potential, 22.3 q/ha. Popping quality is good, popping to five times its size. Leaves and inflorescence are green.

The following were collected by Hugh H. Iltis, University of Wisconsin, Herbarium and Department of Botany, Madison, Wisconsin 53706, United States; Milton Castrillo; Cristobal Medina; Charles Aker. Donated by Hugh H. Iltis, University of Wisconsin, Herbarium and Department of Botany, Madison, Wisconsin 53706, United States. Received 06/30/1992.

PI 615697. *Zea nicaraguensis* H. H. Iltis & B. F. Benz
Wild. Population. 30919; Ames 21893. Collected 12/18/1991 in Chinandega, Nicaragua. Latitude 12° 53' 45" N. Longitude 86° 59' W.
Elevation 9 m. Near seasonal camp occupied by cattle herders known as El Rodeo, ~100 m east of Estero Palo Blanco, ~3 km northwest of Hacienda Apacunca, 19-20 km west-southwest of Villa Nueva, plains between Estero Paimaica and Estero Palo Blanco. Pacific coastal plain near Golfo de Fonseca. Sunny margin of open, mature, weedy, heavily grazed floodplain gallery forest (dry forest, seasonally green, 25 m tall, under 3-5 dm of water in Oct.) between savanna and seasonal river (estero). Dense 1 ha stand, 3-5 meters tall, once ubiquitous, now very rare in region.

The following were developed by Wisconsin Alumni Research Foundation, University of Wisconsin, Madison, Wisconsin, United States. Received 03/13/2001.

PI 615698 PVPO. *Solanum tuberosum* L.
Cultivar. "W1100R". PVP 9700151.

Unknown source. Received 2001.

PI 615699. *Gossypium arboreum* L.
BURMA C19.

Unknown source. Received 2001.

PI 615700. *Gossypium arboreum* L.
"CHINESE NARROW LEAF".

Unknown source. Received 2001.

PI 615701. *Gossypium arboreum* L.
SOUDANENSE.

Unknown source. Received 2001.

PI 615702. *Gossypium arboreum* L.
AK 235.

Unknown source. Received 2001.

PI 615703. *Gossypium arboreum* L.

CJ-73.

Unknown source. Received 2001.

PI 615704. *Gossypium arboreum* L.
"GAORANI 46".

Unknown source. Received 2001.

PI 615705. *Gossypium arboreum* L.
"COCANDA-1".

Unknown source. Received 2001.

PI 615706. *Gossypium arboreum* L.
30846.

Unknown source. Received 2001.

PI 615707. *Gossypium arboreum* L.
30838.

Unknown source. Received 2001.

PI 615708. *Gossypium arboreum* L.
CERNUUM.

Unknown source. Received 2001.

PI 615709. *Gossypium arboreum* L.
NEGLECTUM.

Unknown source. Received 2001.

PI 615710. *Gossypium arboreum* L.
"NANKING MEYEN".

Unknown source. Received 2001.

PI 615711. *Gossypium arboreum* L.
ANTYPICUM.

Unknown source. Received 2001.

PI 615712. *Gossypium arboreum* L.
INDICUM.

Unknown source. Received 2001.

PI 615713. *Gossypium arboreum* L.
"SANGUINEUM HASSK".

Unknown source. Received 2001.

PI 615714. *Gossypium arboreum* L.
WEIGHTIANUM.

Unknown source. Received 2001.

PI 615715. *Gossypium arboreum* L.
"GAORANI 46".

Unknown source. Received 2001.

PI 615716. *Gossypium arboreum* L.
"K-7".

Unknown source. Received 2001.

PI 615717. *Gossypium arboreum* L.
VIR-6681.

Unknown source. Received 2001.

PI 615718. *Gossypium arboreum* L.
"WESTERNS-I".

Unknown source. Received 2001.

PI 615719. *Gossypium arboreum* L.
"CV 2557".

Unknown source. Received 2001.

PI 615720. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615721. *Gossypium arboreum* L.
Unknown source. Received 2001.

PI 615722. *Gossypium arboreum* L.
"TAICHANG?".

Unknown source. Received 2001.

PI 615723. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615724. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615725. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615726. *Gossypium arboreum* L.
"JIANG NING".

Unknown source. Received 2001.

PI 615727. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615728. *Gossypium arboreum* L.
"ZHENJIANG DING".

Unknown source. Received 2001.

PI 615729. *Gossypium arboreum* L.
"SHEZHOU".

Unknown source. Received 2001.

PI 615730. *Gossypium arboreum* L.
"ZI SE DA HUA".

Unknown source. Received 2001.

PI 615731. *Gossypium arboreum* L.
"HONG-ZIE MIAN".

Unknown source. Received 2001.

PI 615732. *Gossypium arboreum* L.

"TU MIAN".

Unknown source. Received 2001.

PI 615733. *Gossypium arboreum* L.
"ZI-HUA GUANG ZI".

Unknown source. Received 2001.

PI 615734. *Gossypium arboreum* L.
"LIAO YANG #1".

Unknown source. Received 2001.

PI 615735. *Gossypium arboreum* L.
"BAI WAN MIAN".

Unknown source. Received 2001.

PI 615736. *Gossypium arboreum* L.
"LE TING XIAN-HEIZI".

Unknown source. Received 2001.

PI 615737. *Gossypium arboreum* L.
"GUANG DI XIAN-TIE-ZI".

Unknown source. Received 2001.

PI 615738. *Gossypium arboreum* L.
"ZHEJIANG DING HAI-ZI".

Unknown source. Received 2001.

PI 615739. *Gossypium arboreum* L.
"GUANGXI ZUAXIAN-ZHO".

Unknown source. Received 2001.

PI 615740. *Gossypium arboreum* L.
"FONG YANG ZHONG-MIAN".

Unknown source. Received 2001.

PI 615741. *Gossypium arboreum* L.
"LIANHUA ZHONG-MIAN".

Unknown source. Received 2001.

PI 615742. *Gossypium arboreum* L.
"GING JING".

Unknown source. Received 2001.

PI 615743. *Gossypium arboreum* L.
"SHI XI YA #1".

Unknown source. Received 2001.

PI 615744. *Gossypium arboreum* L.
4189.

Unknown source. Received 2001.

PI 615745. *Gossypium arboreum* L.
"WHITE FLOWER".

Unknown source. Received 2001.

PI 615746. *Gossypium arboreum* L.
"RED FLOWER".

Unknown source. Received 2001.

PI 615747. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615748. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615749. *Gossypium arboreum* L.
"CVA-4".

Unknown source. Received 2001.

PI 615750. *Gossypium arboreum* L.
"PUNJABI 39".

Unknown source. Received 2001.

PI 615751. *Gossypium arboreum* L.

"A2-K".

Unknown source. Received 2001.

PI 615752. *Gossypium arboreum* L.
"A2-Q".

Unknown source. Received 2001.

PI 615753. *Gossypium arboreum* L.
"A2-72270".

Unknown source. Received 2001.

PI 615754. *Gossypium arboreum* L.
"JARILLA".

Unknown source. Received 2001.

PI 615755. *Gossypium arboreum* L.
C-19.

Unknown source. Received 2001.

PI 615756. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615757. *Gossypium arboreum* L.
"WHITE FLOWER, BROWN LINT".

Unknown source. Received 2001.

PI 615758. *Gossypium arboreum* L.
"119 S".

Unknown source. Received 2001.

PI 615759. *Gossypium arboreum* L.
"231 R".

Unknown source. Received 2001.

PI 615760. *Gossypium arboreum* L.
"GAO 61-6".

Unknown source. Received 2001.

PI 615761. *Gossypium arboreum* L.
"H 150".

Unknown source. Received 2001.

PI 615762. *Gossypium arboreum* L.
"H 158".

Unknown source. Received 2001.

PI 615763. *Gossypium arboreum* L.
"H 173".

Unknown source. Received 2001.

PI 615764. *Gossypium arboreum* L.
"H 209".

Unknown source. Received 2001.

PI 615765. *Gossypium arboreum* L.
"H 241".

Unknown source. Received 2001.

PI 615766. *Gossypium arboreum* L.
"H 415".

Unknown source. Received 2001.

PI 615767. *Gossypium arboreum* L.
"H 429".

Unknown source. Received 2001.

PI 615768. *Gossypium arboreum* L.
"H 442".

Unknown source. Received 2001.

PI 615769. *Gossypium arboreum* L.
"H 460".

Unknown source. Received 2001.

PI 615770. *Gossypium arboreum* L.

"H 465".

Unknown source. Received 2001.

PI 615771. *Gossypium arboreum* L.
"H 467".

Unknown source. Received 2001.

PI 615772. *Gossypium arboreum* L.
"H 468".

Unknown source. Received 2001.

PI 615773. *Gossypium arboreum* L.
"H 484".

Unknown source. Received 2001.

PI 615774. *Gossypium arboreum* L.
"H 485".

Unknown source. Received 2001.

PI 615775. *Gossypium arboreum* L.
"H 486".

Unknown source. Received 2001.

PI 615776. *Gossypium arboreum* L.
"H 489".

Unknown source. Received 2001.

PI 615777. *Gossypium arboreum* L.
"H 491".

Unknown source. Received 2001.

PI 615778. *Gossypium arboreum* L.
"H 492".

Unknown source. Received 2001.

PI 615779. *Gossypium arboreum* L.
"H 494".

Unknown source. Received 2001.

PI 615780. *Gossypium arboreum* L.
"H 495".

Unknown source. Received 2001.

PI 615781. *Gossypium arboreum* L.
"H 496".

Unknown source. Received 2001.

PI 615782. *Gossypium arboreum* L.
"H 499".

Unknown source. Received 2001.

PI 615783. *Gossypium arboreum* L.
"H 500".

Unknown source. Received 2001.

PI 615784. *Gossypium arboreum* L.
"H 503".

Unknown source. Received 2001.

PI 615785. *Gossypium arboreum* L.
"H 507".

Unknown source. Received 2001.

PI 615786. *Gossypium arboreum* L.
"H 508".

Unknown source. Received 2001.

PI 615787. *Gossypium arboreum* L.
"H 510".

Unknown source. Received 2001.

PI 615788. *Gossypium arboreum* L.
"H 512".

Unknown source. Received 2001.

PI 615789. *Gossypium arboreum* L.

"H 513".

Unknown source. Received 2001.

PI 615790. *Gossypium arboreum* L.
"H 574".

Unknown source. Received 2001.

PI 615791. *Gossypium arboreum* L.
"H 581".

Unknown source. Received 2001.

PI 615792. *Gossypium arboreum* L.
"HAWARI".

Unknown source. Received 2001.

PI 615793. *Gossypium arboreum* L.
"INDICUM-1".

Unknown source. Received 2001.

PI 615794. *Gossypium arboreum* L.
"INDICUM-2".

Unknown source. Received 2001.

PI 615795. *Gossypium arboreum* L.
"INDICUM-10".

Unknown source. Received 2001.

PI 615796. *Gossypium arboreum* L.
"INDICUM-18".

Unknown source. Received 2001.

PI 615797. *Gossypium arboreum* L.
"INDICUM-22".

Unknown source. Received 2001.

PI 615798. *Gossypium arboreum* L.
"INDICUM-24".

Unknown source. Received 2001.

PI 615799. *Gossypium arboreum* L.
"INDICUM-28".

Unknown source. Received 2001.

PI 615800. *Gossypium arboreum* L.
"INDICUM-1290".

Unknown source. Received 2001.

PI 615801. *Gossypium arboreum* L.
"INDICUM-1998".

Unknown source. Received 2001.

PI 615802. *Gossypium arboreum* L.
"IMPROVED SHAM".

Unknown source. Received 2001.

PI 615803. *Gossypium arboreum* L.
"JARILLA".

Unknown source. Received 2001.

PI 615804. *Gossypium arboreum* L.
"JUBILEE".

Unknown source. Received 2001.

PI 615805. *Gossypium arboreum* L.
"JL 9".

Unknown source. Received 2001.

PI 615806. *Gossypium arboreum* L.
"JL 9-46".

Unknown source. Received 2001.

PI 615807. *Gossypium arboreum* L.
"JL 60".

Unknown source. Received 2001.

PI 615808. *Gossypium arboreum* L.

"JL 407".

Unknown source. Received 2001.

PI 615809. *Gossypium arboreum* L.
"JL 415".

Unknown source. Received 2001.

PI 615810. *Gossypium arboreum* L.
"KOKATI KHAKI".

Unknown source. Received 2001.

PI 615811. *Gossypium arboreum* L.
"KUMUNDI B3".

Unknown source. Received 2001.

PI 615812. *Gossypium arboreum* L.
"K 1".

Unknown source. Received 2001.

PI 615813. *Gossypium arboreum* L.
"K 2".

Unknown source. Received 2001.

PI 615814. *Gossypium arboreum* L.
"K 52-46-E-3".

Unknown source. Received 2001.

PI 615815. *Gossypium arboreum* L.
"K 52-402".

Unknown source. Received 2001.

PI 615816. *Gossypium arboreum* L.
"K 53-519".

Unknown source. Received 2001.

PI 615817. *Gossypium arboreum* L.
"K 53-567".

Unknown source. Received 2001.

PI 615818. *Gossypium arboreum* L.
"K 161-1".

Unknown source. Received 2001.

PI 615819. *Gossypium arboreum* L.
"K 359 F".

Unknown source. Received 2001.

PI 615820. *Gossypium arboreum* L.
"K 462".

Unknown source. Received 2001.

PI 615821. *Gossypium arboreum* L.
"K 463".

Unknown source. Received 2001.

PI 615822. *Gossypium arboreum* L.
"KUMATHA BLACK SEEDED".

Unknown source. Received 2001.

PI 615823. *Gossypium arboreum* L.
"LATE VERUM".

Unknown source. Received 2001.

PI 615824. *Gossypium arboreum* L.
"LOHIT".

Unknown source. Received 2001.

PI 615825. *Gossypium arboreum* L.
"MALVI-11".

Unknown source. Received 2001.

PI 615826. *Gossypium arboreum* L.
"MALVI-12".

Unknown source. Received 2001.

PI 615827. *Gossypium arboreum* L.

"MALVI-20".

Unknown source. Received 2001.

PI 615828. *Gossypium arboreum* L.
"MALSONIE".

Unknown source. Received 2001.

PI 615829. *Gossypium arboreum* L.
"MH-R-168-144".

Unknown source. Received 2001.

PI 615830. *Gossypium arboreum* L.
"MSA".

Unknown source. Received 2001.

PI 615831. *Gossypium arboreum* L.
"MUDHOL 2927".

Unknown source. Received 2001.

PI 615832. *Gossypium arboreum* L.
"MUDHOL 3394".

Unknown source. Received 2001.

PI 615833. *Gossypium arboreum* L.
"NARROW NO.".

Unknown source. Received 2001.

PI 615834. *Gossypium arboreum* L.
"NEW MILLION DOLLAR".

Unknown source. Received 2001.

PI 615835. *Gossypium arboreum* L.
"NEW TYPE-2".

Unknown source. Received 2001.

PI 615836. *Gossypium arboreum* L.
"NEW TYPE-10".

Unknown source. Received 2001.

PI 615837. *Gossypium arboreum* L.
"N 11-54-31-32".

Unknown source. Received 2001.

PI 615838. *Gossypium arboreum* L.
"N 14-M 14".

Unknown source. Received 2001.

PI 615839. *Gossypium arboreum* L.
"N 31-14".

Unknown source. Received 2001.

PI 615840. *Gossypium arboreum* L.
"N 31-24".

Unknown source. Received 2001.

PI 615841. *Gossypium arboreum* L.
"N 56-7".

Unknown source. Received 2001.

PI 615842. *Gossypium arboreum* L.
"N 723-WR".

Unknown source. Received 2001.

PI 615843. *Gossypium arboreum* L.
"N 1314".

Unknown source. Received 2001.

PI 615844. *Gossypium arboreum* L.
"NORTHERN-16".

Unknown source. Received 2001.

PI 615845. *Gossypium arboreum* L.
"NR-5".

Unknown source. Received 2001.

PI 615846. *Gossypium arboreum* L.

"NRS".

Unknown source. Received 2001.

PI 615847. *Gossypium arboreum* L.
"OBTUSIFOLIUM-INDICUM".

Unknown source. Received 2001.

PI 615848. *Gossypium arboreum* L.
"O-S-217".

Unknown source. Received 2001.

PI 615849. *Gossypium arboreum* L.
"O-S-218".

Unknown source. Received 2001.

PI 615850. *Gossypium arboreum* L.
"PARBHANI-1".

Unknown source. Received 2001.

PI 615851. *Gossypium arboreum* L.
"PINKTOP".

Unknown source. Received 2001.

PI 615852. *Gossypium arboreum* L.
"PRATAP".

Unknown source. Received 2001.

PI 615853. *Gossypium arboreum* L.
"PS-135".

Unknown source. Received 2001.

PI 615854. *Gossypium arboreum* L.
"PS-360".

Unknown source. Received 2001.

PI 615855. *Gossypium arboreum* L.
"P-51-31".

Unknown source. Received 2001.

PI 615856. *Gossypium arboreum* L.
"PBN 8-57".

Unknown source. Received 2001.

PI 615857. *Gossypium arboreum* L.
"PBN 48".

Unknown source. Received 2001.

PI 615858. *Gossypium arboreum* L.
"PBN 452".

Unknown source. Received 2001.

PI 615859. *Gossypium arboreum* L.
"PBN 604".

Unknown source. Received 2001.

PI 615860. *Gossypium arboreum* L.
"PBN 8670".

Unknown source. Received 2001.

PI 615861. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 615862. *Gossypium arboreum* L.
"PBN 5839".

Unknown source. Received 2001.

PI 615863. *Gossypium arboreum* L.
"PBN 6977 X AKH4".

Unknown source. Received 2001.

PI 615864. *Gossypium arboreum* L.
"PBS 6582".

Unknown source. Received 2001.

PI 615865. *Gossypium arboreum* L.

"PBS 6572".

Unknown source. Received 2001.

PI 615866. *Gossypium arboreum* L.
"PBS 1549".

Unknown source. Received 2001.

PI 615867. *Gossypium arboreum* L.
"RANGAMATI".

Unknown source. Received 2001.

PI 615868. *Gossypium arboreum* L.
"ROSI 6".

Unknown source. Received 2001.

PI 615869. *Gossypium arboreum* L.
"ROSI 8".

Unknown source. Received 2001.

PI 615870. *Gossypium arboreum* L.
"RANIBEN".

Unknown source. Received 2001.

PI 615871. *Gossypium arboreum* L.
"RG 1".

Unknown source. Received 2001.

PI 615872. *Gossypium arboreum* L.
"SANGUINEUM BL/RF".

Unknown source. Received 2001.

PI 615873. *Gossypium arboreum* L.
"SANGUINEUM/G 29".

Unknown source. Received 2001.

PI 615874. *Gossypium arboreum* L.
"SHELGAON LOCAL".

Unknown source. Received 2001.

PI 615875. *Gossypium arboreum* L.
"SARGUJA-NL-WF".

Unknown source. Received 2001.

PI 615876. *Gossypium arboreum* L.
"SHAMALI SHAM 766".

Unknown source. Received 2001.

PI 615877. *Gossypium arboreum* L.
"SHAM 766".

Unknown source. Received 2001.

PI 615878. *Gossypium arboreum* L.
"VIRA-2".

Unknown source. Received 2001.

PI 615879. *Gossypium arboreum* L.
"VIRA-3".

Unknown source. Received 2001.

PI 615880. *Gossypium arboreum* L.
"VERUM-438".

Unknown source. Received 2001.

PI 615881. *Gossypium arboreum* L.
"W-23-89".

Unknown source. Received 2001.

PI 615882. *Gossypium arboreum* L.
"W-31-O-B".

Unknown source. Received 2001.

PI 615883. *Gossypium arboreum* L.
"W-31-81-5B".

Unknown source. Received 2001.

PI 615884. *Gossypium arboreum* L.
"Y-1".

Unknown source. Received 2001.

PI 615885. *Gossypium arboreum* L.
"5-63-572".

Unknown source. Received 2001.

PI 615886. *Gossypium arboreum* L.
"5-65-1258".

Unknown source. Received 2001.

PI 615887. *Gossypium arboreum* L.
"18-B".

Unknown source. Received 2001.

PI 615888. *Gossypium arboreum* L.
"35-16-408".

Unknown source. Received 2001.

PI 615889. *Gossypium arboreum* L.
"56-5B".

Unknown source. Received 2001.

PI 615890. *Gossypium arboreum* L.
"51/49".

Unknown source. Received 2001.

PI 615891. *Gossypium arboreum* L.
"55-10-429".

Unknown source. Received 2001.

PI 615892. *Gossypium arboreum* L.
"105".

Unknown source. Received 2001.

PI 615893. *Gossypium arboreum* L.
"211".

Unknown source. Received 2001.

PI 615894. *Gossypium arboreum* L.
"321".

Unknown source. Received 2001.

PI 615895. *Gossypium arboreum* L.
"331".

Unknown source. Received 2001.

PI 615896. *Gossypium arboreum* L.
"554".

Unknown source. Received 2001.

PI 615897. *Gossypium arboreum* L.
"595-PST".

Unknown source. Received 2001.

PI 615898. *Gossypium arboreum* L.
"619".

Unknown source. Received 2001.

PI 615899. *Gossypium arboreum* L.
"670-4-2983".

Unknown source. Received 2001.

PI 615900. *Gossypium arboreum* L.
"739".

Unknown source. Received 2001.

PI 615901. *Gossypium arboreum* L.
"907".

Unknown source. Received 2001.

PI 615902. *Gossypium arboreum* L.
"960".

Unknown source. Received 2001.

PI 615903. *Gossypium arboreum* L.
"972".

Unknown source. Received 2001.

PI 615904. *Gossypium arboreum* L.
"1011".

Unknown source. Received 2001.

PI 615905. *Gossypium arboreum* L.
"1238".

Unknown source. Received 2001.

PI 615906. *Gossypium arboreum* L.
"1314 N".

Unknown source. Received 2001.

PI 615907. *Gossypium arboreum* L.
"1391 N".

Unknown source. Received 2001.

PI 615908. *Gossypium arboreum* L.
"1395".

Unknown source. Received 2001.

PI 615909. *Gossypium arboreum* L.
"1422".

Unknown source. Received 2001.

PI 615910. *Gossypium arboreum* L.
"1768".

Unknown source. Received 2001.

PI 615911. *Gossypium arboreum* L.
"1988".

Unknown source. Received 2001.

PI 615912. *Gossypium arboreum* L.
"2990".

Unknown source. Received 2001.

PI 615913. *Gossypium arboreum* L.
"3058".

Unknown source. Received 2001.

PI 615914. *Gossypium arboreum* L.
"3124".

Unknown source. Received 2001.

PI 615915. *Gossypium arboreum* L.
"4469".

Unknown source. Received 2001.

PI 615916. *Gossypium arboreum* L.
"5793".

Unknown source. Received 2001.

PI 615917. *Gossypium arboreum* L.
"5896".

Unknown source. Received 2001.

PI 615918. *Gossypium arboreum* L.
"6040".

Unknown source. Received 2001.

PI 615919. *Gossypium arboreum* L.
"6164".

Unknown source. Received 2001.

PI 615920. *Gossypium arboreum* L.
"6187".

Unknown source. Received 2001.

PI 615921. *Gossypium arboreum* L.
"6346".

Unknown source. Received 2001.

PI 615922. *Gossypium arboreum* L.
"6481".

Unknown source. Received 2001.

PI 615923. *Gossypium arboreum* L.
"6536".

Unknown source. Received 2001.

PI 615924. *Gossypium arboreum* L.
"6582".

Unknown source. Received 2001.

PI 615925. *Gossypium arboreum* L.
"6652".

Unknown source. Received 2001.

PI 615926. *Gossypium arboreum* L.
"7038".

Unknown source. Received 2001.

PI 615927. *Gossypium arboreum* L.
"7244".

Unknown source. Received 2001.

PI 615928. *Gossypium arboreum* L.
"7249".

Unknown source. Received 2001.

PI 615929. *Gossypium arboreum* L.
"7444".

Unknown source. Received 2001.

PI 615930. *Gossypium arboreum* L.
"7526".

Unknown source. Received 2001.

PI 615931. *Gossypium arboreum* L.
"7656".

Unknown source. Received 2001.

PI 615932. *Gossypium arboreum* L.
"7662".

Unknown source. Received 2001.

PI 615933. *Gossypium arboreum* L.
"7735".

Unknown source. Received 2001.

PI 615934. *Gossypium arboreum* L.
"7748".

Unknown source. Received 2001.

PI 615935. *Gossypium arboreum* L.
"7763".

Unknown source. Received 2001.

PI 615936. *Gossypium arboreum* L.
"8251".

Unknown source. Received 2001.

PI 615937. *Gossypium arboreum* L.
"8410-2".

Unknown source. Received 2001.

PI 615938. *Gossypium arboreum* L.
"8410-3".

Unknown source. Received 2001.

PI 615939. *Gossypium arboreum* L.
"30791".

Unknown source. Received 2001.

PI 615940. *Gossypium arboreum* L.
"30795".

Unknown source. Received 2001.

PI 615941. *Gossypium arboreum* L.
"30799".

Unknown source. Received 2001.

PI 615942. *Gossypium arboreum* L.
"30800".

Unknown source. Received 2001.

PI 615943. *Gossypium arboreum* L.
"30802".

Unknown source. Received 2001.

PI 615944. *Gossypium arboreum* L.
"30804".

Unknown source. Received 2001.

PI 615945. *Gossypium arboreum* L.
"30807".

Unknown source. Received 2001.

PI 615946. *Gossypium arboreum* L.
"30808".

Unknown source. Received 2001.

PI 615947. *Gossypium arboreum* L.
"30811".

Unknown source. Received 2001.

PI 615948. *Gossypium arboreum* L.
"30812".

Unknown source. Received 2001.

PI 615949. *Gossypium arboreum* L.
"30816".

Unknown source. Received 2001.

PI 615950. *Gossypium arboreum* L.
"30818".

Unknown source. Received 2001.

PI 615951. *Gossypium arboreum* L.
"30823".

Unknown source. Received 2001.

PI 615952. *Gossypium arboreum* L.
"30824".

Unknown source. Received 2001.

PI 615953. *Gossypium arboreum* L.
"30825".

Unknown source. Received 2001.

PI 615954. *Gossypium arboreum* L.
"30827".

Unknown source. Received 2001.

PI 615955. *Gossypium arboreum* L.
"30830".

Unknown source. Received 2001.

PI 615956. *Gossypium arboreum* L.
"30833".

Unknown source. Received 2001.

PI 615957. *Gossypium arboreum* L.
"30835".

Unknown source. Received 2001.

PI 615958. *Gossypium arboreum* L.
"30837".

Unknown source. Received 2001.

PI 615959. *Gossypium arboreum* L.
"30839".

Unknown source. Received 2001.

PI 615960. *Gossypium arboreum* L.
"30843".

Unknown source. Received 2001.

PI 615961. *Gossypium arboreum* L.
"30847".

Unknown source. Received 2001.

PI 615962. *Gossypium arboreum* L.
"30849".

Unknown source. Received 2001.

PI 615963. *Gossypium arboreum* L.
"30850".

Unknown source. Received 2001.

PI 615964. *Gossypium arboreum* L.
"30852".

Unknown source. Received 2001.

PI 615965. *Gossypium arboreum* L.
"30855".

Unknown source. Received 2001.

PI 615966. *Gossypium arboreum* L.
"79/BH 47".

Unknown source. Received 2001.

PI 615967. *Gossypium arboreum* L.
"79/BH 112".

Unknown source. Received 2001.

PI 615968. *Gossypium arboreum* L.
"79/BH 53".

Unknown source. Received 2001.

PI 615969. *Gossypium arboreum* L.
"79/BH 113".

Unknown source. Received 2001.

PI 615970. *Gossypium arboreum* L.
"79/LOHIT".

Unknown source. Received 2001.

PI 615971. *Gossypium arboreum* L.
"79/BH 124".

Unknown source. Received 2001.

PI 615972. *Gossypium arboreum* L.
"79/BH-97".

Unknown source. Received 2001.

PI 615973. *Gossypium arboreum* L.
"DESI 97".

Unknown source. Received 2001.

PI 615974. *Gossypium arboreum* L.

"DESI 101".

Unknown source. Received 2001.

PI 615975. *Gossypium arboreum* L.
"DESI 11".

Unknown source. Received 2001.

PI 615976. *Gossypium arboreum* L.
"DESI 70".

Unknown source. Received 2001.

PI 615977. *Gossypium arboreum* L.
"DESI 87".

Unknown source. Received 2001.

PI 615978. *Gossypium arboreum* L.
"DESI 22".

Unknown source. Received 2001.

PI 615979. *Gossypium arboreum* L.
"DESI 52".

Unknown source. Received 2001.

PI 615980. *Gossypium arboreum* L.
"DESI 72".

Unknown source. Received 2001.

PI 615981. *Gossypium arboreum* L.
"DESI 31".

Unknown source. Received 2001.

PI 615982. *Gossypium arboreum* L.
"DESI 56".

Unknown source. Received 2001.

PI 615983. *Gossypium arboreum* L.
"DESI 73".

Unknown source. Received 2001.

PI 615984. *Gossypium arboreum* L.
"IC 377/8".

Unknown source. Received 2001.

PI 615985. *Gossypium arboreum* L.
"AKA 57".

Unknown source. Received 2001.

PI 615986. *Gossypium arboreum* L.
"AKA 590".

Unknown source. Received 2001.

PI 615987. *Gossypium arboreum* L.
"AKA 603".

Unknown source. Received 2001.

PI 615988. *Gossypium arboreum* L.
"AKA 28".

Unknown source. Received 2001.

PI 615989. *Gossypium arboreum* L.
"MALJARI".

Unknown source. Received 2001.

PI 615990. *Gossypium arboreum* L.
"DH 149".

Unknown source. Received 2001.

PI 615991. *Gossypium arboreum* L.
"AH 71".

Unknown source. Received 2001.

PI 615992. *Gossypium arboreum* L.
"AKH 5".

Unknown source. Received 2001.

PI 615993. *Gossypium arboreum* L.

"AKH 496".

Unknown source. Received 2001.

PI 615994. *Gossypium arboreum* L.
"AKH 580".

Unknown source. Received 2001.

PI 615995. *Gossypium arboreum* L.
"AKH 590".

Unknown source. Received 2001.

PI 615996. *Gossypium arboreum* L.
"AKH 592".

Unknown source. Received 2001.

PI 615997. *Gossypium arboreum* L.
"AKH 597".

Unknown source. Received 2001.

PI 615998. *Gossypium arboreum* L.
"AKH 603".

Unknown source. Received 2001.

PI 615999. *Gossypium arboreum* L.
"AKH 606".

Unknown source. Received 2001.

PI 616000. *Gossypium arboreum* L.
"AKH 607".

Unknown source. Received 2001.

PI 616001. *Gossypium arboreum* L.
"JLH 7".

Unknown source. Received 2001.

PI 616002. *Gossypium arboreum* L.
"SC 136".

Unknown source. Received 2001.

PI 616003. *Gossypium arboreum* L.
"CPA-5467 (BROWN LINT)".

Unknown source. Received 2001.

PI 616004. *Gossypium arboreum* L.
"AK 580".

Unknown source. Received 2001.

PI 616005. *Gossypium arboreum* L.
"SC 97".

Unknown source. Received 2001.

PI 616006. *Gossypium arboreum* L.
"GDH 149 (SEL.)".

Unknown source. Received 2001.

PI 616007. *Gossypium arboreum* L.
"PAA 1".

Unknown source. Received 2001.

PI 616008. *Gossypium arboreum* L.
"PAA 2".

Unknown source. Received 2001.

PI 616009. *Gossypium arboreum* L.
"PAA 83".

Unknown source. Received 2001.

PI 616010. *Gossypium arboreum* L.
"AC 3291".

Unknown source. Received 2001.

PI 616011. *Gossypium arboreum* L.
"AC 3590".

Unknown source. Received 2001.

PI 616012. *Gossypium arboreum* L.

"AC 3535".

Unknown source. Received 2001.

PI 616013. *Gossypium arboreum* L.
"AC 3361".

Unknown source. Received 2001.

PI 616014. *Gossypium arboreum* L.
"AC 3234".

Unknown source. Received 2001.

PI 616015. *Gossypium arboreum* L.
"AC 3273".

Unknown source. Received 2001.

PI 616016. *Gossypium arboreum* L.
"AC 3562".

Unknown source. Received 2001.

PI 616017. *Gossypium arboreum* L.
"AC 3504".

Unknown source. Received 2001.

PI 616018. *Gossypium arboreum* L.
"AC 3477".

Unknown source. Received 2001.

PI 616019. *Gossypium arboreum* L.
"AC 3617".

Unknown source. Received 2001.

PI 616020. *Gossypium arboreum* L.
"AC 3391".

Unknown source. Received 2001.

PI 616021. *Gossypium arboreum* L.
"AC 3376".

Unknown source. Received 2001.

PI 616022. *Gossypium arboreum* L.
"AC 3498".

Unknown source. Received 2001.

PI 616023. *Gossypium arboreum* L.
"AC 3278".

Unknown source. Received 2001.

PI 616024. *Gossypium arboreum* L.
"AC 3235".

Unknown source. Received 2001.

PI 616025. *Gossypium arboreum* L.
"AC 3244".

Unknown source. Received 2001.

PI 616026. *Gossypium arboreum* L.
"AC 3631".

Unknown source. Received 2001.

PI 616027. *Gossypium arboreum* L.
"AC 3399".

Unknown source. Received 2001.

PI 616028. *Gossypium arboreum* L.
"AC 3516".

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PI 616029. *Gossypium arboreum* L.
"AC 3286".

Unknown source. Received 2001.

PI 616030. *Gossypium arboreum* L.
"AC 3079".

Unknown source. Received 2001.

PI 616031. *Gossypium arboreum* L.

"AC 3630".

Unknown source. Received 2001.

PI 616032. *Gossypium arboreum* L.
"AC 3522 B".

Unknown source. Received 2001.

PI 616033. *Gossypium arboreum* L.
"AC 3034".

Unknown source. Received 2001.

PI 616034. *Gossypium arboreum* L.
"AC 3100".

Unknown source. Received 2001.

PI 616035. *Gossypium arboreum* L.
"AC 3088".

Unknown source. Received 2001.

PI 616036. *Gossypium arboreum* L.
"AC 3493".

Unknown source. Received 2001.

PI 616037. *Gossypium arboreum* L.
"AC 3087".

Unknown source. Received 2001.

PI 616038. *Gossypium arboreum* L.
"AC 3008".

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PI 616039. *Gossypium arboreum* L.
"AC 3461".

Unknown source. Received 2001.

PI 616040. *Gossypium arboreum* L.
"AC 3599".

Unknown source. Received 2001.

PI 616041. *Gossypium arboreum* L.
"AC 3532".

Unknown source. Received 2001.

PI 616042. *Gossypium arboreum* L.
"AC 3525".

Unknown source. Received 2001.

PI 616043. *Gossypium arboreum* L.
"AC 3137".

Unknown source. Received 2001.

PI 616044. *Gossypium arboreum* L.
"AC 3511".

Unknown source. Received 2001.

PI 616045. *Gossypium arboreum* L.
"AC 3344".

Unknown source. Received 2001.

PI 616046. *Gossypium arboreum* L.
"AC 3251".

Unknown source. Received 2001.

PI 616047. *Gossypium arboreum* L.
"AC 3233".

Unknown source. Received 2001.

PI 616048. *Gossypium arboreum* L.
"AC 3653".

Unknown source. Received 2001.

PI 616049. *Gossypium arboreum* L.
"AC 3695".

Unknown source. Received 2001.

PI 616050. *Gossypium arboreum* L.

"AC 3503".

Unknown source. Received 2001.

PI 616051. *Gossypium arboreum* L.
"AC 3191".

Unknown source. Received 2001.

PI 616052. *Gossypium arboreum* L.
"AC 3540".

Unknown source. Received 2001.

PI 616053. *Gossypium arboreum* L.
"AC 3324".

Unknown source. Received 2001.

PI 616054. *Gossypium arboreum* L.
"AC 3519".

Unknown source. Received 2001.

PI 616055. *Gossypium arboreum* L.
"AC 3517".

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PI 616056. *Gossypium arboreum* L.
"AC 3245".

Unknown source. Received 2001.

PI 616057. *Gossypium arboreum* L.
"AC 3470".

Unknown source. Received 2001.

PI 616058. *Gossypium arboreum* L.
"AC 3025".

Unknown source. Received 2001.

PI 616059. *Gossypium arboreum* L.
"AC 3402".

Unknown source. Received 2001.

PI 616060. *Gossypium arboreum* L.
"AC 3696".

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PI 616061. *Gossypium arboreum* L.
"AC 3688".

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PI 616062. *Gossypium arboreum* L.
"AC 3184".

Unknown source. Received 2001.

PI 616063. *Gossypium arboreum* L.
"AC 3316".

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PI 616064. *Gossypium arboreum* L.
"AC 3104".

Unknown source. Received 2001.

PI 616065. *Gossypium arboreum* L.
"AC 3633".

Unknown source. Received 2001.

PI 616066. *Gossypium arboreum* L.
"AC 3332".

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PI 616067. *Gossypium arboreum* L.
"AC 3606".

Unknown source. Received 2001.

PI 616068. *Gossypium arboreum* L.
"AC 3418".

Unknown source. Received 2001.

PI 616069. *Gossypium arboreum* L.

"AC 3423".

Unknown source. Received 2001.

PI 616070. *Gossypium arboreum* L.
"AC 3393".

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PI 616071. *Gossypium arboreum* L.
"AC 3521".

Unknown source. Received 2001.

PI 616072. *Gossypium arboreum* L.
"AC 3396".

Unknown source. Received 2001.

PI 616073. *Gossypium arboreum* L.
"AC 3170".

Unknown source. Received 2001.

PI 616074. *Gossypium arboreum* L.
"AC 3028".

Unknown source. Received 2001.

PI 616075. *Gossypium arboreum* L.
"AC 3570".

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PI 616076. *Gossypium arboreum* L.
"AC 3009".

Unknown source. Received 2001.

PI 616077. *Gossypium arboreum* L.
"AC 3161".

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PI 616078. *Gossypium arboreum* L.
"AC 3166".

Unknown source. Received 2001.

PI 616079. *Gossypium arboreum* L.
"AC 3173".

Unknown source. Received 2001.

PI 616080. *Gossypium arboreum* L.
"AC 3620".

Unknown source. Received 2001.

PI 616081. *Gossypium arboreum* L.
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PI 616082. *Gossypium arboreum* L.
"AC 3181".

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PI 616083. *Gossypium arboreum* L.
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PI 616084. *Gossypium arboreum* L.
"AC 3645".

Unknown source. Received 2001.

PI 616085. *Gossypium arboreum* L.
"AC 3256 A".

Unknown source. Received 2001.

PI 616086. *Gossypium arboreum* L.
"AC 3640".

Unknown source. Received 2001.

PI 616087. *Gossypium arboreum* L.
"AC 3108".

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PI 616088. *Gossypium arboreum* L.

"AC 3664".

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PI 616089. *Gossypium arboreum* L.
"AC 3389".

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PI 616090. *Gossypium arboreum* L.
"AC 3682".

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PI 616091. *Gossypium arboreum* L.
"AC 3305".

Unknown source. Received 2001.

PI 616092. *Gossypium arboreum* L.
"AC 3506".

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PI 616093. *Gossypium arboreum* L.
"AC 3002".

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PI 616094. *Gossypium arboreum* L.
"AC 3248".

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PI 616095. *Gossypium arboreum* L.
"AC 3666".

Unknown source. Received 2001.

PI 616096. *Gossypium arboreum* L.
"AC 3505".

Unknown source. Received 2001.

PI 616097. *Gossypium arboreum* L.
"AC 3150".

Unknown source. Received 2001.

PI 616098. *Gossypium arboreum* L.
"AC 3569".

Unknown source. Received 2001.

PI 616099. *Gossypium arboreum* L.
"AC 3111".

Unknown source. Received 2001.

PI 616100. *Gossypium arboreum* L.
"AC 3203".

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PI 616101. *Gossypium arboreum* L.
"AC 3071".

Unknown source. Received 2001.

PI 616102. *Gossypium arboreum* L.
"AC 3175".

Unknown source. Received 2001.

PI 616103. *Gossypium arboreum* L.
"AC 3149".

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PI 616104. *Gossypium arboreum* L.
"AC 3665".

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PI 616105. *Gossypium arboreum* L.
"AC 3530".

Unknown source. Received 2001.

PI 616106. *Gossypium arboreum* L.
"AC 3397".

Unknown source. Received 2001.

PI 616107. *Gossypium arboreum* L.

"AC 3556".

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PI 616108. *Gossypium arboreum* L.
"AC 3121".

Unknown source. Received 2001.

PI 616109. *Gossypium arboreum* L.
"AC 3206".

Unknown source. Received 2001.

PI 616110. *Gossypium arboreum* L.
"AC 3685".

Unknown source. Received 2001.

PI 616111. *Gossypium arboreum* L.
"AC 3001".

Unknown source. Received 2001.

PI 616112. *Gossypium arboreum* L.
"AC 3323".

Unknown source. Received 2001.

PI 616113. *Gossypium arboreum* L.
"AC 3381".

Unknown source. Received 2001.

PI 616114. *Gossypium arboreum* L.
"AC 3281".

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PI 616115. *Gossypium arboreum* L.
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PI 616116. *Gossypium arboreum* L.
"AC 3122".

Unknown source. Received 2001.

PI 616117. *Gossypium arboreum* L.
"AC 3373".

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PI 616118. *Gossypium arboreum* L.
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PI 616119. *Gossypium arboreum* L.
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PI 616120. *Gossypium arboreum* L.
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Unknown source. Received 2001.

PI 616121. *Gossypium arboreum* L.
"AC 3077".

Unknown source. Received 2001.

PI 616122. *Gossypium arboreum* L.
"AC 3637".

Unknown source. Received 2001.

PI 616123. *Gossypium arboreum* L.
"AC 3236".

Unknown source. Received 2001.

PI 616124. *Gossypium arboreum* L.
"AC 3123".

Unknown source. Received 2001.

PI 616125. *Gossypium arboreum* L.
"AC 3655".

Unknown source. Received 2001.

PI 616126. *Gossypium arboreum* L.

"AC 3672".

Unknown source. Received 2001.

PI 616127. *Gossypium arboreum* L.
"AC 3260".

Unknown source. Received 2001.

PI 616128. *Gossypium arboreum* L.
"AC 3375".

Unknown source. Received 2001.

PI 616129. *Gossypium arboreum* L.
"AC 3544".

Unknown source. Received 2001.

PI 616130. *Gossypium arboreum* L.
AC 3345.

Unknown source. Received 2001.

PI 616131. *Gossypium arboreum* L.
AC 3242.

Unknown source. Received 2001.

PI 616132. *Gossypium arboreum* L.
AC 3205.

Unknown source. Received 2001.

PI 616133. *Gossypium arboreum* L.
AC 3064.

Unknown source. Received 2001.

PI 616134. *Gossypium arboreum* L.
AC 3586.

Unknown source. Received 2001.

PI 616135. *Gossypium arboreum* L.
AC 3650.

Unknown source. Received 2001.

PI 616136. *Gossypium arboreum* L.
"AC 3674".

Unknown source. Received 2001.

PI 616137. *Gossypium arboreum* L.
AC 3560.

Unknown source. Received 2001.

PI 616138. *Gossypium arboreum* L.
AC 3101.

Unknown source. Received 2001.

PI 616139. *Gossypium arboreum* L.
AC 3158.

Unknown source. Received 2001.

PI 616140. *Gossypium arboreum* L.
AC 3522 A.

Unknown source. Received 2001.

PI 616141. *Gossypium arboreum* L.
AC 3126.

Unknown source. Received 2001.

PI 616142. *Gossypium arboreum* L.
AC 3692.

Unknown source. Received 2001.

PI 616143. *Gossypium arboreum* L.
AC 3313.

Unknown source. Received 2001.

PI 616144. *Gossypium arboreum* L.
AC 3043.

Unknown source. Received 2001.

PI 616145. *Gossypium arboreum* L.

AC 3060.

Unknown source. Received 2001.

PI 616146. *Gossypium arboreum* L.
AC 3157.

Unknown source. Received 2001.

PI 616147. *Gossypium arboreum* L.
AC 3153 B.

Unknown source. Received 2001.

PI 616148. *Gossypium arboreum* L.
AC 3571.

Unknown source. Received 2001.

PI 616149. *Gossypium arboreum* L.
AC 3668.

Unknown source. Received 2001.

PI 616150. *Gossypium arboreum* L.
AC 3240.

Unknown source. Received 2001.

PI 616151. *Gossypium arboreum* L.
AC 3204.

Unknown source. Received 2001.

PI 616152. *Gossypium arboreum* L.
AC 3671.

Unknown source. Received 2001.

PI 616153. *Gossypium arboreum* L.
AC 3536.

Unknown source. Received 2001.

PI 616154. *Gossypium arboreum* L.
AC 3270.

Unknown source. Received 2001.

PI 616155. *Gossypium arboreum* L.
AC 3261.

Unknown source. Received 2001.

PI 616156. *Gossypium arboreum* L.
AC 3683.

Unknown source. Received 2001.

PI 616157. *Gossypium arboreum* L.
AC 3709.

Unknown source. Received 2001.

PI 616158. *Gossypium arboreum* L.
AC 3267.

Unknown source. Received 2001.

PI 616159. *Gossypium arboreum* L.
AC 3647.

Unknown source. Received 2001.

PI 616160. *Gossypium arboreum* L.
AC 3510.

Unknown source. Received 2001.

PI 616161. *Gossypium arboreum* L.
AC 3400.

Unknown source. Received 2001.

PI 616162. *Gossypium arboreum* L.
AC 3062.

Unknown source. Received 2001.

PI 616163. *Gossypium arboreum* L.
AC 3052.

Unknown source. Received 2001.

PI 616164. *Gossypium arboreum* L.

AC 3073.

Unknown source. Received 2001.

PI 616165. *Gossypium arboreum* L.
AC 3494.

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PI 616166. *Gossypium arboreum* L.
AC 3086.

Unknown source. Received 2001.

PI 616167. *Gossypium arboreum* L.
AC 3041.

Unknown source. Received 2001.

PI 616168. *Gossypium arboreum* L.
AC 3082.

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PI 616169. *Gossypium arboreum* L.
AC 3440 A.

Unknown source. Received 2001.

PI 616170. *Gossypium arboreum* L.
AC 3132.

Unknown source. Received 2001.

PI 616171. *Gossypium arboreum* L.
AC 3075.

Unknown source. Received 2001.

PI 616172. *Gossypium arboreum* L.
AC 3725.

Unknown source. Received 2001.

PI 616173. *Gossypium arboreum* L.
AC 3187.

Unknown source. Received 2001.

PI 616174. *Gossypium arboreum* L.
AC 3276.

Unknown source. Received 2001.

PI 616175. *Gossypium arboreum* L.
AC 3328.

Unknown source. Received 2001.

PI 616176. *Gossypium arboreum* L.
AC 3169.

Unknown source. Received 2001.

PI 616177. *Gossypium arboreum* L.
AC 3054.

Unknown source. Received 2001.

PI 616178. *Gossypium arboreum* L.
AC 3455.

Unknown source. Received 2001.

PI 616179. *Gossypium arboreum* L.
AC 3080.

Unknown source. Received 2001.

PI 616180. *Gossypium arboreum* L.
AC 3546.

Unknown source. Received 2001.

PI 616181. *Gossypium arboreum* L.
AC 3656.

Unknown source. Received 2001.

PI 616182. *Gossypium arboreum* L.
AC 3192.

Unknown source. Received 2001.

PI 616183. *Gossypium arboreum* L.

AC 3337.

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PI 616184. *Gossypium arboreum* L.
AC 3005.

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PI 616185. *Gossypium arboreum* L.
AC 3262.

Unknown source. Received 2001.

PI 616186. *Gossypium arboreum* L.
AC 3405.

Unknown source. Received 2001.

PI 616187. *Gossypium arboreum* L.
AC 3103.

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PI 616188. *Gossypium arboreum* L.
AC 3654.

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PI 616189. *Gossypium arboreum* L.
AC 3033.

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PI 616190. *Gossypium arboreum* L.
AC 3710.

Unknown source. Received 2001.

PI 616191. *Gossypium arboreum* L.
AC 3341.

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PI 616192. *Gossypium arboreum* L.
AC 3708.

Unknown source. Received 2001.

PI 616193. *Gossypium arboreum* L.
AC 3428.

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PI 616194. *Gossypium arboreum* L.
AC 3183.

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PI 616195. *Gossypium arboreum* L.
AC 3429.

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PI 616196. *Gossypium arboreum* L.
AC 3499.

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PI 616197. *Gossypium arboreum* L.
AC 3172.

Unknown source. Received 2001.

PI 616198. *Gossypium arboreum* L.
AC 3727.

Unknown source. Received 2001.

PI 616199. *Gossypium arboreum* L.
AC 3651.

Unknown source. Received 2001.

PI 616200. *Gossypium arboreum* L.
AC 3201.

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PI 616201. *Gossypium arboreum* L.
AC 3474.

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PI 616202. *Gossypium arboreum* L.

AC 3257.

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PI 616203. *Gossypium arboreum* L.
AC 3443.

Unknown source. Received 2001.

PI 616204. *Gossypium arboreum* L.
AC 3018.

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PI 616205. *Gossypium arboreum* L.
AC 3349.

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PI 616206. *Gossypium arboreum* L.
AC 3404.

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PI 616207. *Gossypium arboreum* L.
AC 3488.

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PI 616208. *Gossypium arboreum* L.
AC 3584.

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PI 616209. *Gossypium arboreum* L.
AC 3539.

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PI 616210. *Gossypium arboreum* L.
AC 3554.

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PI 616211. *Gossypium arboreum* L.
AC 3317.

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PI 616212. *Gossypium arboreum* L.
AC 3385.

Unknown source. Received 2001.

PI 616213. *Gossypium arboreum* L.
AC 3326.

Unknown source. Received 2001.

PI 616214. *Gossypium arboreum* L.
AC 3014.

Unknown source. Received 2001.

PI 616215. *Gossypium arboreum* L.
AC 3390.

Unknown source. Received 2001.

PI 616216. *Gossypium arboreum* L.
AC 3277.

Unknown source. Received 2001.

PI 616217. *Gossypium arboreum* L.
AC 3541.

Unknown source. Received 2001.

PI 616218. *Gossypium arboreum* L.
AC 3643.

Unknown source. Received 2001.

PI 616219. *Gossypium arboreum* L.
AC 3202.

Unknown source. Received 2001.

PI 616220. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 616221. *Gossypium arboreum* L.

AC 3152.

Unknown source. Received 2001.

PI 616222. *Gossypium arboreum* L.
AC 3668.

Unknown source. Received 2001.

PI 616223. *Gossypium arboreum* L.
AC 3294.

Unknown source. Received 2001.

PI 616224. *Gossypium arboreum* L.
AC 3613.

Unknown source. Received 2001.

PI 616225. *Gossypium arboreum* L.
AC 3412 A.

Unknown source. Received 2001.

PI 616226. *Gossypium arboreum* L.
AC 3065.

Unknown source. Received 2001.

PI 616227. *Gossypium arboreum* L.
AC 3744.

Unknown source. Received 2001.

PI 616228. *Gossypium arboreum* L.
AC 3044.

Unknown source. Received 2001.

PI 616229. *Gossypium arboreum* L.
AC 3093.

Unknown source. Received 2001.

PI 616230. *Gossypium arboreum* L.
AC 3463.

Unknown source. Received 2001.

PI 616231. *Gossypium arboreum* L.
AC 3573.

Unknown source. Received 2001.

PI 616232. *Gossypium arboreum* L.
AC 3568.

Unknown source. Received 2001.

PI 616233. *Gossypium arboreum* L.
AC 3364.

Unknown source. Received 2001.

PI 616234. *Gossypium arboreum* L.
AC 3496.

Unknown source. Received 2001.

PI 616235. *Gossypium arboreum* L.
AC 3632.

Unknown source. Received 2001.

PI 616236. *Gossypium arboreum* L.
AC 3673.

Unknown source. Received 2001.

PI 616237. *Gossypium arboreum* L.
AC 3600.

Unknown source. Received 2001.

PI 616238. *Gossypium arboreum* L.
AC 3718.

Unknown source. Received 2001.

PI 616239. *Gossypium arboreum* L.
AC 3148.

Unknown source. Received 2001.

PI 616240. *Gossypium arboreum* L.

AC 3230.

Unknown source. Received 2001.

PI 616241. *Gossypium arboreum* L.
AC 3603.

Unknown source. Received 2001.

PI 616242. *Gossypium arboreum* L.

Unknown source. Received 2001.

PI 616243. *Gossypium arboreum* L.
AC 3508.

Unknown source. Received 2001.

PI 616244. *Gossypium arboreum* L.
AC 3601.

Unknown source. Received 2001.

PI 616245. *Gossypium arboreum* L.
AC 3464.

Unknown source. Received 2000.

PI 616246. *Gossypium arboreum* L.
AC 3162.

Unknown source. Received 2001.

PI 616247. *Gossypium arboreum* L.
AC 3730.

Unknown source. Received 2001.

PI 616248. *Gossypium arboreum* L.
AC 3476.

Unknown source. Received 2001.

PI 616249. *Gossypium arboreum* L.
AC 3740.

Unknown source. Received 2001.

PI 616250. *Gossypium arboreum* L.
AC 3074.

Unknown source. Received 2001.

PI 616251. *Gossypium arboreum* L.
AC 3198.

Unknown source. Received 2001.

PI 616252. *Gossypium arboreum* L.
AC 3347.

Unknown source. Received 2001.

PI 616253. *Gossypium arboreum* L.
0266.

Unknown source. Received 2001.

PI 616254. *Gossypium arboreum* L.
0407.

Unknown source. Received 2001.

PI 616255. *Gossypium arboreum* L.
0409.

Unknown source. Received 2001.

PI 616256. *Gossypium arboreum* L.
AC 3609.

Unknown source. Received 2001.

PI 616257. *Gossypium arboreum* L.
AC 3048.

Unknown source. Received 2001.

PI 616258. *Gossypium arboreum* L.
AC 3485.

Unknown source. Received 2001.

PI 616259. *Gossypium arboreum* L.

AC 3669.

Unknown source. Received 2001.

PI 616260. *Gossypium arboreum* L.
AC 3418.

Unknown source. Received 2001.

PI 616261. *Gossypium arboreum* L.
AC 3330.

Unknown source. Received 2001.

PI 616262. *Gossypium arboreum* L.
AC 3553.

Unknown source. Received 2001.

PI 616263. *Gossypium arboreum* L.
AC 3059.

Unknown source. Received 2001.

PI 616264. *Gossypium arboreum* L.
AC 3219.

Unknown source. Received 2001.

PI 616265. *Gossypium arboreum* L.
AC 3266.

Unknown source. Received 2001.

PI 616266. *Gossypium arboreum* L.
AC 3346.

Unknown source. Received 2001.

PI 616267. *Gossypium arboreum* L.
AC 3439.

Unknown source. Received 2001.

PI 616268. *Gossypium arboreum* L.
AC 3133.

Unknown source. Received 2001.

PI 616269. *Gossypium arboreum* L.
AC 3334.

Unknown source. Received 2001.

PI 616270. *Gossypium arboreum* L.
AC 3222.

Unknown source. Received 2001.

PI 616271. *Gossypium arboreum* L.
AC 3058.

Unknown source. Received 2001.

PI 616272. *Gossypium arboreum* L.
AC 3076.

Unknown source. Received 2001.

PI 616273. *Gossypium arboreum* L.
AC 3392.

Unknown source. Received 2001.

PI 616274. *Gossypium arboreum* L.
AC 3636.

Unknown source. Received 2001.

PI 616275. *Gossypium arboreum* L.
AC 3053.

Unknown source. Received 2001.

PI 616276. *Gossypium arboreum* L.
AC 3603.

Unknown source. Received 2001.

PI 616277. *Gossypium arboreum* L.
AC 3061.

Unknown source. Received 2001.

PI 616278. *Gossypium arboreum* L.

AC 3588.

Unknown source. Received 2001.

PI 616279. *Gossypium arboreum* L.
AC 3301.

Unknown source. Received 2001.

PI 616280. *Gossypium arboreum* L.
AC 3441 B.

Unknown source. Received 2001.

PI 616281. *Gossypium arboreum* L.
AC 3732.

Unknown source. Received 2001.

PI 616282. *Gossypium arboreum* L.
AC 3013.

Unknown source. Received 2001.

PI 616283. *Gossypium arboreum* L.
AC 3122.

Unknown source. Received 2001.

PI 616284. *Gossypium arboreum* L.
AC 3703.

Unknown source. Received 2001.

PI 616285. *Gossypium arboreum* L.
AC 3129.

Unknown source. Received 2001.

PI 616286. *Gossypium arboreum* L.
AC 3040.

Unknown source. Received 2001.

PI 616287. *Gossypium arboreum* L.
AC 3214.

Unknown source. Received 2001.

PI 616288. *Gossypium arboreum* L.
AC 3115.

Unknown source. Received 2001.

PI 616289. *Gossypium arboreum* L.
AC 3492.

Unknown source. Received 2001.

PI 616290. *Gossypium arboreum* L.
AC 3118.

Unknown source. Received 2001.

PI 616291. *Gossypium arboreum* L.
AC 3221.

Unknown source. Received 2001.

PI 616292. *Gossypium arboreum* L.
AC 3036.

Unknown source. Received 2001.

PI 616293. *Gossypium arboreum* L.
AC 3207.

Unknown source. Received 2001.

PI 616294. *Gossypium arboreum* L.
AC 3254.

Unknown source. Received 2001.

PI 616295. *Gossypium arboreum* L.
AC 3398.

Unknown source. Received 2001.

PI 616296. *Gossypium arboreum* L.
AC 3469.

Unknown source. Received 2001.

PI 616297. *Gossypium arboreum* L.

AC 3551.

Unknown source. Received 2001.

PI 616298. *Gossypium arboreum* L.
AC 3031.

Unknown source. Received 2001.

PI 616299. *Gossypium arboreum* L.
AC 3639.

Unknown source. Received 2001.

PI 616300. *Gossypium arboreum* L.
AC 3500.

Unknown source. Received 2001.

PI 616301. *Gossypium arboreum* L.
AC 3403.

Unknown source. Received 2001.

PI 616302. *Gossypium arboreum* L.
AC 3369.

Unknown source. Received 2001.

PI 616303. *Gossypium arboreum* L.
"NLRF".

Unknown source. Received 2001.

PI 616304. *Gossypium arboreum* L.
"V. MOLLISONI".

Unknown source. Received 2001.

PI 616305. *Gossypium arboreum* L.
WIR-822.

Unknown source. Received 2001.

PI 616306. *Gossypium arboreum* L.
"MUNGARI-274".

Unknown source. Received 2001.

PI 616307. *Gossypium arboreum* L.
AC 3736 A.

Unknown source. Received 2001.

PI 616308. *Gossypium arboreum* L.
AC 3134.

Unknown source. Received 2001.

PI 616309. *Gossypium arboreum* L.
AC 3333.

Unknown source. Received 2001.

PI 616310. *Gossypium arboreum* L.
"NA 39".

Unknown source. Received 2001.

PI 616311. *Gossypium arboreum* L.
RUSSIAN NO. 2211.

Unknown source. Received 2001.

PI 616312. *Gossypium arboreum* L.
RUSSIAN NO. 3270.

Unknown source. Received 2001.

PI 616313. *Gossypium arboreum* L.
RUSSIAN NO. 3679.

Unknown source. Received 2001.

PI 616314. *Gossypium arboreum* L.
RUSSIAN NO. 3686.

Unknown source. Received 2001.

PI 616315. *Gossypium arboreum* L.
RUSSIAN NO. 3710.

Unknown source. Received 2001.

PI 616316. *Gossypium arboreum* L.

RUSSIAN NO. 3712.

Unknown source. Received 2001.

PI 616317. *Gossypium arboreum* L.
RUSSIAN NO. 4344.

Unknown source. Received 2001.

PI 616318. *Gossypium arboreum* L.
RUSSIAN NO. 4731.

Unknown source. Received 2001.

PI 616319. *Gossypium arboreum* L.
RUSSIAN NO. 5244.

Unknown source. Received 2001.

PI 616320. *Gossypium arboreum* L.
RUSSIAN NO. 6123.

Unknown source. Received 2001.

PI 616321. *Gossypium arboreum* L.
RUSSIAN NO. 6124.

Unknown source. Received 2001.

PI 616322. *Gossypium arboreum* L.
RUSSIAN NO. 6412.

Unknown source. Received 2001.

PI 616323. *Gossypium arboreum* L.
RUSSIAN NO. 6682.

Unknown source. Received 2001.

PI 616324. *Gossypium arboreum* L.
RUSSIAN NO. 6680.

Unknown source. Received 2001.

PI 616325. *Gossypium arboreum* L.
RUSSIAN NO. 6698.

Unknown source. Received 2001.

PI 616326. *Gossypium arboreum* L.
RUSSIAN NO. 6700.

Unknown source. Received 2001.

PI 616327. *Gossypium arboreum* L.
RUSSIAN NO. 6701.

Unknown source. Received 2001.

PI 616328. *Gossypium arboreum* L.
RUSSIAN NO. 7004.

Unknown source. Received 2001.

PI 616329. *Gossypium arboreum* L.
VIR NO. 1259.

Unknown source. Received 2001.

PI 616330. *Gossypium arboreum* L.
C-2287.

Unknown source. Received 2001.

PI 616331. *Gossypium arboreum* L.
6502 BLL.

Unknown source. Received 2001.

PI 616332. *Gossypium arboreum* L.
6502 NLL.

Unknown source. Received 2001.

PI 616333. *Gossypium arboreum* L.
6529.

Unknown source. Received 2001.

PI 616334. *Gossypium arboreum* L.
6540.

Unknown source. Received 2001.

PI 616335. *Gossypium arboreum* L.

6543.

Unknown source. Received 2001.

PI 616336. *Gossypium arboreum* L.
6544.

Unknown source. Received 2001.

PI 616337. *Gossypium arboreum* L.
6545.

Unknown source. Received 2001.

PI 616338. *Gossypium arboreum* L.
6556 BLL.

Unknown source. Received 2001.

PI 616339. *Gossypium arboreum* L.
6556 MLL.

Unknown source. Received 2001.

PI 616340. *Gossypium arboreum* L.
6565 BLL.

Unknown source. Received 2001.

PI 616341. *Gossypium arboreum* L.
6565 MLL.

Unknown source. Received 2001.

PI 616342. *Gossypium arboreum* L.
6572.

Unknown source. Received 2001.

PI 616343. *Gossypium arboreum* L.
6579.

Unknown source. Received 2001.

PI 616344. *Gossypium arboreum* L.
6580 BLL.

Unknown source. Received 2001.

PI 616345. *Gossypium arboreum* L.
6580 MLL.

Unknown source. Received 2001.

PI 616346. *Gossypium arboreum* L.
6584 BLL.

Unknown source. Received 2001.

PI 616347. *Gossypium arboreum* L.
6584 MLL.

Unknown source. Received 2001.

PI 616348. *Gossypium arboreum* L.
6585.

Unknown source. Received 2001.

PI 616349. *Gossypium arboreum* L.
6589.

Unknown source. Received 2001.

PI 616350. *Gossypium arboreum* L.
6601.

Unknown source. Received 2001.

PI 616351. *Gossypium arboreum* L.
6604.

Unknown source. Received 2001.

PI 616352. *Gossypium arboreum* L.
6611.

Unknown source. Received 2001.

PI 616353. *Gossypium arboreum* L.
6617.

Unknown source. Received 2001.

PI 616354. *Gossypium arboreum* L.

6617 NLL.

Unknown source. Received 2001.

PI 616355. *Gossypium arboreum* L.
6629.

Unknown source. Received 2001.

PI 616356. *Gossypium arboreum* L.
6631 BLL.

Unknown source. Received 2001.

PI 616357. *Gossypium arboreum* L.
6631 MLL.

Unknown source. Received 2001.

PI 616358. *Gossypium arboreum* L.
6651 BROWN KAPAS.

Unknown source. Received 2001.

PI 616359. *Gossypium arboreum* L.
6651 WHITE KAPAS.

Unknown source. Received 2001.

PI 616360. *Gossypium arboreum* L.
6659.

Unknown source. Received 2001.

PI 616361. *Gossypium arboreum* L.
6663.

Unknown source. Received 2001.

PI 616362. *Gossypium arboreum* L.
6670.

Unknown source. Received 2001.

PI 616363. *Gossypium arboreum* L.
6671 L.

Unknown source. Received 2001.

PI 616364. *Gossypium arboreum* L.
6671 W.

Unknown source. Received 2001.

PI 616365. *Gossypium arboreum* L.
6674.

Unknown source. Received 2001.

PI 616366. *Gossypium arboreum* L.
6687 BLL.

Unknown source. Received 2001.

PI 616367. *Gossypium arboreum* L.
6687 MLL.

Unknown source. Received 2001.

PI 616368. *Gossypium arboreum* L.
6687 NLL.

Unknown source. Received 2001.

PI 616369. *Gossypium arboreum* L.
6696.

Unknown source. Received 2001.

PI 616370. *Gossypium arboreum* L.
6698.

Unknown source. Received 2001.

PI 616371. *Gossypium arboreum* L.
6699 BLL.

Unknown source. Received 2001.

PI 616372. *Gossypium arboreum* L.
6699 MLL.

Unknown source. Received 2001.

PI 616373. *Gossypium arboreum* L.

6701.

Unknown source. Received 2001.

PI 616374. *Gossypium arboreum* L.
6702.

Unknown source. Received 2001.

PI 616375. *Gossypium arboreum* L.
6705.

Unknown source. Received 2001.

PI 616376. *Gossypium arboreum* L.
6706.

Unknown source. Received 2001.

PI 616377. *Gossypium arboreum* L.
6711 BLL.

Unknown source. Received 2001.

PI 616378. *Gossypium arboreum* L.
6711 NLL.

Unknown source. Received 2001.

PI 616379. *Gossypium arboreum* L.
6714.

Unknown source. Received 2001.

PI 616380. *Gossypium arboreum* L.
6716 BLL.

Unknown source. Received 2001.

PI 616381. *Gossypium arboreum* L.
6716 NLL.

Unknown source. Received 2001.

PI 616382. *Gossypium arboreum* L.
6717 BLL.

Unknown source. Received 2001.

PI 616383. *Gossypium arboreum* L.
6717 MLL.

Unknown source. Received 2001.

PI 616384. *Gossypium arboreum* L.
6721 MLL.

Unknown source. Received 2001.

PI 616385. *Gossypium arboreum* L.
6721 NLL.

Unknown source. Received 2001.

PI 616386. *Gossypium arboreum* L.
6729.

Unknown source. Received 2001.

PI 616387. *Gossypium arboreum* L.
6736.

Unknown source. Received 2001.

PI 616388. *Gossypium arboreum* L.
6738.

Unknown source. Received 2001.

PI 616389. *Gossypium arboreum* L.
6739.

Unknown source. Received 2001.

PI 616390. *Gossypium arboreum* L.
6752.

Unknown source. Received 2001.

PI 616391. *Gossypium arboreum* L.
6760 BLL.

Unknown source. Received 2001.

PI 616392. *Gossypium arboreum* L.

6760 NLL.

Unknown source. Received 2001.

PI 616393. *Gossypium arboreum* L.
6763 MLL.

Unknown source. Received 2001.

PI 616394. *Gossypium arboreum* L.
6763 NLL.

Unknown source. Received 2001.

PI 616395. *Gossypium arboreum* L.
6765 BLL.

Unknown source. Received 2001.

PI 616396. *Gossypium arboreum* L.
6769.

Unknown source. Received 2001.

PI 616397. *Gossypium arboreum* L.
6771.

Unknown source. Received 2001.

PI 616398. *Gossypium arboreum* L.
6773.

Unknown source. Received 2001.

PI 616399. *Gossypium arboreum* L.
6776.

Unknown source. Received 2001.

PI 616400. *Gossypium arboreum* L.
6780.

Unknown source. Received 2001.

PI 616401. *Gossypium arboreum* L.
6789.

Unknown source. Received 2001.

PI 616402. *Gossypium arboreum* L.
6790 BLL.

Unknown source. Received 2001.

PI 616403. *Gossypium arboreum* L.
6790 MLL.

Unknown source. Received 2001.

PI 616404. *Gossypium arboreum* L.
6791 BLL.

Unknown source. Received 2001.

PI 616405. *Gossypium arboreum* L.
6791 NLL.

Unknown source. Received 2001.

PI 616406. *Gossypium arboreum* L.
6792.

Unknown source. Received 2001.

PI 616407. *Gossypium arboreum* L.
6799.

Unknown source. Received 2001.

PI 616408. *Gossypium arboreum* L.
6800.

Unknown source. Received 2001.

PI 616409. *Gossypium arboreum* L.
6801.

Unknown source. Received 2001.

PI 616410. *Gossypium arboreum* L.
6803.

Unknown source. Received 2001.

PI 616411. *Gossypium arboreum* L.

6807.

Unknown source. Received 2001.

PI 616412. *Gossypium arboreum* L.
6807 MLL.

Unknown source. Received 2001.

PI 616413. *Gossypium arboreum* L.
6807 NLL.

Unknown source. Received 2001.

PI 616414. *Gossypium arboreum* L.
6810.

Unknown source. Received 2001.

PI 616415. *Gossypium arboreum* L.
6812.

Unknown source. Received 2001.

PI 616416. *Gossypium arboreum* L.
6814.

Unknown source. Received 2001.

PI 616417. *Gossypium arboreum* L.
6816.

Unknown source. Received 2001.

PI 616418. *Gossypium arboreum* L.
6818.

Unknown source. Received 2001.

PI 616419. *Gossypium arboreum* L.
6823.

Unknown source. Received 2001.

PI 616420. *Gossypium arboreum* L.
6824.

Unknown source. Received 2001.

PI 616421. *Gossypium arboreum* L.
6827.

Unknown source. Received 2001.

PI 616422. *Gossypium arboreum* L.
6829 BLL.

Unknown source. Received 2001.

PI 616423. *Gossypium arboreum* L.
6829 MLL.

Unknown source. Received 2001.

PI 616424. *Gossypium arboreum* L.
6830.

Unknown source. Received 2001.

PI 616425. *Gossypium arboreum* L.
6840.

Unknown source. Received 2001.

PI 616426. *Gossypium arboreum* L.
6844.

Unknown source. Received 2001.

PI 616427. *Gossypium arboreum* L.
6847.

Unknown source. Received 2001.

PI 616428. *Gossypium arboreum* L.
6848.

Unknown source. Received 2001.

PI 616429. *Gossypium arboreum* L.
6852 BLL.

Unknown source. Received 2001.

PI 616430. *Gossypium arboreum* L.

6852 MLL.

Unknown source. Received 2001.

PI 616431. *Gossypium arboreum* L.
6853 BLL.

Unknown source. Received 2001.

PI 616432. *Gossypium arboreum* L.
6853 MLL.

Unknown source. Received 2001.

PI 616433. *Gossypium arboreum* L.
6869.

Unknown source. Received 2001.

PI 616434. *Gossypium arboreum* L.
6869 BLL.

Unknown source. Received 2001.

PI 616435. *Gossypium arboreum* L.
6871.

Unknown source. Received 2001.

PI 616436. *Gossypium arboreum* L.
6873.

Unknown source. Received 2001.

PI 616437. *Gossypium arboreum* L.
6873 NLL.

Unknown source. Received 2001.

PI 616438. *Gossypium arboreum* L.
6875.

Unknown source. Received 2001.

PI 616439. *Gossypium arboreum* L.
6875 BLL.

Unknown source. Received 2001.

PI 616440. *Gossypium arboreum* L.
6876.

Unknown source. Received 2001.

PI 616441. *Gossypium arboreum* L.
6876 BLL.

Unknown source. Received 2001.

PI 616442. *Gossypium arboreum* L.
6878.

Unknown source. Received 2001.

PI 616443. *Gossypium arboreum* L.
6879.

Unknown source. Received 2001.

PI 616444. *Gossypium arboreum* L.
6883.

Unknown source. Received 2001.

PI 616445. *Gossypium arboreum* L.
6884.

Unknown source. Received 2001.

PI 616446. *Gossypium arboreum* L.
6884 BLL.

Unknown source. Received 2001.

PI 616447. *Gossypium arboreum* L.
6888.

Unknown source. Received 2001.

PI 616448. *Gossypium arboreum* L.
6888 M11.

Unknown source. Received 2001.

PI 616449. *Gossypium arboreum* L.

6892.

Unknown source. Received 2001.

PI 616450. *Gossypium arboreum* L.
6892 NLL.

Unknown source. Received 2001.

PI 616451. *Gossypium arboreum* L.
6896.

Unknown source. Received 2001.

PI 616452. *Gossypium arboreum* L.
6896 NLL-L.

Unknown source. Received 2001.

PI 616453. *Gossypium arboreum* L.
6953.

Unknown source. Received 2001.

PI 616454. *Gossypium arboreum* L.
6954 BLL.

Unknown source. Received 2001.

PI 616455. *Gossypium arboreum* L.
6954 NLL.

Unknown source. Received 2001.

PI 616456. *Gossypium arboreum* L.
6957.

Unknown source. Received 2001.

PI 616457. *Gossypium arboreum* L.
6958.

Unknown source. Received 2001.

PI 616458. *Gossypium arboreum* L.
6959.

Unknown source. Received 2001.

PI 616459. *Gossypium arboreum* L.
6960 L.

Unknown source. Received 2001.

PI 616460. *Gossypium arboreum* L.
6960 W.

Unknown source. Received 2001.

PI 616461. *Gossypium arboreum* L.
6961 L.

Unknown source. Received 2001.

PI 616462. *Gossypium arboreum* L.
6961 W.

Unknown source. Received 2001.

PI 616463. *Gossypium arboreum* L.
6962.

Unknown source. Received 2001.

PI 616464. *Gossypium arboreum* L.
6964.

Unknown source. Received 2001.

PI 616465. *Gossypium arboreum* L.
6965 BLL.

Unknown source. Received 2001.

PI 616466. *Gossypium arboreum* L.
6965 MLL.

Unknown source. Received 2001.

PI 616467. *Gossypium arboreum* L.
6965 W.

Unknown source. Received 2001.

PI 616468. *Gossypium arboreum* L.

6966 BLL.

Unknown source. Received 2001.

PI 616469. *Gossypium arboreum* L.
6966 MLL.

Unknown source. Received 2001.

PI 616470. *Gossypium arboreum* L.
6966 NLL.

Unknown source. Received 2001.

PI 616471. *Gossypium arboreum* L.
6967 NLL.

Unknown source. Received 2001.

PI 616472. *Gossypium arboreum* L.
6968.

Unknown source. Received 2001.

PI 616473. *Gossypium arboreum* L.
6968 BLL.

Unknown source. Received 2001.

PI 616474. *Gossypium arboreum* L.
6969 MLL.

Unknown source. Received 2001.

PI 616475. *Gossypium arboreum* L.
6973 BLL.

Unknown source. Received 2001.

PI 616476. *Gossypium arboreum* L.
6973 MLL.

Unknown source. Received 2001.

PI 616477. *Gossypium arboreum* L.
6974.

Unknown source. Received 2001.

PI 616478. *Gossypium arboreum* L.
6975.

Unknown source. Received 2001.

PI 616479. *Gossypium arboreum* L.
6976 BROWN KAPAS.

Unknown source. Received 2001.

PI 616480. *Gossypium arboreum* L.
6976 WHITE KAPAS.

Unknown source. Received 2001.

PI 616481. *Gossypium arboreum* L.
6978 BLL.

Unknown source. Received 2001.

PI 616482. *Gossypium arboreum* L.
6978 MLL.

Unknown source. Received 2001.

PI 616483. *Gossypium arboreum* L.
6979 BLL.

Unknown source. Received 2001.

PI 616484. *Gossypium arboreum* L.
6979 MLL.

Unknown source. Received 2001.

PI 616485. *Gossypium arboreum* L.
6984 BLL.

Unknown source. Received 2001.

PI 616486. *Gossypium arboreum* L.
6984 NLL.

The following were developed by C. Meijer, B.V., Netherlands. Received 09/12/2001.

PI 616487 PVPO. *Solanum tuberosum* L.
Cultivar. "ACCORD". PVP 9900056.

PI 616488 PVPO. *Solanum tuberosum* L.
Cultivar. "LADY OLYMPIA". PVP 9900057.

The following were developed by NORIKA Nordring-Kartoffelzucht-und, Vermehrungs-GmbH Grob Lusewitz, Germany. Received 09/12/2001.

PI 616489 PVPO. *Solanum tuberosum* L.
Cultivar. "VALISA". PVP 9900118.

PI 616490 PVPO. *Solanum tuberosum* L.
Cultivar. "DELIKAT". PVP 9900120.

The following were developed by Craig F. Morris, USDA-ARS, Western Wheat Quality Lab., E-202 FSHN Facility East, Pullman, Washington 99164-6394, United States; Garrison King, USDA-ARS Western Wheat Quality Lab, E 202 Food Quality Bldg., P.O. Box 646394, Pullman, Washington 99164-6394, United States. Received 09/10/2001.

PI 616491. *Triticum aestivum* L. subsp. *aestivum*
Genetic. Pureline. WQL6WTNS; NSGC 8784. GS-149. Pedigree - Selection from Weston. Released 2001. Soft grain near-isogenic line selected from Weston.

PI 616492. *Triticum aestivum* L. subsp. *aestivum*
Genetic. Pureline. WQL6WTNH; NSGC 8785. GS-150. Pedigree - Selection from Weston. Released 2001. Hard grain near-isogenic line selected from Weston.

The following were developed by Rick Turley, USDA, ARS, Delta States Research Center, Cotton Phys. & Genetics Res. Center, Stoneville, Mississippi 38776, United States. Received 09/17/2001.

PI 616493. *Gossypium hirsutum* L.
Genetic. MD 17. GS-2. Pedigree - Selection from an F2 population (completely fiberless plant) from a cross between Mississippi Obsolete Variety Collection accession 243 and 143. Lines 243 and 143 expressed the naked seed alleles N1 and n2 respectively. Individual plants were harvested in the F2 and F3. Seed bulked to F4 and F5. Experimental line which is devoid of cottonseed fiber. (No commercial agronomic value). The genetic stock is the result of combining the dominant and recessive naked seed alleles (N1 and n2). This stock is homozygous for petal spot (R1) and has high seed abortion. The line has been used in genetic evaluation and biochemical/cytological studies.

The following were developed by Chao-Chien Jan, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Brady A. Vick, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105-5677, United States. Received 09/28/2001.

PI 616494. *Helianthus annuus* L.

Genetic. RS 1. GS-26. Pedigree - NMS HA89/PI 250542,F2//HA89,F8. Reduced composition of saturated fatty acids in the seed oil, typically 8% or less for C16 to C24 saturated fatty acids. This compares with about 13% saturated fatty acids in the seed oil of most sunflowers. Plants frequently demonstrate bicephalism, with the two heads sometimes completely separated and sometimes fused. Achenes black and gray striped. 1000 seed weight is 90 grams. Plant height of 98 cm and flowers 69 days after planting.

PI 616495. *Helianthus annuus* L.

Genetic. RS 2. GS-27. Pedigree - NMS HA89/PI 250542, F2//HA89, F8. Reduced composition of saturated fatty acids in the seed oil, typically 8% or less for C16 to C24 saturated fatty acids. Compares with about 13% saturated fatty acids in the seed oil of most sunflowers. Plants frequently demonstrate bicephalism, with the two heads sometimes completely separated and sometimes fused. Achenes light gray and often bleach to white when grown in the field. 1000 seed weight is 89 grams. Plant height of 89 cm and flowers 69 days after planting.

The following were developed by Paul C. St. Amand, Kansas State University, Agronomy Department, 2004 Throckmorton Hall, Manhattan, Kansas 66506-5501, United States. Received 09/05/2001.

PI 616496. *Medicago sativa* L. subsp. *sativa*

Breeding. KS2000SBS. Pedigree - Synthetic population cross: 50% KS80-13 x 50% KS80-15, then 2 cycles of selection. Resistant to multiple pests and has improved levels of resistance to summer black stem (SBS) incited by the fungus *Cercospora medicaginia*. Appears to be the most resistant population available, possessing moderate levels of resistance. In growth chamber tests. cycle 0 plants possessed high levels of resistance to downy mildew, pea aphid, blue alfalfa aphid, spotted alfalfa aphid and intermediate levels of resistance to bacterial wilt, Fusarium wilt and anthracnose.

PI 616497. *Medicago sativa* L. subsp. *sativa*

Breeding. KS224Ri50. Pedigree - Synthetic: 50% Riley, 50% KS224-36. By AFLP analysis: 45% Riley, 55% KS224-36. High levels of glandular-trichome pubescence on the seed pods and exhibits a reduction in ovaposition by alfalfa seed chalcids (*Bruchophagus roddi*). Evaluated using standardized tests for multiple pests. Percentages of resistant seedlings were: anthracnose, 50.1%; spotted alfalfa aphid, 33.8%; pea aphid, 7.8%, and potato leafhopper, 2.7%. Tests to evaluate the reaction to alfalfa seed chalcid showed the frequency of pods with exit holes 43% (Riley 62%). These percentages were significantly different at $P < 0.05$. A 19% reduction in ovaposition should significantly improve seed production in areas infested with seed chalcids.

The following were developed by James H. Orf, University of Minnesota, Dept. of Agronomy and Plant Genetics, Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55108, United States; Roxanne Denny, University of Minnesota, Dept of Plant Pathology, 350 Cargill Building 1500 Gortner Ave., St. Paul, Minnesota 55108, United States. Received 04/09/2001.

PI 616498. *Glycine max* (L.) Merr.

Cultivar. Pureline. "MN1302"; SY 109004. CV-460. Pedigree - Hendricks x Archer. Early maturity group I (relative maturity 1.3). Indeterminate growth habit, purple flowers, gray pubescence and brown pods at maturity. Seeds yellow with buff hila and a dull seed coat luster. Seeds average about 180 mg in size and have approx. 400 g kg⁻¹ protein and 205 g kg⁻¹ oil on a dry weight basis. Carries the Rpslk gene for resistance to phytophthora root rot (*Phytophthora sojae*).

The following were developed by Handelmaatschappij VAN RIJN B.V., Netherlands. Received 04/10/2001.

PI 616499 PVPO. *Solanum tuberosum* L.

Cultivar. "SANTANA". PVP 9700240.

The following were developed by D. Boyes. Donated by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 06/28/1984.

PI 616500. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Cambridge Favorite". Pedigree - *F. chiloensis* x Blakemore. IDX. Very good for canning, ships well, early.

The following were developed by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; John Maas, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States. Donated by Olivia Broome, USDA/ARS Hort. Res. Inst., BARC-West, Beltsville, Maryland 20705, United States. Received 12/03/1984.

PI 616501. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Lester"; MDUS 4359; E189. Pedigree - Raritan x MDUS 3413. Attractive, developed for fresh produce in red stele areas. Superior to Raritan in drought and leaf disease tolerance.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/01/1991.

PI 616502. *Fragaria virginiana* subsp. *platypetala* (Rydb.) Staudt

Wild. *F. virginiana* subsp. *platypetala*; Virginia Strawberry. Collected 05/17/1991 in Oregon, United States. Latitude 44° 30' N. Longitude 121° 40' W. Elevation 1000 m. Jefferson Co., 1m N of Camp Sherman, near bank of Metolius. Pedigree - Collected from the wild in Oregon. Collected in open understory of Ponderosa Pine, sandy soil, roots of plant were especially deep.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA,

ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/25/1991.

PI 616503. *Fragaria virginiana* Mill. subsp. *virginiana*

Wild. *F. virginiana* subsp. *virginiana*; Virginia Strawberry. Collected 07/22/1991 in Pennsylvania, United States. Latitude 40° 28' N. Longitude 77° 37' W. Scotia Barrens, Half Moon Twnshp, 6mi West of State College. Pedigree - Collected from the wild in Pennsylvania.

The following were collected by Margaret M. Stahler, USDA/SCS, Plant Materials Center, 3415 NE Granger, Corvallis, Oregon 97333, United States; James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/25/1991.

PI 616504. *Fragaria virginiana* Mill. subsp. *virginiana*

Wild. *F. virginiana* subsp. *virginiana*; Virginia Strawberry. Collected 07/23/1991 in Pennsylvania, United States. Latitude 40° 43' N. Longitude 77° 45' W. Bear Meadows, halfway down the hill. Pedigree - Collected from the wild in Pennsylvania. Associated with swamp milkweed.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/28/1991.

PI 616505. *Fragaria iinumae* Makino

Wild. *F. iinumae*. Collected 08/20/1991 in Honshu, Japan. Latitude 36° 34' 33" N. Longitude 137° 37' 8" E. Elevation 1960 m. Mt. Tateyama, Tateyama-machi, Nakaniikawa-gun, Toyama Pref. Pedigree - collected from the wild in Japan. Open pollinated but the only *Fragaria* species on the mountain. Fruit 0.8 - 1.0 cm length.

PI 616506. *Fragaria nipponica* Makino

Wild. *F. nipponica*. Collected 08/21/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1600 m. Hirayu, Mt. Norikura-dake, Nyukawa-mura, Yoshiki-gun, Gifu. Pedigree - selected from the wild in Japan.

The following were developed by Rudolf Bauer. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 09/06/1991.

PI 616507. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Spadeka"; Q 28394; BE 3360. Pedigree - Cross between wild strawberry and garden strawberry. Intermediate sized fruit, aroma full

bodied. Fruit suitable for fresh consumption, preserves or freezing.
Vigorous.

The following were developed by Ake Truedsson, Hans-Pers vag 2, S-230 43, Klagshamn, Malmohus, Sweden. Received 10/22/1991.

PI 616508. *Fragaria vesca* L.

Cultivar. "Rodluvan". Pedigree - Uncertain. Large light red berries, high yield, very good flavor, good groundcover.

The following were donated by Ake Truedsson, Hans-Pers vag 2, S-230 43, Klagshamn, Malmohus, Sweden. Received 10/22/1991.

PI 616509. *Fragaria vesca* L.

Cultivar. "Norrlund". Developed in Sweden. Pedigree - Unknown, an old Swedish selection. Large red berries, high yield, very good flavor, good as a groundcover.

The following were developed by Ake Truedsson, Hans-Pers vag 2, S-230 43, Klagshamn, Malmohus, Sweden. Received 10/22/1991.

PI 616510. *Fragaria vesca* L.

Cultivar. "Snovit". Pedigree - Uncertain. Large white berries, high yield, good taste, low bush, good groundcover.

The following were donated by Ake Truedsson, Hans-Pers vag 2, S-230 43, Klagshamn, Malmohus, Sweden. Received 10/22/1991.

PI 616511. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "White D". Collected in Malmohus, Sweden. Developed in Sweden. Pedigree - old strawberry cultivar with pale fruit. Collected from a landscape garden in Dalarna, where it had been for at least 50 years. Superior to White Pine.

The following were collected by Royce S. Bringhurst, University of California, Dept. Pomology, Wickson Hall, Davis, California 95616, United States. Received 12/09/1991.

PI 616512. *Fragaria chiloensis* (L.) Mill.

Wild. *F. chiloensis* (female). Collected 11/17/1991 in Chile. Latitude 38° 26' S. Longitude 71° 14' W. Lonquimay. Pedigree - Collected from the wild in Chile. Female.

The following were collected by A.T. Whittemore, Missouri Botanical Garden, Biology Department, P.O. Box 299, St. Louis, Missouri 63166-0299, United States. Received 02/26/1992.

PI 616513. *Fragaria vesca* L.

Wild. *F. vesca*. Collected 07/14/1991 in Kazakhstan. Elevation 1700 m. Lower part of the Bolshoi Aime Atinke Canyon. Pedigree - collected from the wild in Kazakhstan. Fruits small and tasty.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States; Arturo Lavin, Instituto de Investigaciones Agropecuarias, Subestacion Experimental Cauquenes, Camino A Parral-KM 3,5, Cauquenes, Chile. Developed by Washington State University, SW Washington Research Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Donated by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 616514. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 La Tapera 2A; 2 TAP 2A. Collected 1992 in Chile. Latitude 44° 39' S. Longitude 71° 42' W. Elevation 0 m. La Tapera. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616515. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Lago Torres 1A; 2 TOR 1A. Collected 1992 in Chile. Latitude 44° 48' S. Longitude 72° 13' W. Elevation 0 m. Lago Torres. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616516. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Carelmapu 1A; 2 CPU 1A. Collected 1992 in Chile. Latitude 41° 45' S. Longitude 73° 44' W. Elevation 0 m. Carelmapu. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616517. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Lago Yelcho 1A; 2 YEL 1A. Collected 1992 in Chile. Latitude 43° 11' S. Longitude 72° 27' W. Elevation 0 m. Lago Yelcho. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616518. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Lago Carrera 1A; 2 CAR 1A. Collected 1992 in Chile. Latitude 46° 39' S. Longitude 72° 38' W. Elevation 0 m. Lago General Carrera. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616519. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 La Tapera 4C Elite #2; 2 TAP 4C Elite #2. Collected 1992 in Chile. Latitude 44° 39' S. Longitude 71° 42' W. Elevation 0 m. La Tapera. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616520. *Fragaria chiloensis* (L.) Mill. f. *chiloensis*

Breeding. *F. chiloensis* 2 Rio Camahueto 1C; 2 CAM 1C. Collected 1992 in Chile. Latitude 42° 33' S. Longitude 72° 32' W. Elevation 0 m. Rio Camahueto. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

- PI 616521. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 MAC 2A; 2 MIC 2A. Collected 1992 in Chile. Latitude 42° 44' S. Longitude 72° 35' W. Elevation 0 m. Volcano Michimahuida. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616522. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Cochrane 7A; 2 COC 7A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616523. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Lago Carrera 4A; 2 CAR 4A. Collected 1992 in Chile. Latitude 46° 39' S. Longitude 72° 38' W. Elevation 0 m. Lago General Carrera. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616524. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Point Guabun 1A; 2 GBN 1A. Collected 1992 in Chile. Latitude 41° 48' S. Longitude 74° 3' W. Elevation 0 m. Point Guabun. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616525. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Cochrane 4A; 2 COC 4A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616526. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Mar Brava 1B; 2 BRA 1B. Collected 1992 in Chile. Latitude 41° 50' S. Longitude 73° 38' W. Elevation 0 m. Mar Brava. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616527. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Mallin Grande 1A; 2 MAL 1A. Collected 1992 in Chile. Latitude 46° 42' 0" S. Longitude 72° 27' 0" W. Elevation 0 m. 2 km from Mallin Grande. Nothofagus woodland area with pasture in the open, north side of road, scattered *Berberis* spp., and occasional *Ribes*. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616528. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Palena 3A; 2 PAL 3A. Collected 1992 in Chile. Latitude 43° 37' S. Longitude 71° 49' W. Elevation 0 m. Rio Palena. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616529. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Cucao 1A; 2 CUC 1A. Collected 1992 in Chile. Latitude 42° 41' S. Longitude 73° 54' W. Elevation 0 m. Cucao. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

- PI 616530. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 El Valle 1A; *F. chiloensis* 2 Le Valle 1A; 2 VAL 1A. Collected 1992 in Chile. Latitude 45° 5' S. Longitude 72° 9' W. Elevation 0 m. El Valle. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616531. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 Cochrane 3A; 2 COC 3A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616532. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 Rio Grande 1A; 2 GRA 1A. Collected 1992 in Chile. Latitude 44° 41' S. Longitude 72° 12' W. Elevation 0 m. Rio Grande. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616533. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 Lago Carrera 2A; 2 CAR 2A. Collected 1992 in Chile. Latitude 46° 39' S. Longitude 72° 38' W. Elevation 0 m. Lago General Carrera. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616534. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 Carelmapu 2A; 2 CPU 2A. Collected 1992 in Chile. Latitude 41° 45' S. Longitude 73° 44' W. Elevation 0 m. Carelmapu. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616535. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 Calle 1A; 2 CAE 1A. Collected 1992 in Chile. Latitude 42° 4' S. Longitude 74° 2' W. Elevation 0 m. Calle Cahya. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616536. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 Palena 1A; 2 PAL 1A. Collected 1992 in Chile. Latitude 43° 37' S. Longitude 71° 49' W. Elevation 0 m. Rio Palena. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States; Arturo Lavin, Instituto de Investigaciones Agropecuarias, Subestacion Experimental Cauquenes, Camino A Parral-KM 3,5, Cauquenes, Chile. Developed by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

- PI 616537. *Fragaria chiloensis* f. *patagonica* Staudt**
 Breeding. *F. chiloensis* 2 Rio Baker 2A; 2 BAK 2A. Collected 1992 in Chile. Latitude 47° 8' S. Longitude 72° 41' W. Elevation 0 m.

Rio Baker. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States; Arturo Lavin, Instituto de Investigaciones Agropecuarias, Subestacion Experimental Cauquenes, Camino A Parral-KM 3,5, Cauquenes, Chile. Developed by Washington State University, SW Washington Research Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Donated by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 616538. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Puerto Bertrand 1A; 2 BER 1A. Collected 1992 in Chile. Latitude 47° 1' 0" S. Longitude 72° 49' 0" W. Elevation 0 m. Puerto Bertrand, 11k south of junction hwy 7 at 205 with rte 7 at marker K 280. Dry lenga pastureland both roadside. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616539. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 La Tapera 3A; 2 TAP 3A. Collected 1992 in Chile. Latitude 44° 39' 0" S. Longitude 71° 42' 0" W. Elevation 0 m. La Tapera, 42 km east on X-25 junction with Hwy 7 on X-25. Open shrub, grassland mix. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616540. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. *F. chiloensis* 2 Quildaco 2A introgressed; 2 QUI 2A. Collected 1992 in Chile. Latitude 41° 57' S. Longitude 72° 49' W. Elevation 0 m. Quildaco Alto. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States; Arturo Lavin, Instituto de Investigaciones Agropecuarias, Subestacion Experimental Cauquenes, Camino A Parral-KM 3,5, Cauquenes, Chile. Developed by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 616541. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. 2 BAL 1A; *F. chiloensis* 2 Balmaceda 1A. Collected 1992 in Aisen, Chile. Latitude 45° 55' S. Longitude 71° 42' W. Elevation 0 m. Balmaceda. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; J. Scott Cameron, Washington State

University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States; Arturo Lavin, Instituto de Investigaciones Agropecuarias, Subestacion Experimental Cauquenes, Camino A Parral-KM 3,5, Cauquenes, Chile. Developed by Washington State University, SW Washington Research Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Donated by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 616542. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Futalefu 5A; 2 FUT 5A. Collected 1992 in Chile. Latitude 43° 10' 59" S. Longitude 71° 51' 0" W. Elevation 0 m. Futalefu, Gelves rd to right 1 km from edge of town, along Gelves road, mainly across bridge for about 1 km, roadbank by roadside, in pasture and woodland. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616543. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Palena 2B Elite #1; 2 PAL 2B Elite #1. Collected 1992 in Chile. Latitude 43° 37' S. Longitude 71° 49' W. Elevation 0 m. Rio Palena. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616544. *Fragaria chiloensis* (L.) Mill. f. *chiloensis*

Breeding. *F. chiloensis* 2 Michimahueda 1A; 2 MIC 1A. Collected 1992 in Chile. Latitude 43° 2' S. Longitude 72° 13' W. Elevation 0 m. Valcano Michimahuida. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States; Arturo Lavin, Instituto de Investigaciones Agropecuarias, Subestacion Experimental Cauquenes, Camino A Parral-KM 3,5, Cauquenes, Chile. Developed by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 616545. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. 2 BAK 1A; *F. chiloensis* 2 Rio Baker 1A. Collected 1992 in Chile. Latitude 48° 16' S. Longitude 73° 8' W. Elevation 0 m. (Rio Baker?). Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States; Arturo Lavin, Instituto de Investigaciones Agropecuarias, Subestacion Experimental Cauquenes, Camino A Parral-KM 3,5, Cauquenes, Chile. Developed by Washington State University, SW Washington Research Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States.

Donated by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

- PI 616546. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Puerto Guadal 1A; 2 GUA 1A. Collected 1992 in Chile. Latitude 46° 52' 0" S. Longitude 72° 42' 0" W. Elevation 0 m. 8 km from Puerto Guadal. woodland swall, lenga overstory. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616547. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Puerto Cisnes 1A; 2 CIS 1A. Collected 1992 in Chile. Latitude 44° 45' S. Longitude 72° 41' W. Elevation 0 m. Puerto Cisnes. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616548. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Lago Carrera 3A Elite #1; 2 CAR 3A. Collected 1992 in Chile. Latitude 46° 39' S. Longitude 72° 38' W. Elevation 0 m. Lago General Carrera. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616549. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Cochrane 5A; 2 COC 5A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616550. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Cochrane 2A; 2 COC 2A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616551. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Futalefu 4A; 2 FUT 4A. Collected 1992 in Chile. Latitude 43° 11' S. Longitude 71° 51' W. Elevation 0 m. Futalefu. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616552. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Cochrane 6A; 2 COC 6A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616553. *Fragaria chiloensis* f. *patagonica* Staudt**
Breeding. *F. chiloensis* 2 Rio Camahueto 1A; 2 CAM 1A. Collected 1992 in Chile. Latitude 42° 33' S. Longitude 72° 32' W. Elevation 0 m. Rio Camahueto. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.
- PI 616554. *Fragaria chiloensis* (L.) Mill. f. *chiloensis***
Breeding. *F. chiloensis* 2 Futalefu 6A introgressed; 2 FUT 6A. Collected 1992 in Chile. Latitude 43° 11' S. Longitude 71° 51' W.

Elevation 0 m. Futalefu. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616555. *Fragaria chiloensis* f. *patagonica* Staudt

Breeding. *F. chiloensis* 2 Cochrane 9A; 2 COC 9A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616556. *Fragaria chiloensis* (L.) Mill.

Breeding. *F. chiloensis* 2 Gara Bahia 1A; 2 GAR 1A. Collected 1992 in Chile. Gara Bahia. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616557. *Fragaria chiloensis* (L.) Mill.

Breeding. *F. chiloensis* 2 Cochrane 3A; 2 COC 3A. Collected 1992 in Chile. Latitude 47° 16' S. Longitude 72° 35' W. Elevation 0 m. Cochrane. Pedigree - Collected from the wild in Chile. Additional collection information forthcoming.

PI 616558. *Fragaria chiloensis* (L.) Mill.

Breeding. *F. chiloensis* 2 Rio Camahueto 1D; 2 CAM 1D. Collected 1992 in Chile. Latitude 42° 33' S. Longitude 72° 32' W. Elevation 0 m. Rio Camahueto. Pedigree - Collected from the wild in Chile. 8.3 refract. score, 8 firmness score.

The following were developed by L.J. Brundage. Donated by Tim Nourse, Nourse Farms, Inc., Box 444485, RFD, South Deerfield, Massachusetts 01373, United States. Received 04/06/1992.

PI 616559. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Seneca". Pedigree - NY 1261 (Redcoat x NY 844) x Holiday. Perfect, midseason. Fruit large to medium, drops in size, roundish, necked, very light red, soft, mild flavor.

The following were developed by Andrew R. Jamieson, Agriculture and Agri-Food Canada, Atlantic Food and Horticulture Research Centre, 32 Main St., Kentville, Nova Scotia B4N 1J5, Canada; K.A. Sanford; Nancy L. Nickerson, Agriculture Canada, Research Station, Berry Crop Pathology, Kentville, Nova Scotia B4N 1J5, Canada. Donated by Tim Nourse, Nourse Farms, Inc., Box 444485, RFD, South Deerfield, Massachusetts 01373, United States. Received 04/06/1992.

PI 616560. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Cavendish"; K83-4. Pedigree - Glooscap x Annapolis. A mid-season productive cultivar. The berries are very large and firm with medium-firm skin and bright medium red color darkening with maturity. Plants are moderately vigorous, susceptible to mildew, moderately resistant to *Verticillium* wilt and resistant to the common races of red stele. Recommended for trial as a pick-your-own, fresh market cultivar. Dale et al. 1992 Fruit: medium to very large; surface deep glossy red, medium firm; flesh firm, red except whit; flavor sweet, less tart than Honeoye, melon-like; tolerant to gray mold. Ripens midseason. Plants: medium vigor; runner well, but not excessively; crown size small to medium; very productive.

Tolerant or resistant to verticillium wilt; resistant to stele races A4, A-6 and A-7; tolerant to powdery mildew; susceptible to green petal virus. The Brooks and Olmo Register of Fruit and Nut Varieties. p. 680. APS Press. 1996.

The following were collected by Douglas D. Archbold, University of Kentucky, Department of Horticulture, N-318 Agricultural Science Building North, Lexington, Kentucky 40546, United States. Developed by Douglas D. Archbold, University of Kentucky, Department of Horticulture, N-318 Agricultural Science Building North, Lexington, Kentucky 40546, United States. Received 04/22/1992.

- PI 616561. *Fragaria virginiana* subsp. *grayana*** (Vilm. ex J. Gay) Staudt Breeding. *F. virginiana* subsp. *grayana* KY-01; KY-1. Collected in Kentucky, United States. Latitude 38° 36' N. Longitude 84° 36' W. Elevation 0 m. Dry Ridge, .5m west of Zion Station Rd. on Harrison Ridge Rd. Pedigree - Selected from the wild in Kentucky.
- PI 616562. *Fragaria virginiana* subsp. *grayana*** (Vilm. ex J. Gay) Staudt Breeding. *F. virginiana* subsp. *grayana* KY-02; KY-2. Collected in Kentucky, United States. Latitude 38° 0' N. Longitude 85° 10' W. Elevation 0 m. Anderson Co., Avonstoke Road at KY 1873. Pedigree - Selected from the wild in Kentucky.
- PI 616563. *Fragaria virginiana* subsp. *grayana*** (Vilm. ex J. Gay) Staudt Breeding. *F. virginiana* subsp. *grayana* KY-03; KY-3. Collected in Kentucky, United States. Latitude 36° 40' N. Longitude 85° 45' W. Elevation 0 m. Tompkinsville, Monroe Co. Pedigree - Selected from the wild in Kentucky.
- PI 616564. *Fragaria virginiana* subsp. *grayana*** (Vilm. ex J. Gay) Staudt Breeding. *F. virginiana* subsp. *grayana* KY-04; KY-4. Collected in Kentucky, United States. Latitude 38° 10' N. Longitude 83° 30' W. Elevation 0 m. Rowan Co., Intersection of KY 519 and US 60. Pedigree - Selected from the wild in Kentucky.
- PI 616565. *Fragaria virginiana* subsp. *grayana*** (Vilm. ex J. Gay) Staudt Breeding. *F. virginiana* subsp. *grayana* KY-05; KY-5. Collected in Kentucky, United States. Latitude 38° 5' N. Longitude 84° 30' W. Elevation 0 m. Lexington, Old Higbee Mill Rd. 5m W of Nicholasville Rd. Pedigree - Selected from the wild in Kentucky.
- PI 616566. *Fragaria virginiana* subsp. *grayana*** (Vilm. ex J. Gay) Staudt Breeding. *F. virginiana* subsp. *grayana* KY-06; KY-6. Collected in Kentucky, United States. Latitude 37° 5' N. Longitude 84° 45' W. Elevation 0 m. Mounce Farm, Nancy, near KY 80 (Pulaski Co.). Pedigree - Selected from the wild in Kentucky.
- PI 616567. *Fragaria virginiana* subsp. *grayana*** (Vilm. ex J. Gay) Staudt Breeding. *F. virginiana* subsp. *grayana* KY-07; KY-7. Collected in Kentucky, United States. Pedigree - Selected from the wild. Originally from Strafford, NH (Submitted by KY resident).
- PI 616568. *Fragaria virginiana* Mill. subsp. *virginiana*** Breeding. *F. virginiana* subsp. *virginiana* KY-08; KY-8. Collected in Kentucky, United States. Latitude 36° 40' N. Longitude 86° 15' W.

Elevation 0 m. Richards Farm, Allen Co. Pedigree - collected from the wild in Kentucky.

PI 616569. *Fragaria virginiana* Mill. subsp. *virginiana*

Breeding. *F. virginiana* subsp. *virginiana* KY-09; KY-9. Collected in Kentucky, United States. Latitude 36° 50' N. Longitude 86° 30' W. Elevation 0 m. 10m SW of Bowling Green at Warren, Hwy 68/80. Pedigree - collected from the wild in Kentucky.

PI 616570. *Fragaria virginiana* Mill. subsp. *virginiana*

Breeding. *F. virginiana* subsp. *virginiana* KY-10; KY-10. Collected in Kentucky, United States. Latitude 38° 54' N. Longitude 84° 30' W. Elevation 0 m. Cold Spring, Cambell Co. Pedigree - collected from the wild in Kentucky.

PI 616571. *Fragaria virginiana* Mill. subsp. *virginiana*

Breeding. *F. virginiana* subsp. *virginiana* KY-12; KY-12. Collected in Kentucky, United States. Latitude 37° 40' N. Longitude 84° 20' W. Elevation 0 m. Berea, Madison Co. Pedigree - collected from the wild in Kentucky.

PI 616572. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt

Breeding. *F. virginiana* subsp. *grayana* KY-13; KY-13. Collected in Kentucky, United States. Latitude 37° 5' N. Longitude 84° 36' W. Elevation 0 m. Bronston, Pulaski Co. Pedigree - Selected from the wild in Kentucky.

PI 616573. *Fragaria virginiana* Mill. subsp. *virginiana*

Breeding. *F. virginiana* subsp. *virginiana* KY-16; KY-16. Collected in Kentucky, United States. Latitude 37° 50' N. Longitude 82° 55' W. Elevation 0 m. Johnson Co. Pedigree - collected from the wild in Kentucky.

The following were developed by Douglas D. Archbold, University of Kentucky, Department of Horticulture, N-318 Agricultural Science Building North, Lexington, Kentucky 40546, United States. Received 04/22/1992.

PI 616574. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt

Breeding. *F. virginiana* subsp. *grayana* KY-17; KY-17. Pedigree - open pollinated seedling selection from KY-1.

The following were collected by Douglas D. Archbold, University of Kentucky, Department of Horticulture, N-318 Agricultural Science Building North, Lexington, Kentucky 40546, United States. Developed by Douglas D. Archbold, University of Kentucky, Department of Horticulture, N-318 Agricultural Science Building North, Lexington, Kentucky 40546, United States. Received 04/22/1992.

PI 616575. *Fragaria vesca* L. subsp. *vesca*

Breeding. *F. vesca* subsp. *vesca* KY-18; KY-18. Collected in Kentucky, United States. Latitude 36° 54' N. Longitude 84° 42' W. Elevation 0 m. Burnside, Pulaski Co. Pedigree - Selected from the wild in Kentucky.

The following were developed by Jerry Sortomme, Santa Barbara City College, Environmental Horticulture, 721 Cliff Dr., Santa Barbara, California 93109-2394, United States. Received 06/19/1992.

PI 616576. *Fragaria vesca* L. subsp. *vesca*

Breeding. "Golden Alpine". Pedigree - Golden strain isolated from a Thompson & Morgan order of 1986.

The following were developed by Barbara J. Smith, USDA/ARS Small Fruits Research Station, 810 Highway 26 West, Room 162, Poplarville, Mississippi 39470, United States. Received 08/06/1992.

PI 616577. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. US-70. Pedigree - Uncertain. Anthracnose crown rot resistant.

PI 616578. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. US-292. Pedigree - Uncertain. Anthracnose crown rot resistant.

PI 616579. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. US-159. Pedigree - Uncertain. Anthracnose crown rot resistant.

PI 616580. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. US-438. Pedigree - Uncertain. Anthracnose crown rot resistant.

The following were developed by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/17/1992.

PI 616581. *Fragaria vesca* f. *semperflorens* (Duchesne) Staudt

Cultivar. *F. vesca* subsp. *vesca* forma *semperflorens*. Collected in France. Pedigree - Open-pollinated Alpine. Seed regenerated for use as virus indicator plants.

The following were developed by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 10/29/1992.

PI 616582. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. Melcher 86-17. Pedigree - Headliner (L-0-188) x Dover (73-1965E). Tested in North Carolina, Auburn University, Texas A & M and USDA Poplarville, Miss.

The following were collected by Gunter Staudt, Bachelhurst 10A, Merzhausen, Germany. Received 11/04/1992.

PI 616583. *Fragaria chinensis* Losinsk.

Wild. *F. sp.* from China; *F. chinensis* Kansu; *F. chinensis* China diploid. Collected 1992 in Gansu, China. Latitude 35° 28' N. Longitude

104° 19' E. Elevation 2000 m. Xinglong Mtn, 100 km southeast of Lanzhou, Kansu, China. Pedigree - Collected from the wild in China.

The following were developed by E.L. Denisen, Iowa State University, Dept. Horticulture, Ames, Iowa 50011, United States. Received 11/24/1992.

PI 616584. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Clare"; Iowa 7-75065. Pedigree - 3-7165 (Stoplight x Sunrise) x 3-7145 (Surecrop x Sunrise). Fruit: large, firm, concentrated midseason ripening, calyx slightly reflexed. Plant: vigorous, fairly numerous runners, petioles sturdy, medium thick, crown solid with seven to nine fruit buds each. The Brooks and Olmo Register of Fruit and Nuts. p. 681. APS Press. 1996. A mid-season productive cultivar. The medium large berries are firm. Adam Dale et al. 1992.

The following were collected by P. Aravena. Developed by University of California, Botanical Garden, 200 Centennial Drive, Berkeley, California 94270, United States. Donated by University of California, Botanical Garden, 200 Centennial Drive, Berkeley, California 94270, United States. Received 01/29/1993.

PI 616585. *Fragaria chiloensis* subsp. *pacifica* Staudt

Cultivated. *F. chiloensis* subsp. *pacifica*. Collected in Chile. Latitude 39° 31' S. Longitude 72° 58' W. San Jose de la Mariquina. Pedigree - Collected from the wild in Chile. Original plant virus infected. Range: N & S America. A small Chilean fruit.

The following were donated by Dennis Magnello, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 12/30/1992.

PI 616586. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Frel"; Pink Panda. PP07598. Developed in United Kingdom. Pedigree - *Fragaria x ananassa* x *Potentilla palustris* selected for pink blossoms. Pink Panda is a fifth backcross segregant from a cross of cultivated strawberry (*Fragaria x ananassa*) b a red- to purple-colored European cinquefoil relative (*Potentilla palustris*). It was bred by Jack R. Ellis of Bourne End, England and patented in the United States under the name of 'Frel.' Ellis regarded the 'Frel' as essentially a strawberry. "The present cultivar is designated *Fragaria* because it is a chromosome addition line of the cultivated strawberry and is 96% *Fragaria*." with its pinkflowers, continuous blooming (everbearing habit) and increased petal count coming from the *Potentilla* parent. Gene Galletta of the USDA Fruit Laboratory in Beltsville, MD became curious how the flower color of 'Pink Panda' would be inherited and crossed it to the late maturing red stele-resistant, white-flowered, strawberry, MDUS 4740. The resulting first generation progeny varied in flower color from white, white striped with pink, pastel pink, deep pink, to red. The deep set color was often concentrated around the mid-veins of the flower petals. - Gene Galletta, *Advances in Strawberry Research*, 1997. vol. 16:cover story.

The following were developed by G. F. Govorova, Krymsk Experimental Breeding Station, Immunity Laboratory, VIR, Krymsk, Krasnodar 353330, Russian Federation. Donated by G. J. Galletta, USDA, ARS, Building 010A, BARC-West,

10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States.
Received 03/16/1993.

PI 616587. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. "Yuzhanka". Pedigree - Russian selection of cultivated
strawberry. See login notes for additional info.

PI 616588. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. "Rannyaya Plotnaya". Pedigree - Persikovaya (Peach) x
VIR228613. See login notes for additional info.

The following were developed by G. J. Galletta, USDA, ARS, Building 010A,
BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United
States. Received 03/16/1993.

PI 616589. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. "Delmarvel"; MDUS 4923; R12; MDUS 4923 R12. Pedigree -
Earliglow x Atlas.

PI 616590. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. MDUS 5368 R19.

The following were developed by Elzibeth Volk, Oregon State University, Dept.
Botany and Plant Path., Corvallis, Oregon 97331, United States. Received
04/02/1993.

PI 616591. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. ORUS 1083-135. Virus free strawberry selections from USDA
Breeding Program.

The following were developed by Adam Dale, Ontario Ministry of Agriculture &
Food, Horticultural Experiment Station, Box 587, Simcoe, Ontario N3Y 4N5,
Canada. Received 04/29/1993.

PI 616592. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Selkirk"; "Selkirk (V7210-5)"; CANADA FRA1682. Pedigree -
Earlibelle x Holiday. Selkirk is an early mid-season productive type.
The medium large berry is very firm, medium red and flavorful. The
firmness, with flesh that is red throughout, makes this an excellent
berry for freezing. Selkirk stores very well fresh. Plants are of
moderate vigor and are very susceptible to mildew. Recommended for
trial for the fresh market and for processing. Adam Dale et al.
1992.

PI 616593. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Settler"; CANADA FRA1656. Pedigree - Guardian x Holiday. An
early-midseason, productive cultivar. The large berries are firm and
bright medium red with good flavor. The fruit will skin fairly easily
which could be a disadvantage for shipping. The plants are vigorous but
slightly dense. Settler is moderately resistant to leaf scorch and
Verticillium wilt but susceptible to mildew. Recommended for trial as a
pick-your-own and fresh-market cultivar. Adam Dale et al.,
1992.

PI 616594. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Governor Simcoe"; V7236R-3; CANADA FRA1652. Pedigree - Holiday x Guardian. This is a mid- to late season productive berry. The berries are very large and firm. The skin is bright, medium-red and the flesh is pale. The fresh flavor is good. the plants are vigorous, slightly dense and runner well but not excessively. Governor Simcoe is moderately resistant to *Verticillium* wilt and leaf scorch and susceptible to powdery mildew. Recommended as a fresh market cultivar particularly on sandy soils. Dale et al., 1992. This strawberry was named (sim ko), 1752-1806, British army officer, first governor of Upper Canada (Ontario). He served with the British in the American Revolution. Upon the division of Quebec into the two Canadas, he was appointed (1791) lieutenant governor of Upper Canada. In 1792 he arrived at Niagara (which he called Newark), his temporary capital; he moved to York (now Toronto) in 1793. Zealous to make the province a strong colony, Simcoe encouraged immigration (particularly of the American Loyalists), fostered agricultural development, and urged the imperial government to establish a provincial college. He was sent (1796) to take part in the ineffective campaign in Haiti and then returned to England.
<http://www.encyclopedia.com/html/S/Simcoe-J1.asp>.

PI 616595. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "St. Williams"; "St. Williams (V7261-3)"; CANADA FRA1680. Pedigree - Guardsman x V6747R-6. St. Williams is a mid-season, productive type. The medium sized berries are firm, medium red with good flavor. St. Williams has consistently rated as outstanding in tests on the frozen pack at Vineland. It does not decap on the CML decapper. The plant runners well and is vigorous. It is resistant to leaf scorch and mildew. St. Williams is recommended for trial for processing only. Adam Dale et al., 1992.

PI 616596. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Scotland"; "Scotland (V7251-1)"; CANADA FRA1681. Pedigree - Guardian x (Veestar x NY 844). This cultivar is a late season productive type. The large berries are extremely firm, slightly pale red with a slightly acid flavor. Scotland is acceptable for processing but produces more decapped berries on the CML decapper than Midway. the plant is vigorous and will produce a good solid bed suitable for machine harvesting. It is moderately resistant to leaf scorch, mildew and *Verticillium* wild. Recommended for trial as a cultivar for machine harvesting for processing. Adam Dale et al., 1992.

The following were developed by G. F. Govorova, Krymsk Experimental Breeding Station, Immunity Laboratory, VIR, Krymsk, Krasnodar 353330, Russian Federation. Donated by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 05/07/1993.

PI 616597. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. "Vystavochnaya". Pedigree - Russian selection of cultivated strawberry. See login notes for additional info.

The following were developed by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 05/07/1993.

PI 616598. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. "Mohawk"; MDUS 5122. Pedigree - MDUS 4587 x Earliglow.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/16/1993.

PI 616599. *Fragaria virginiana* subsp. *glauca* (S. Watson) Staudt
Wild. *F. virginiana* subsp. *glauca*. Collected 08/12/1993 in Idaho, United States. Latitude 43° 46' N. Longitude 114° 34' W. Elevation 2134 m. Newman Creek in the Sawtooth National Forest, Idaho near HWY 75 and Baker Creek. Pedigree - Collected from the wild in Idaho. Collected from moist soil under conifer trees.

PI 616600. *Fragaria virginiana* subsp. *glauca* (S. Watson) Staudt
Wild. *F. virginiana* subsp. *glauca*. Collected 08/12/1993 in Idaho, United States. Latitude 43° 31' N. Longitude 114° 19' W. Elevation 2286 m. Collected along the Big Wood River, Sawtooth National Forest Idaho near mile post 148 on Hwy 75. Pedigree - Collected from the wild in Idaho. Collected from moist, rocky, sandy soil.

The following were collected by Barbara Reed, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/23/1993.

PI 616601. *Fragaria virginiana* subsp. *glauca* (S. Watson) Staudt
Wild. *F. virginiana* subsp. *glauca*. Collected 08/22/1993 in Oregon, United States. Latitude 44° 15' N. Longitude 118° 37' W. Elevation 1768 m. Big Creek Trail, Strawberry Mountain Wilderness Area. Pedigree - Collected from the wild in Oregon. Collected in burned area of lodgepole pine with lupine, pearly everlasting & a few *Ribes*.

The following were donated by James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Received 06/04/1993.

PI 616602. *Fragaria nilgerrensis* Schltdl. ex J. Gay
Cultivated. *F. nilgerrensis*. Collected in Germany. Pedigree - Grown from seed collected at Berlin Botanical Garden.

The following were developed by University of California, Botanical Garden, 200 Centennial Drive, Berkeley, California 94270, United States. Donated by James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Received 06/04/1993.

PI 616603. *Fragaria nilgerrensis* Schltdl. ex J. Gay
Cultivated. *F. nilgerrensis*. Collected in China. Pedigree - selected from the wild in China.

The following were collected by Aimak Dj. Djangaliev, Academy of Sciences Rep. of Kazakhstan, Main Botanical Garden, 187 Tulebaev st., apt. 11, Almaty, Alma-Ata 480091, Kazakhstan. Received 10/22/1993.

PI 616604. *Fragaria vesca* L.

Wild. *F. vesca*. Collected 09/1993 in Kazakhstan. Latitude 41° N. Longitude 77° E. Near Alma Ata. Pedigree - Collected from the wild in Kazakhstan.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 10/13/1993.

PI 616605. *Fragaria virginiana* Mill.

Breeding. *F. virginiana* (female). Collected in North Carolina, United States. Latitude 35° 47' N. Longitude 78° 39' W. Pedigree - collected from the wild in North Carolina. Immune to *Colletotrichum acutatum* in North Carolina.

The following were developed by Royce S. Bringhurst, University of California, Dept. Pomology, Wickson Hall, Davis, California 95616, United States. Donated by Susan Nelson-Kluk, University of California, Foundation Plant Services (FPS), One Shields Ave., Davis, California 95616-8600, United States. Received 10/15/1993.

PI 616606. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Cruz"; CANADA FRA1752. 3979. Pedigree - Cal. 37.20-45 x Sequoia. Certified virus free. Released for more northern parts of California but now replaced with others.

PI 616607. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Toro". 3980. Certified virus free. Released for the Southern California area but was replaced with others.

The following were collected by Joe Voges, Naturecraft Studio, 925 4th Corso, Nebraska City, Nebraska 68410-2864, United States. Received 12/03/1993.

PI 616608. *Fragaria virginiana* Mill. subsp. *virginiana*

Wild. *F. virginiana* subsp. *virginiana*. Collected 11/1993 in Nebraska, United States. Latitude 40° 40' N. Longitude 95° 52' W. Elevation 200 m. 4 miles west of Nebraska City on country road. Pedigree - Collected from the wild in Nebraska.

The following were collected by Gunter Staudt, Bachelhurst 10A, Merzhausen, Germany. Received 06/25/1993.

PI 616609. *Fragaria viridis* Weston

Wild. *F. viridis*. Collected in Germany. Latitude 48° 6' N. Longitude 7° 40' E. Grown at Staudt's residence. Originally collected from Kaiserstuhl, NW of Frieberg (Baden) Mountains. Pedigree - Collected from the wild in Kaiserstuhl (Caesars Chair).

PI 616610. *Fragaria vesca* L.

Wild. *F. vesca*. Collected in Russian Federation. Latitude 50° N. Longitude 105° E. Elevation 400 m. Grown at Staudt's residence. Originally collected from Irkutsk, Russia. Pedigree - Collected from the wild in Irkutsk, Russia.

PI 616611. *Fragaria viridis* Weston

Wild. *F. viridis*. Collected in Russian Federation. Latitude 50° N. Longitude 105° E. Elevation 400 m. Grown at Staudt's residence. Originally collected from Irkutsk, Russia. Pedigree - Collected from the wild in Irkutsk, Russia.

PI 616612. *Fragaria vesca* L.

Wild. *F. vesca*. Collected in Germany. Latitude 47° 58' N. Longitude 7° 50' E. Elevation 400 m. Grown at Staudt's residence. Originally collected from Merzhausen, Germany. Pedigree - Collected from the wild in Merzhausen, Germany.

PI 616613. *Fragaria x bifera* Duchesne

Wild. *F. x hagenbachiana*. Collected in France. Latitude 47° N. Longitude 6° E. Elevation 200 m. Grown at Staudt's residence. Originally collected from Besancon, France. Pedigree - Collected from the wild in Besancon, France.

The following were donated by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 03/29/1994.

PI 616614. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Fujisaki 068". Developed in Japan. Pedigree - Dorsett x Eppersburg. processed variety for northern cooler Japan. - George M. Darrow. 1966. The strawberry. p. 305.

PI 616615. *Fragaria x ananassa* Duchesne ex Rozier

Clone. *F. x ananassa* 86.51.10. Collected in Italy. Galletta received 5-21-93.

The following were developed by Pasquale Rosati, Universita degli Studi di Ancona, Dipartimento di Biotechnologie Agrarie, Via Breccie Bianche-Segreteria, Ancona, Marche 60131, Italy. Donated by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 03/29/1994.

PI 616616. *Fragaria x ananassa* Duchesne ex Rozier

Clone. "Don 85.30.5"; "Don"; 85.30.5. Pedigree - (Cesena x Tribute) x Brighton. Galletta received 5-21-93.

The following were donated by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 03/29/1994.

PI 616617. *Fragaria x ananassa* Duchesne ex Rozier

Clone. *F. x ananassa* 86.75.6. Developed in Italy. Galletta received 5-21-93.

PI 616618. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Linda". Developed in Italy. Pedigree - (Tenira x Md.Us 3184)
x Dana. Galletta received 5-21-93.

PI 616619. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Nike". Developed in Italy. Pedigree - Douglas x Addie.
Galletta received 5-21-93.

The following were collected by Hector Black, Hidden Springs Nursery, Route 14 Box 159, 170 Hidden Springs Lane, Cookeville, Tennessee 38501, United States. Received 05/03/1994.

PI 616620. *Fragaria virginiana* Mill.
Wild. *F. virginiana*. Collected in Tennessee, United States. Latitude 36° 10' N. Longitude 85° 30' W. Elevation 900 m. Roaring River Road, Cookeville, Jackson County, Tennessee. Pedigree - collected from the wild in Tennessee. Pubescence on petiole spreading.

The following were developed by F. Honda, Vegetable and Ornamental Crop, Research Station, Kurume Experiment Station, Mii-Machi, Fukuoka, Japan. Donated by Isamu Igarashi, Morioka Branch of National Research, Inst of Veg, Ornament, Tea, 92 Nabeyashiki Simokuriyagawa, Morioka, Iwate, Japan. Received 05/26/1994.

PI 616621. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Haruyoi". Pedigree - selection of *F. x ananassa*.

The following were donated by Isamu Igarashi, Morioka Branch of National Research, Inst of Veg, Ornament, Tea, 92 Nabeyashiki Simokuriyagawa, Morioka, Iwate, Japan. Received 05/26/1994.

PI 616622. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Hogyoku". Developed in Japan. Pedigree - Open pollinated 'Fukuba'.

PI 616623. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Miyazaki". Developed in Japan. Pedigree - selection of *F. x ananassa*.

PI 616624. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. Morioka 20. Developed in Japan. Pedigree - selection of *F. x ananassa*.

PI 616625. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Nagasaki Queen". Developed in Japan. Pedigree - selection of *F. x ananassa*.

PI 616626. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Nyohou". Developed in Japan. Pedigree - complex hybrid of Dana, Harunoka, Reikou.

- PI 616627. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Reikou". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616628. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Syuukou". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616629. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Terunoka". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616630. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Touhoku 10". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616631. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Tonami-zairai-shikinari". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616632. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Toyonoka". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616633. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Tonami". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616634. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Yamato-shikinari". Developed in Japan. Pedigree - selection of *F. x ananassa*.
- PI 616635. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Yamagata 2". Developed in Japan. Pedigree - selection of *F. x ananassa*.

The following were collected by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 08/09/1994.

- PI 616636. *Fragaria chiloensis*** (L.) Mill.
Wild. *F. chiloensis*. Collected 08/04/1994 in California, United States. Latitude 41° 40' N. Longitude 124° 15' W. Elevation 0 m.
Collected at lighthouse site in Crescent City, Del Norte county, California. Pedigree - collected from the wild in California.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/22/1994.

- PI 616637. *Fragaria chiloensis*** (L.) Mill.
Wild. *F. chiloensis*. Collected 08/18/1994 in Washington, United States. Latitude 47° 53' N. Longitude 124° 45' W. Elevation 3 m.
Collected at La Push Beach, La Push Indian Res., Clallam Co. Washington, 200 yds from ocean, south of Quillayute River. Sandy gravel w/

Gaultheria shalon, Picea, Rubus ursinus... Pedigree - collected from the wild in Washington.

PI 616638. *Fragaria chiloensis* (L.) Mill.

Wild. *F. chiloensis*. Collected 08/18/1994 in Washington, United States. Latitude 47° 53' N. Longitude 124° 45' W. Elevation 0 m. Collected at Rialto Beach State Park, Washington, 1 mile north of Quillayute River. Growing in organic-sand undershade w/ Salal, Chamaecyparis Pseudotsuga menyissii... Pedigree - collected from the wild in Washington.

PI 616639. *Fragaria chiloensis* (L.) Mill.

Wild. *F. chiloensis*. Collected 08/18/1994 in Washington, United States. Latitude 47° 53' N. Longitude 124° 45' W. Elevation 10 m. Collected at Hole-in-the-wall, 1.5 miles N of Rialto Beach, Washington, near stairs behind 'cake rock' on edge or trail. Organic & sand mix w/ Gaultheria shalon, Picea. Pedigree - collected from the wild in Washington.

The following were donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 06/01/1994.

PI 616640. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. NJ 8826-11. Developed in United States.

PI 616641. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. T-2. Developed in United States.

PI 616642. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. T-3. Developed in United States.

PI 616643. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. NFAA. Developed in United States.

PI 616644. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. NF-21. Developed in United States.

PI 616645. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. NF-29. Developed in United States.

PI 616646. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. NF-25. Developed in United States.

PI 616647. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. NF-19. Developed in United States.

PI 616648. *Fragaria x ananassa* Duchesne ex Rozier
Breeding. NF-31. Developed in United States.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/01/1994.

PI 616649. *Fragaria hybrid*

Wild. *F. hybrid* - *chiloensis* x *virginiana* intr. Collected 07/24/1994 in British Columbia, Canada. Latitude 49° N. Longitude 124° 30' W. Elevation 20 m. Beaver Peninsula, Vancouver Island, British Columbia, Canada. Collected from top of rocky ledge. Sandy loam, partial shade. Associated with *Gaultheria shallon*, *Rubus ursinus*. Pedigree - collected from the wild in Canada. Fewer serrations than *virginiana*. Glossy green leaves but not as thick as *F. chiloensis*.

PI 616650. *Fragaria virginiana* subsp. *platypetala* (Rydb.) Staudt

Wild. *F. virginiana* subsp. *platypetala*. Collected 07/20/1994 in British Columbia, Canada. Latitude 49° N. Longitude 124° 30' W. Elevation 100 m. Stroat Lake, approx 10 km NW of Port Alberni, Vancouver Island, British Columbia, Canada. Growing in mineral soil on edge of woods on path to lake beach. Mostly shaded. Common through path edges. Associated with *G. shallon*, *F. vesca*, *R. ursinus*, *R. spectabilis*, etc. Pedigree - collected from the wild in British Columbia. Low growing. Hairs on stems were spreading. Mother clone collected with several runners. Also associated with *Pseudotsuga menziesii* and *Chamacyparis*.

PI 616651. *Fragaria vesca* subsp. *bracteata* (A. Heller) Staudt

Wild. *F. vesca* subsp. *bracteata*. Collected 07/20/1994 in British Columbia, Canada. Latitude 49° N. Longitude 124° 30' W. Elevation 100 m. Sproat Lake, approx 10 km NW of Port Alberni, Vancouver Island, British Columbia, Canada. Growing in mineral soil on edge of woods on path to lake beach. Mostly shaded. Common through path edges. Associated with *G. shallon*, *F. virginiana* subsp. *platypetala*, etc. Pedigree - collected from the wild in British Columbia. Hairs on stems spreading. Mother clone taken with several runners. Also associated with *Rubus ursinus* and *Rubus spectabilis*.

PI 616652. *Fragaria chiloensis* (L.) Mill.

Wild. *F. chiloensis*. Collected 07/22/1994 in British Columbia, Canada. Latitude 48° 45' N. Longitude 125° 30' W. Elevation 10 m. Long Beach Golf Course, approx 10 km SE of Tofino, Vancouver Island, British Columbia, Canada. Growing as a 'weed' in sandy loam. Pedigree - collected from the wild in British Columbia.

PI 616653. *Fragaria chiloensis* (L.) Mill.

Wild. *F. chiloensis*. Collected 07/22/1994 in British Columbia, Canada. Latitude 48° 45' N. Longitude 125° 30' W. Elevation 0 m. On the beach, 200 m from waves on Schooner Cove at the north end of Long Beach. Approx 10 km SE of Tofino, Vancouver Island, British Columbia, Canada. Growing behind large driftwood on beach sand. Shaded by driftwood. Associated with *Rubus spectabilis*, grass plantain, broomgrass. Pedigree - collected from the wild in British Columbia.

PI 616654. *Fragaria virginiana* subsp. *platypetala* (Rydb.) Staudt

Wild. *F. virginiana* subsp. *platypetala*. Collected 07/24/1994 in British Columbia, Canada. Latitude 49° 49' N. Longitude 124° 7' W. Elevation 5 m. Saltery Bay Picnic Area, Saltery Bay, British Columbia, Canada. Growing about 200 m from shoreline in sod by edge of trail down to beach. Full sun. Pedigree - collected from the wild in British Columbia. Light green leaves not as coriaceous as *chiloensis*. Spreading hairs on pediole.

The following were collected by Margaret M. Stahler, USDA/SCS, Plant Materials Center, 3415 NE Granger, Corvallis, Oregon 97333, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 01/31/1995.

PI 616655. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Wisconsin, United States. Latitude 46° 15' N. Longitude 91° 48' W. Elevation 0 m. Collected around Gordon, Douglas County, Wisconsin. Pedigree - collected from the wild in Wisconsin. Selected for fruit quality 1993, 1994.

PI 616656. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Minnesota, United States. Latitude 46° 40' N. Longitude 94° 42' W. Collected at Foothills State Forest, Cass County, Minnesota. Pedigree - collected from the wild in Minnesota. Selected for fruit quality 1993, 1994.

PI 616657. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Minnesota, United States. Latitude 47° 3' N. Longitude 94° 5' W. Elevation 0 m. Collected at Chippewa National Forest, Cass County, Minnesota. Pedigree - collected from the wild in Minnesota. Selected for fruit quality 1993, 1994.

PI 616658. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Minnesota, United States. Latitude 46° 49' N. Longitude 93° 13' W. Elevation 390 m. Collected at Remote Lake, Aitkin County, Minnesota. Pedigree - collected from the wild in Minnesota. Selected for fruit quality 1993, 1994.

PI 616659. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Wisconsin, United States. Latitude 45° 25' N. Longitude 92° 39' W. Elevation 0 m. Collected at St. Croix Falls, Polk County, Wisconsin. Pedigree - collected from the wild in Wisconsin. Selected for fruit quality 1993, 1994.

PI 616660. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Minnesota, United States. Latitude 43° 46' N. Longitude 91° 21' W. Elevation 0 m. Collected at Hokah, Houston County, Minnesota. Pedigree - collected from the wild in Minnesota. Selected for fruit quality 1993, 1994.

PI 616661. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Minnesota, United States. Latitude 47° 32' N. Longitude 96° 17' W. Elevation 0 m. Collected at Fertile Prairie, Polk County, Minnesota. Pedigree - collected from the wild in Minnesota. Selected for fruit quality 1993, 1994.

PI 616662. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 1986 in Minnesota, United States. Latitude 47° 32' N. Longitude 96° 17' W. Elevation 0 m. Collected at Fertile Prairie, Polk County, Minnesota. Pedigree - collected from the wild in Minnesota. Selected for fruit quality 1993, 1994.

- PI 616663. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 48° 49' N. Longitude 94° 55' W. Elevation 0 m.
Collected at Lake of the Woods, Lake of the Woods County, Minnesota.
Pedigree - collected from the wild in Minnesota. Selected for fruit
quality 1993, 1994.
- PI 616664. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 48° 10' N. Longitude 94° 31' W. Elevation 0 m.
Collected at Waskish, Beltrami County, Minnesota. Pedigree - collected
from the wild in Minnesota. Selected for fruit quality 1993, 1994.
- PI 616665. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 48° 13' N. Longitude 93° 53' W. Elevation 0 m. Collected at
Sturgeon River, Koochiching County, Minnesota. Pedigree - collected
from the wild in Minnesota. Selected for fruit quality 1993, 1994.
- PI 616666. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 48° 13' N. Longitude 93° 53' W. Elevation 0 m.
Collected at Sturgeon River, Koochiching County, Minnesota. Pedigree -
collected from the wild in Minnesota. Selected for fruit quality 1993,
1994.
- PI 616667. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 47° 51' N. Longitude 92° 41' W. Elevation 0 m.
Collected at Cook, St. Louis County, Minnesota. Pedigree - collected
from the wild in Minnesota. Selected for fruit quality 1993, 1994.
- PI 616668. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Wisconsin, United States.
Latitude 46° 48' N. Longitude 90° 41' W. Elevation 185 m. Collected at
Madeline Island, Ashland County, Wisconsin. Pedigree - collected
from the wild in Wisconsin. Selected for fruit quality 1993, 1994.
- PI 616669. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 44° 20' N. Longitude 93° 13' W. Elevation 0 m.
Collected at Cannon City, Rice County, Minnesota. Pedigree - collected
from the wild in Minnesota. Selected for fruit quality 1993, 1994.
- PI 616670. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 44° 20' N. Longitude 93° 13' W. Elevation 0 m.
Collected at Cannon City, Rice County, Minnesota. Pedigree - collected
from the wild in Minnesota. Selected for fruit quality 1993, 1994.
- PI 616671. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*. Collected 1986 in Minnesota, United States.
Latitude 44° 20' N. Longitude 93° 13' W. Elevation 0 m.
Collected at Cannon City, Rice County, Minnesota. Pedigree - collected
from the wild in Minnesota. Selected for fruit quality 1993, 1994.

The following were collected by Bruce Bartholomew, Berkeley Bot. Gdn., Dept. of Botany, University of CA, Berkeley, California 94720, United States. Donated by Robert Newman, American College of Traditional Chinese Medicine, Botanical Garden, 455 Arkansas Street, San Francisco, California 94107, United States. Received 04/20/1995.

PI 616672. *Fragaria nilgerrensis* Schltdl. ex J. Gay
Cultivated. *F. nilgerrensis*. Collected 06/1984 in Yunnan, China.
Latitude 25° 40' N. Longitude 100° 2' E. Elevation 0 m.
Pedigree - collected from the wild in Yunnan, China.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 616673. *Fragaria vesca* L.
Wild. *F. vesca*. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild in Bolivia.

The following were collected by Laura Poggio, Ente Parco Nazionale Gran Paradiso, Giardino Botanico Alpino "Paradisica", Valnontey, Cogne, Valle d'Aosta 11012, Italy. Received 04/21/1995.

PI 616674. *Fragaria vesca* L.
Cultivated. *F. vesca*. Collected in Valle d'Aosta, Italy. Pedigree - collected from the wild in Epinel, Italy.

The following were collected by Paul M. Catling, Agriculture Canada, Centre for Land and Biological Resources Research, Edifice Wm. Saunders Bldg., Ottawa, Ontario K1A 0C6, Canada. Received 09/12/1994.

PI 616675. *Fragaria virginiana* Mill. subsp. *virginiana*
Cultivated. *F. virginiana* ssp. *virginiana*. Collected in Quebec, Canada.
Pedigree - Collected from the wild in Quebec, Canada.

PI 616676. *Fragaria virginiana* Mill. subsp. *virginiana*
Cultivated. *F. virginiana* ssp. *virginiana*. Collected in Quebec, Canada.
Pedigree - collected from the wild in Quebec.

PI 616677. *Fragaria virginiana* subsp. *glauca* (S. Watson) Staudt
Cultivated. *F. virginiana* ssp. *glauca*. Collected in Quebec, Canada.
Pedigree - Collected from the wild in Quebec, Canada.

PI 616678. *Fragaria virginiana* Mill. subsp. *virginiana*
Cultivated. *F. virginiana* ssp. *virginiana*. Collected in Quebec, Canada.
Pedigree - collected from the wild in Quebec.

PI 616679. *Fragaria virginiana* subsp. *glauca* (S. Watson) Staudt
Cultivated. *F. virginiana* ssp. *glauca*. Collected in Quebec, Canada.
Pedigree - Collected from the wild in Quebec, Canada.

The following were developed by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Received 05/12/1995.

PI 616680. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Latestar". Pedigree - Lateglow x Allstar. Latestar, a late season, disease resistant, Junebearing strawberry cultivar. Tested as MDUS 5084, was selected in 1980 at Queenstown, Maryland by G.J. Galletta from a 1978 cross of Lateglow x Allstar, made at Beltsville by G.J. Galletta. Latestar has performed well in Maryland, Ohio, New Jersey, Pennsylvania, and Missouri, but was not productive in initial tests in Minnesota or in southwest Michigan. Latestar is resistant to 5 eastern U.S. races of red stele root rot, resistant to most of the leaf and stem diseases and fruit rots, but susceptible to leaf blight. Its plants are vigorous, runner well, and usually flower and ripen slightly later than the Allstar, Lateglow or Jewel. Latestar yielded as well as and was as large-fruited as Allstar and Lateglow in Maryland and Ohio. Latestar produces well on either light or heavy soils, in matted rows or in hill culture. Fruit of Latestar is attractive, has firm and tough skin, glossy red skin color, light red flesh color, and has a pleasant and mild, slightly acidic fresh flavor. On a heavy soil in Ohio, Latestar fruit produced modest soluble solids levels compared to the high solids level standard, Earliglow. On a light soil in Maryland, Latestar fruit had a soluble solids/titratable acidity ratio similar to that of Earliglow fruit, but produced lower solids and acid levels than Earliglow. Latestar's principal fruit sugar is glucose, similar to its Lateglow parent, rather than fructose, which is the principal sugar in its Allstar parent and in Earliglow. Latestar is expected to be best adapted to the Middle Atlantic, and adjacent regions, and is introduced for trial there as an attractive, large and productive late season shipping and local market cultivar with multiple fungus disease resistance. It should be especially useful to extend the season where Lateglow has not been productive.

PI 616681. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Primetime". Pedigree - MDUS 4377 [Sunrise x MDUS 3082 (sibling of Redchief and Guardian)] x Earliglow. Notice of the release of PRIMETIME, a midseason, disease resistant, large Junebearing strawberry cultivar. The Agricultural Research Service, U.S. Department of Agriculture hereby releases for propagation PRIMETIME, a midseason, di ant, Junebearing strawberry cultivar. PRIMETIME, tested as MDUS 5069, was selected in 1980 at Queenstown, Maryland by G.J. Galletta from a 1978 cross of MDUS 4377 [Sunrise x MDUS 3082 (sibling of Redchief and Guardian)] x Earliglow, made at Beltsville by G.J. Galletta. PRIMETIME has performed well in Maryland, Ohio, New Jersey, and Pennsylvania, reasonably well in Minnesota, though it is not hardy enough for commercial production there, and was not productive in a test in southwest Michigan. PRIMETIME is resistant to 5 eastern U.S. races of red stele root rot, and is also tolerant to most of the leaf and stem diseases and fruit rots. It is vigorous, runners well, and usually ripens with or slightly ahead of the Redchief and Lester cultivars in midseason. PRIMETIME yielded as well as and was as large-fruited as Allstar in Maryland and Ohio, particularly during heat-stressed fruiting seasons (1991, 1994). PRIMETIME produces well on either light or heavy soils, in matted rows or in hill culture. Fruit of PRIMETIME is attractive and symmetrical, medium in skin firmness and toughness, bright scarlet in skin color, pink in flesh color, and has a pleasant, mild, lightly aromatic fresh flavor. On a heavy soil in Ohio, PRIMETIME fruit produced modest soluble solids levels compared to the high solids level standard, Earliglow. On a light soil in Maryland, PRIMETIME fruit

had lower solids but the same acidity as Earliglow fruit. PRIMETIME is expected to be best adapted to the Middle Atlantic and adjacent regions, and is introduced for trial there as a fancy, large-fruited, good quality, midseason shipping and local market cultivar with multiple fungus disease tolerances.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/08/1995.

PI 616682. *Fragaria chiloensis* subsp. *pacifica* Staudt

Wild. *F. chiloensis* subsp. *pacifica*. Collected 06/11/1994 in Oregon, United States. Latitude 44° 35' N. Longitude 124° W. Elevation 10 m. Sand dunes by South Beach Jetty, mouth of Yaquina Bay, Newport, Lincoln county, Oregon. Sand dunes by beach, growing with beach grasses and legumes. Pedigree - collected from the wild in Oregon.

The following were collected by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Developed by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/10/1995.

PI 616683. *Fragaria chiloensis* (L.) Mill. f. *chiloensis*

Breeding. *F. chiloensis* subsp. *c. forma c.*. Collected 06/30/1995 in Chile. Latitude 44° 36' N. Longitude 123° 15' W. Elevation 75 m. Pedigree - Selfed cross from CFRA 1104.001.

PI 616684. *Fragaria chiloensis* (L.) Mill. f. *chiloensis*

Breeding. *F. chiloensis* subsp. *c. forma c.*. Collected in Chile. Latitude 44° 36' N. Longitude 123° 15' W. Elevation 75 m. Pedigree - Selfed cross from CFRA 744.001.

PI 616685. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. *F. x ananassa*. Collected in Chile. Latitude 44° 36' N. Longitude 123° 15' W. Elevation 75 m. Pedigree - Selfed cross from CFRA 792.001.

PI 616686. *Fragaria chiloensis* (L.) Mill.

Breeding. *F. chiloensis*. Collected in Chile. Latitude 44° 36' N. Longitude 123° 15' W. Elevation 75 m. Pedigree - Selfed cross from CFRA 713.001.

PI 616687. *Fragaria chiloensis* (L.) Mill. f. *chiloensis*

Breeding. *F. chiloensis* subsp. *c. forma c.*. Collected in Chile. Latitude 44° 36' N. Longitude 123° 15' W. Elevation 75 m. Pedigree - Selfed cross from CFRA 742.001.

The following were donated by Robert Newman, American College of Traditional Chinese Medicine, Botanical Garden, 455 Arkansas Street, San Francisco, California 94107, United States. Received 07/27/1995.

PI 616688. *Fragaria nilgerrensis* Schltndl. ex J. Gay

Wild. *F. nilgerrensis*. Collected in China. Pedigree - Collected from the wild in China.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Jerry A. Payne, Wildlife Biology Department, Rt. 5, Box 180, Forsyth, Georgia 31029, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 09/28/1995.

PI 616689. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 95-4-1. Collected 06/12/1995 in South Carolina, United States. Latitude 34° 19' 16" N. Longitude 79° 17' 8" W. Elevation 0 m. South Carolina, Williamsburg county, Creel Farm, Henry community. South from Hemingway on SC 41 to county road 121, left on 121 for 4.5 miles to SC 512 in Henry. Just across SC 512 on 121, to Creel farm. Woodland, currently w/ a heavy canopy of mostly deciduous trees. *V. tenellum*, *R. trivialis* and *R. flagellans* occasionally in the woods and along the field edge. Pedigree - collected from the wild in South Carolina. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616690. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 95-9-2. Collected 06/15/1995 in South Carolina, United States. Latitude 33° 45' 18" N. Longitude 82° 12' 14" W. Elevation 0 m. South Carolina, Greenwood county, Sumter National Forest, Edgefield & Long Cane District. About halfway along Sumter

Forest Road in the National Forest. One of two small colonies of *F. virginiana* found in moist situations along the road edge. Pedigree - collected from the wild in South Carolina. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616691. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 95-11-1. Collected 06/16/1995 in South Carolina, United States. Latitude 34° 5' 23" N. Longitude 82° 24' 37" W. Elevation 0 m. South Carolina, Abbeville county, Sumter National Forest. FS Road 520 at White Creek Bridge. Modest colony of *F. virginiana* in shade in shallow ditch by road side (above creek). Good moisture and moisture holding capacity. Sig. comp. from grasses & lugumes + *Lonicera hallii* & tree sdlg. Pedigree - collected from the wild in South Carolina. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found

growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616692. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 95-12-1. Collected 06/17/1995 in South Carolina, United States. Latitude 34° 11' 22" N. Longitude 82° 57' 55" W. Elevation 0 m. South Carolina, Greenwood county, Greenwood State Park. Along road 207 that fronts the Park boundary. Upland - very disturbed area, apparently clearcut 2 yrs ago. Some areas of bare soil. Clearcut cornered with established 30 year old pines. Pedigree - collected from the wild in South Carolina. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616693. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 95-12-2. Collected 06/17/1995 in South Carolina, United States. Latitude 34° 11' 22" N. Longitude 82° 57' 55" W. Elevation 0 m. South Carolina, Greenwood county, Greenwood State Park. Along road 207 that fronts the Park boundary. Upland - very disturbed

area, apparently clearcut 2 yrs ago. Some areas of bare soil. Clearcut cornered with established 30 year old pines. Pedigree - collected from the wild in South Carolina. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616694. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 95-12-3. Collected 06/17/1995 in South Carolina, United States. Latitude 34° 11' 22" N. Longitude 82° 57' 55" W. Elevation 0 m. South Carolina, Greenwood county, Greenwood State Park. Along road 207 that fronts the Park boundary. Upland - very disturbed area, apparently clearcut 2 yrs ago. Some areas of bare soil. Clearcut cornered with established 30 year old pines. Pedigree - collected from the wild in South Carolina. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where

little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616695. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 95-12-4. Collected 06/17/1995 in South Carolina, United States. Latitude 34° 11' 22" N. Longitude 82° 57' 55" W. Elevation 0 m. South Carolina, Greenwood county, Greenwood State Park. Along road 207 that fronts the Park boundary. Upland - very disturbed area, apparently clearcut 2 yrs ago. Some areas of bare soil. Clearcut cornered with established 30 year old pines. Pedigree - collected from the wild in South Carolina. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616696. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt

Wild. *F. virginiana* NC 95-16-2. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 32' 46" N. Longitude 88° 42' 53" W. Elevation 0 m. Mississippi, Oktibbeha county. From Starkville, E on Hwy 82/182 2.2 mi to sec rd 16. L on sec rd 16 4.6 mi to Rock Hill Rd.

Righton Rock Hill Rd for 1.6 mi. On right: almost excl in shade of *Juniperus virginiana*, shallow soil over exposed chalk - shade appeared critical for survival. On left: more or less open, competing w/ grasses & *R. trivialis*. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616697. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-16-3. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 32' 46" N. Longitude 88° 42' 53" W. Elevation 0 m. Mississippi, Oktibbeha county. From Starkville, E on Hwy 82/182 2.2 mi to sec rd 16. L on sec rd 16 4.6 mi to Rock Hill Rd. Righton Rock Hill Rd for 1.6 mi. On right: almost excl in shade of *Juniperus virginiana*, shallow soil over exposed chalk - shade appeared critical for survival. On left: more or less open, competing w/ grasses & *R. trivialis*. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over

decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616698. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-16-4. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 32' 46" N. Longitude 88° 42' 53" W. Elevation 0 m. Mississippi, Oktibbeha county. From Starkville, E on Hwy 82/182 2.2 mi to sec rd 16. L on sec rd 16 4.6 mi to Rock Hill Rd. Righton Rock Hill Rd for 1.6 mi. On right: almost excl in shade of *Juniperus virgiana*, shallow soil over exposed chalk - shade appeared critical for survival. On left: more or less open, competing w/ grasses & *R. trivialis*. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616699. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-16-5. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 32' 46" N. Longitude 88° 42' 53" W. Elevation 0 m. Mississippi, Oktibbeha county. From Starkville, E on Hwy 82/182 2.2 mi to sec rd 16. L on sec rd 16 4.6 mi to Rock Hill Rd. Righton Rock Hill Rd for 1.6 mi. On right: almost excl in shade of *Juniperus virginiana*, shallow soil over exposed chalk - shade appeared critical for survival. On left: more or less open, competing w/ grasses & *R. trivialis*. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616700. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-16-6. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 32' 46" N. Longitude 88° 42' 53" W. Elevation 0 m. Mississippi, Oktibbeha county. From Starkville, E on Hwy 82/182 2.2 mi to sec rd 16. L on sec rd 16 4.6 mi to Rock Hill Rd. Righton Rock Hill Rd for 1.6 mi. On right: almost excl in shade of *Juniperus virginiana*, shallow soil over exposed chalk - shade appeared critical for survival. On left: more or less open, competing w/ grasses & *R. trivialis*. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were

found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616701. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-17-1. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 27' 28" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Oktibbeha county. E on Hwy 82 to Old Mayhew Road. Right on Old Mayhew 0.8 mi to unpaved road heading uphill to left. Left on unpaved rd 0.5 mi to nat'l gas pipeling right of way. A significant popl of *F. virginiana* occurred under *J. virginiana* trees in an extended cedar glade on slopes above a meadow. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild

strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616702. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-17-2. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 27' 28" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Oktibbeha county. E on Hwy 82 to Old Mayhew Road. Right on Old Mayhew 0.8 mi to unpaved road heading uphill to left. Left on unpaved rd 0.5 mi to nat'l gas pipeling right of way. A significant popl of *F. virginiana* occurred under *J. virginiana* trees in an extended cedar glade on slopes above a meadow. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616703. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-17-3. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 27' 28" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Oktibbeha county. E on Hwy 82 to Old Mayhew Road. Right on Old Mayhew 0.8 mi to unpaved road heading uphill to left. Left on unpaved rd 0.5 mi to nat'l gas pipeling right of way. A significant popl of *F. virginiana* occurred under *J. virginiana* trees in an extended cedar glade on slopes above a meadow. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near

Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616704. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-17-4. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 27' 28" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Oktibbeha county. E on Hwy 82 to Old Mayhew Road. Right on Old Mayhew 0.8 mi to unpaved road heading uphill to left. Left on unpaved rd 0.5 mi to nat'l gas pipeling right of way. A significant popl of *F. virginiana* occurred under *J. virginiana* trees in an extended cedar glade on slopes above a meadow. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground

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PI 616705. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-17-5. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 27' 28" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Oktibbeha county. E on Hwy 82 to Old Mayhew Road. Right on Old Mayhew 0.8 mi to unpaved road heading uphill to left. Left on unpaved rd 0.5 mi to nat'l gas pipeling right of way. A significant popl of *F. virginiana* occurred under *J. virginiana* trees in an extended cedar glade on slopes above a meadow. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616706. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-17-6. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 27' 28" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Oktibbeha county. E on Hwy 82 to Old Mayhew Road. Right on Old Mayhew 0.8 mi to unpaved road heading uphill to left. Left on unpaved rd 0.5 mi to nat'l gas pipeling right of way. A significant popl of *F. virginiana* occurred under *J. virginiana* trees in an extended cedar glade on slopes above a meadow. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over

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PI 616707. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-18-1. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 27' 27" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Monroe county. Hwy 45 north to Hwy 278. E on Hwy 278 to Central Grove Rd. Right on Peaceley Ferry Rd. 1.1 mi. Cedar glade on both roadsides, with *F. virginiana* scattered on the site under *J. virginiana*, always under heavy shade. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as

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PI 616708. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-18-2. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 27' 27" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Monroe county. Hwy 45 north to Hwy 278. E on Hwy 278 to Central Grove Rd. Right on Peaceley Ferry Rd. 1.1 mi. Cedar glade on both roadsides, with *F. virginiana* scattered on the site under *J. virginiana*, always under heavy shade. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616709. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-18-3. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 27' 27" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Monroe county. Hwy 45 north to Hwy 278. E on Hwy 278 to Central Grove Rd. Right on Peaceley Ferry Rd. 1.1 mi. Cedar glade on both roadsides, with *F. virginiana* scattered on the site under *J. virginiana*, always under heavy shade. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The

one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616710. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-18-6. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 27' 27" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Monroe county. Hwy 45 north to Hwy 278. E on Hwy 278 to Central Grove Rd. Right on Peacely Ferry Rd. 1.1 mi. Cedar glade on both roadsides, with *F. virginiana* scattered on the site under *J. virginiana*, always under heavy shade. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium

specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616711. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-19-2. Collected 07/11/1995 in Mississippi, United States. Latitude 34° 0' 27" N. Longitude 88° 34' 17" W. Elevation 0 m. Mississippi, Monroe county. Hwy 278 1.8 mi from Lake Monroe Rd to Wrenwood Rd. L on Wrenwood (an unpaved rd to Presbyterian Church Camp). Site 0.75 mi off road to the right, behind caretakers home. Cedar glade with occasional *F. virginiana*, mostly in heavy shade, but with several colonies extending out into open areas. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616712. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-19-3. Collected 07/11/1995 in Mississippi, United States. Latitude 34° 0' 27" N. Longitude 88° 34' 17" W. Elevation 0 m. Mississippi, Monroe county. Hwy 278 1.8 mi from Lake Monroe Rd to Wrenwood Rd. L on Wrenwood (an unpaved rd to Presbyterian Church Camp). Site 0.75 mi off road to the right, behind caretakers home. Cedar glade with occasional *F. virginiana*, mostly in heavy shade, but with several colonies extending out into open areas. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in

Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616713. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-19-4. Collected 07/11/1995 in Mississippi, United States. Latitude 34° 0' 27" N. Longitude 88° 34' 17" W. Elevation 0 m. Mississippi, Monroe county. Hwy 278 1.8 mi from Lake Monroe Rd to Wrenwood Rd. L on Wrenwood (an unpaved rd to Presbyterian Church Camp). Site 0.75 mi off road to the right, behind caretakers home. Cedar glade with occasional *F. virginiana*, mostly in heavy shade, but with several colonies extending out into open areas. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to

be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edge of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616714. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-20-1. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 59' 44" N. Longitude 88° 32' 19" W. Elevation 0 m. Mississippi, Monroe county. In Aberdeen take Meridian St N to Rye Rd. R on Rye 1.2 mi to Rowell Rd. R on Rowell 0.1 mi. Primarily along roadside. Deciduous broadleaf trees along fence-row. Large colony of *Fragaria* very coarse - could represent escapes from very old cultivated planting. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edge of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616715. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-20-2. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 59' 44" N. Longitude 88° 32' 19" W. Elevation 0 m. Mississippi, Monroe county. In Aberdeen take Meridian St N to Rye Rd. R on Rye 1.2 mi to Rowell Rd. R on Rowell 0.1 mi. Primarily along roadside. Deciduous broadleaf trees along fence-row. Large colony of *Fragaria* very coarse - could represent escapes from very old cultivated planting. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three

accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edge of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616716. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-21-2. Collected 07/12/1995 in Mississippi, United States. Latitude 33° 51' 19" N. Longitude 88° 32' 21" W. Elevation 0 m. Mississippi, Pontotoc county. Trace State Park (just outside Tupelo). Along roadside in grassy areas. Found in shade under trees. Scattered and morphologically diverse popl. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground

two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616717. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-21-3. Collected 07/12/1995 in Mississippi, United States. Latitude 33° 51' 19" N. Longitude 88° 32' 21" W. Elevation 0 m. Mississippi, Pontotoc county. Trace State Park (just outside Tupelo). Along roadside in grassy areas. Found in shade under trees. Scattered and morphologically diverse popl. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616718. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-21-4A. Collected 07/12/1995 in Mississippi, United States. Latitude 33° 51' 19" N. Longitude 88° 32' 21" W. Elevation 0 m. Mississippi, Pontotoc county. Trace State Park (just outside Tupelo). Along roadside in grassy areas. Found in shade under trees. Scattered and morphologically diverse popl. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia*

frondosa, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616719. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-21-4B. Collected 07/12/1995 in Mississippi, United States. Latitude 33° 51' 19" N. Longitude 88° 32' 21" W. Elevation 0 m. Mississippi, Pontotoc county. Trace State Park (just outside Tupelo). Along roadside in grassy areas. Found in shade under trees. Scattered and morphologically diverse popl. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild

strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616720. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-21-5. Collected 07/12/1995 in Mississippi, United States. Latitude 33° 51' 19" N. Longitude 88° 32' 21" W. Elevation 0 m. Mississippi, Pontotoc county. Trace State Park (just outside Tupelo). Along roadside in grassy areas. Found in shade under trees. Scattered and morphologically diverse popl. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616721. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-21-6. Collected 07/12/1995 in Mississippi, United States. Latitude 33° 51' 19" N. Longitude 88° 32' 21" W. Elevation 0 m. Mississippi, Pontotoc county. Trace State Park (just outside Tupelo). Along roadside in grassy areas. Found in shade under trees. Scattered and morphologically diverse popl. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edg efield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS.

Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edge of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616722. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-22-3. Collected 07/13/1995 in Mississippi, United States. Latitude 34° 15' 37" N. Longitude 88° 53' 9" W. Elevation 0 m. Mississippi, Tishomingo county, Tishomingo State Park. Upper piedmont vegetation on ridges and in deep shady ravines; closely resembling the Appalachians where rock outcrops occur. *V. arboreum*, *V. elliotii* fairly abundant. Scattering of *Rubus* spp. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edge of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616723. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-22-4. Collected 07/13/1995 in Mississippi, United States. Latitude 34° 15' 37" N. Longitude 88° 53' 9" W. Elevation 0 m. Mississippi, Tishomingo county, Tishomingo State Park. Upper piedmont vegetation on ridges and in deep shady ravines; closely resembling the Appalachians where rock outcrops occur. *V. arboreum*, *V. elliotii* fairly abundant. Scattering of *Rubus* spp. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edge of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616724. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-22-5. Collected 07/13/1995 in Mississippi, United States. Latitude 34° 15' 37" N. Longitude 88° 53' 9" W. Elevation 0 m. Mississippi, Tishomingo county, Tishomingo State Park. Upper piedmont vegetation on ridges and in deep shady ravines; closely resembling the Appalachians where rock outcrops occur. *V. arboreum*, *V. elliotii* fairly abundant. Scattering of *Rubus* spp. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but

F. virginiana was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616725. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-16-1. Collected 07/10/1995 in Mississippi, United States. Latitude 33° 32' 46" N. Longitude 88° 42' 53" W. Elevation 0 m. Mississippi, Oktibbeha county. From Starkville, E on Hwy 82/182 2.2 mi to sec rd 16. L on sec rd 16 4.6 mi to Rock Hill Rd. Right on Rock Hill Rd for 1.6 mi. On right: almost excl in shade of *Juniperus virgiana*, shallow soil over exposed chalk - shade appeared critical for survival. On left: more or less open, competing w/ grasses & *R. trivialis*. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told

us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616726. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-18-4. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 27' 27" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Monroe county. Hwy 45 north to Hwy 278. E on Hwy 278 to Central Grove Rd. Right on Peacely Ferry Rd. 1.1 mi. Cedar glade on both roadsides, with *F. virginiana* scattered on the site under *J. virginiana*, always under heavy shade. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 616727. *Fragaria virginiana* subsp. *grayana* (Vilm. ex J. Gay) Staudt Wild. *F. virginiana* NC 95-18-5. Collected 07/11/1995 in Mississippi, United States. Latitude 33° 27' 27" N. Longitude 88° 46' 14" W. Elevation 0 m. Mississippi, Monroe county. Hwy 45 north to Hwy 278. E on Hwy 278 to Central Grove Rd. Right on Peacely Ferry Rd. 1.1 mi. Cedar glade on both roadsides, with *F. virginiana* scattered on the site under *J. virginiana*, always under heavy shade. Pedigree - collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas

either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edge of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

The following were collected by Elizabeth Janssen, Box 20060, Perth Mews Postal Outlet, Perth, Ontario K7H 3A0, Canada. Received 11/06/1995.

PI 616728. *Fragaria vesca* L.

Wild. *F. vesca*. Collected 06/30/1995 in Ontario, Canada. Latitude 44° 54' 45" N. Longitude 76° 29' 20" W. Elevation 180 m. West of Perth off County Road 19, the Janssen property. Pedigree - collected from the wild in Bolivia. From the Strawberry Project - an experiment in wide-area germplasm collection through posting on the internet.

PI 616729. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 06/30/1995 in Ontario, Canada. Latitude 44° 54' 45" N. Longitude 76° 29' 20" W. Elevation 180 m. West of Perth off County Road 19, the Janssen property. Pedigree - collected from the wild in Ontario, Canada. From the Strawberry Project - an experiment in wide-area germplasm collection through posting on the internet.

The following were collected by Cecille Wachal, 56 Rutherford Way, Kanata, Ontario K2K 1N4, Canada. Received 11/06/1995.

PI 616730. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 06/18/1995 in Ontario, Canada. Latitude 45° 20' N. Longitude 75° 50' W. Elevation 0 m. Pedigree - collected from the wild in Ontario, Canada. From the Strawberry Project - an experiment in wide-area germplasm collection through posting on the internet.

The following were collected by Cindy Von Halle, NPS-OZAR, Van Buren, Missouri, United States. Received 11/06/1995.

PI 616731. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 06/21/1995 in Missouri, United States. Pedigree - collected from the wild in Missouri. From the Strawberry Project - an experiment in wide-area germplasm collection through posting on the internet.

The following were collected by Sandra Wallace, PO Box 239, Nottingham, New Hampshire 03290-0239, United States. Received 11/06/1995.

PI 616732. *Fragaria virginiana* Mill.

Wild. *F. virginiana*. Collected 06/19/1995 in New Hampshire, United States. Pedigree - collected from the wild in New Hampshire. From the Strawberry Project - an experiment in wide-area germplasm collection through posting on the internet.

The following were collected by Jerry A. Payne, Wildlife Biology Department, Rt. 5, Box 180, Forsyth, Georgia 31029, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/15/1995.

PI 616733. *Fragaria virginiana* Mill.

Wild. JP 95-2-1; *F. virginiana*; CFRA 1436. Collected 09/08/1995 in Georgia, United States. Latitude 31° 57' 21" N. Longitude 83° 54' 57" W. Elevation 0 m. Georgia, Georgia Veterans Memorial State Park Nature Trail, approx 5/8 mile from Park Headquarters. Collected at station 7, approx 3/8 mile from start of trail. Along edge of nature trail. Abundant in fire breaks in a xeric long leaf/loblolly pine community. Site is burned on a 3-year cycle. Pedigree - collected from the wild in Georgia.

PI 616734. *Fragaria virginiana* Mill.

Wild. JP 95-3-1; *F. virginiana*; CFRA 1437. Collected 09/08/1995 in Georgia, United States. Latitude 31° 33' 30" N. Longitude 83° 30' 53" W. Elevation 0 m. Georgia, Gerard Krewer's Live Oaks Orchard, 1.1 miles east of exit 23 from Interstate 75 on Chula Brookfield Road in Tift County. Growing in a row of brambles and has survived past treatment of paraquat herbicide. Pedigree - collected from the wild in Georgia. Strawberries originally from Grady or Thomas County Georgia and are thought to be a dooryard escape from earlier introductions of 'Klondike' and 'Blakemore'.

PI 616735. *Fragaria virginiana* Mill.

Wild. JP 95-4-1; *F. virginiana*; CFRA 1438. Collected 09/10/1995 in Georgia, United States. Latitude 32° 56' 15" N. Longitude 83° 43' 5" W. Elevation 0 m. Georgia, Biff County, 0.2 miles north of intersection of Bass Rd. and Hwy 23-87. Site marked with Georgia Dept. of Transportation Wildlife Experiment sign. Growing in roadside right of way adjacent to a mixed mesophytic hardwood pine community adjacent to parking lot of Perimeter Crossing Building. Pedigree - collected from the wild in Georgia.

PI 616736. *Fragaria virginiana* Mill.

Wild. JP 95-4-2; *F. virginiana*; CFRA 1439. Collected 09/10/1995 in Georgia, United States. Latitude 32° 56' 15" N. Longitude 83°

43' 5" W. Elevation 0 m. Georgia, Biff County, 0.2 miles north of intersection of Bass Rd. and Hwy 23-87. Site marked with Georgia Dept. of Transportation Wildlife Experiment sign. Growing in roadside right of way adjacent to a mixed mesophytic hardwood pine community adjacent to parking lot of Perimeter Crossing Building. Pedigree - collected from the wild in Georgia.

PI 616737. *Fragaria virginiana* Mill.

Wild. JP 95-5-1; *F. virginiana*; CFRA 1440. Collected 09/10/1995 in Georgia, United States. Latitude 33° 14' 49" N. Longitude 83° 55' 31" W. Elevation 0 m. Georgia, Butts County, Flovilla, Indian Springs State Park. Growing on edge of dam near spillway and over most of the eastern slope of the earthen dam. Extremely variable strawberry pop. due to sites having loose sandy clay or rocky and tight hard red clay. Pedigree - collected from the wild in Georgia.

PI 616738. *Fragaria virginiana* Mill.

Wild. JP 95-5-2; *F. virginiana*; CFRA 1441. Collected 09/10/1995 in Georgia, United States. Latitude 33° 14' 49" N. Longitude 83° 55' 31" W. Elevation 0 m. Georgia, Butts County, Flovilla, Indian Springs State Park. Growing on edge of dam near spillway and over most of the eastern slope of the earthen dam. Extremely variable strawberry pop. due to sites having loose sandy clay or rocky and tight hard red clay. Pedigree - collected from the wild in Georgia.

PI 616739. *Fragaria virginiana* Mill.

Wild. JP 95-5-3; *F. virginiana*; CFRA 1442. Collected 09/10/1995 in Georgia, United States. Latitude 33° 14' 49" N. Longitude 83° 55' 31" W. Elevation 0 m. Georgia, Butts County, Flovilla, Indian Springs State Park. Growing on edge of dam near spillway and over most of the eastern slope of the earthen dam. Extremely variable strawberry pop. due to sites having loose sandy clay or rocky and tight hard red clay. Pedigree - collected from the wild in Georgia.

PI 616740. *Fragaria virginiana* Mill.

Wild. JP 95-6-1; *F. virginiana*; CFRA 1443. Collected 09/10/1995 in Georgia, United States. Latitude 33° 1' 52" N. Longitude 83° 48' 17" W. Elevation 0 m. Georgia, Monroe County, Rum Creek Wildlife Management Area, 6.2 miles east on Hwy 18 from junction with Interstate 75, collected along edge of nature trail. Strawberry pops. exist on edge of man-made openings on edges of canopies of mixed mesophytic hardwood pine forests. As canopy closes these pops. will be lost for they cannot compete with ag. Pedigree - collected from the wild in Georgia.

PI 616741. *Fragaria virginiana* Mill.

Wild. JP 95-6-2; *F. virginiana*; CFRA 1444. Collected 09/10/1995 in Georgia, United States. Latitude 33° 1' 52" N. Longitude 83° 48' 17" W. Elevation 0 m. Georgia, Monroe County, Rum Creek Wildlife Management Area, 6.2 miles east on Hwy 18 from junction with Interstate 75, collected from edges of wildlife food plots. Strawberry pops. exist on edge of man-made openings on edges of canopies of mixed mesophytic hardwood pine forests. As canopy closes these pops. will be lost for they cannot compete with ag. Pedigree - collected from the wild in Georgia.

PI 616742. *Fragaria virginiana* Mill.

Wild. JP 95-6-3; *F. virginiana*; CFRA 1445. Collected 09/10/1995 in Georgia, United States. Latitude 33° 1' 52" N. Longitude 83° 48' 17" W. Elevation 0 m. Georgia, Monroe County, Rum Creek Wildlife Management Area, 6.2 miles east on Hwy 18 from junction with Interstate 75, collected from edges of wildlife food plots. Strawberry pops. exist on edge of man-made openings on edges of canopies of mixed mesophytic hardwood pine forests. As canopy closes these pops. will be lost for they cannot compete with ag. Pedigree - collected from the wild in Georgia.

PI 616743. *Fragaria virginiana* Mill.

Wild. JP 95-7-1; *F. virginiana*; CFRA 1446. Collected 09/10/1995 in Georgia, United States. Latitude 32° 37' 5" N. Longitude 83° 53' 38" W. Elevation 0 m. Georgia, Crawford County, Woolfolk Road, 2.9 miles north of intersection with Fort Valley (Peach County) bypass. Deep sand. West side of road. Show effects of herbicide treatment of road side, but strawberries protected by dewberries, yellow jessamine, honeysuckle cover. Pedigree - collected from the wild in Georgia.

PI 616744. *Fragaria virginiana* Mill.

Wild. JP 95-7-2; *F. virginiana*; CFRA 1447. Collected 09/10/1995 in Georgia, United States. Latitude 32° 37' 5" N. Longitude 83° 53' 38" W. Elevation 0 m. Georgia, Crawford County, Woolfolk Road, 2.9 miles north of intersection with Fort Valley (Peach County) bypass. Shallow sand w/ high mixture of clay. Show effects of herbicide treatment of road side, but strawberries protected by dewberries, yellow jessamine, honeysuckle cover. East side of road. Pedigree - collected from the wild in Georgia.

PI 616745. *Fragaria virginiana* Mill.

Wild. JP 95-8-1; *F. virginiana*; CFRA 1448. Collected 09/11/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.

PI 616746. *Fragaria virginiana* Mill.

Wild. JP 95-8-2; *F. virginiana*; CFRA 1449. Collected 09/11/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.

PI 616747. *Fragaria virginiana* Mill.

Wild. JP 95-8-3; *F. virginiana*; CFRA 1450. Collected 09/11/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.

PI 616748. *Fragaria virginiana* Mill.

Wild. JP 95-9-2; *F. virginiana*; CFRA 1452. Collected 09/12/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.

PI 616749. *Fragaria virginiana* Mill.

Wild. JP 95-9-3; *F. virginiana*; CFRA 1453. Collected 09/12/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.

PI 616750. *Fragaria virginiana* Mill.

Wild. JP 95-9-5; *F. virginiana*; CFRA 1454. Collected 09/12/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.

PI 616751. *Fragaria virginiana* Mill.

Wild. JP 95-10-1; *F. virginiana*; CFRA 1456. Collected 09/12/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.

- PI 616752. *Fragaria virginiana* Mill.**
Wild. JP 95-10-2; *F. virginiana*; CFRA 1457. Collected 09/12/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.
- PI 616753. *Fragaria virginiana* Mill.**
Wild. JP 95-10-3; *F. virginiana*; CFRA 1458. Collected 09/12/1995 in Georgia, United States. Pedigree - collected from the wild in Georgia.
- PI 616754. *Fragaria virginiana* Mill.**
Wild. JP 95-11-1; *F. virginiana*; CFRA 1459. Collected 09/13/1995 in Georgia, United States. Latitude 33° 5' 54" N. Longitude 83° 42' 47" W. Elevation 0 m. Georgia, Jones County, Piedmont National Wildlife Refuge, Little Rock Wildlife Drive, west of Round Oaks. East side of road on mown shoulders. Pedigree - collected from the wild in Georgia.
- PI 616755. *Fragaria virginiana* Mill.**
Wild. JP 95-11-2; *F. virginiana*; CFRA 1460. Collected 09/13/1995 in Georgia, United States. Latitude 33° 5' 54" N. Longitude 83° 42' 47" W. Elevation 0 m. Georgia, Jones County, Piedmont National Wildlife Refuge, Little Rock Wildlife Drive, west of Round Oaks. Dry slope on western side of road. Pedigree - collected from the wild in Georgia.
- PI 616756. *Fragaria virginiana* Mill.**
Wild. JP 95-11-3; *F. virginiana*; CFRA 1461. Collected 09/13/1995 in Georgia, United States. Latitude 33° 5' 54" N. Longitude 83° 42' 47" W. Elevation 0 m. Georgia, Jones County, Piedmont National Wildlife Refuge, Little Rock Wildlife Drive, west of Round Oaks. Intensively managed ecotone (margin) between field and loblolly pine stand. Survived repeated burns and mowings. Pedigree - collected from the wild in Georgia.
- PI 616757. *Fragaria virginiana* Mill.**
Wild. JP 95-11-4; *F. virginiana*; CFRA 1462. Collected 09/13/1995 in Georgia, United States. Latitude 33° 5' 54" N. Longitude 83° 42' 47" W. Elevation 0 m. Georgia, Jones County, Piedmont National Wildlife Refuge, Little Rock Wildlife Drive, west of Round Oaks. Open canopied loblolly/ mixed hardwood forest that is burned on a 3-5 year cycle. Concentrated in an abandoned road bed in forest. Pedigree - collected from the wild in Georgia.
- PI 616758. *Fragaria virginiana* Mill.**
Wild. JP 95-11-5; *F. virginiana*; CFRA 1463. Collected 09/13/1995 in Georgia, United States. Latitude 33° 5' 54" N. Longitude 83° 42' 47" W. Elevation 0 m. Georgia, Jones County, Piedmont National Wildlife Refuge, Little Rock Wildlife Drive, west of Round Oaks. Roadside in very dry doughy compacted clay. Competing with thick grass cover and getting most moisture from highway runoff. Pedigree - collected from the wild in Georgia.
- PI 616759. *Fragaria virginiana* Mill.**
Wild. JP 95-11-6; *F. virginiana*; CFRA 1464. Collected 09/13/1995 in Georgia, United States. Latitude 33° 7' 4" N. Longitude 83° 42' 1" W. Elevation 0 m. Longleaf/loblolly pine forest that was burned in 1992. Area receives heavy foot traffic or is closely mown. Pedigree - collected from the wild in Georgia.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Rick Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/01/1995.

PI 616760. *Fragaria virginiana* Mill.

Wild. LIG-2; *F. virginiana*; CFRA 1465. Collected 08/08/1993 in Washington, United States. Latitude 47° 45' 28" N. Longitude 122° 57' 39" W. Elevation 792 m. Olympic National Forest. 13.2 km (8.2 mi) west/southwest of US 101 on FR 2620 where FR 2620, FR 2650 and FR 50 join. T26N R2W Sec 8. Jefferson County. Upland site. Due to clear cuts, generally exposed site. Pedigree - collected from the wild in Washington.

The following were developed by V. Voth; Royce S. Bringhurst, University of California, Dept. Pomology, Wickson Hall, Davis, California 95616, United States. Donated by Judith Berezky, University of California, Davis, College of Agricultural and Environmental Sciences, Foundation Plant Materials Service, Davis, California 95616, United States. Received 11/14/1995.

PI 616761. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Aptos"; CN15; Cal. 70.7-130; CFRA 1471. 4679. Pedigree - Cal. 65.63-601 x second generation backcross (to Sequoia, USPP3,178) derivative from *F. virginiana glauca* from Wasatch Mountains, Utah and Tufts, USPP3,561). A new and distinct variety of strawberry plant of a day-neutral type characterized by its ability after winter and spring plantings in Central California to produce fruit three months after planting continuously on a cyclic basis throughout summer and fall. The variety is also characterized by its runner prolificacy in the nursery; its ability to flower and fruit at any time independent of day length with minimum conditioning and its fruit which is firm and durable, medium long, blunt-ovoid to wedge-shaped and sometimes hollow centered. The fruit is larger in size than Tioga and has an excellent flavor similar to that of Sequoia. Fruit: flesh flavor and quality equal or superior to those of presently grown California 'short-day' cvs; high in ascorbic acid; skin darker, more red than that of Tioga, tends to be dull when overripe. Plant: smaller than Tioga; leaves same color as those of Tioga; less susceptible to Verticillium wilt than Tioga and Tufts. Recommended for home gardens as 'day-neutral' (can be made to produce fruit 3 months after planting). Brooks and Olmo, HortScience, Vol. 18(2), April 1983.

PI 616762. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Brighton"; CN8; CFRA 1472. 4489. Pedigree - Tufts (U.S. Plant Pat. No. 3561) x Cal 65.65-601. A new and distinct variety of strawberry plant of a day-neutral type characterized by its ability after summer planting in South Coastal California to produce fruit during November, December and January, when California fruit is unavailable from the standard short-day cultivars and its ability after winter and spring plantings in Central Coastal California to produce spring and summer fruit without plant storage. Bract leaves do not normally occur on the petioles in contrast to the important California short-day cultivars.

The plants are vigorous and prolific runner makers and with a minimum of conditioning, the new cultivar will flower and fruit effectively independent of day length. The fruit is long conic to flat wedged and fruit color is frequently uneven or burnished, though glossy. Flavor quality is almost equal to the important California short-day cultivars and shipping quality is adequate. Fruit: fleshy flavor and quality not as good as those of Aptos or Hecker, skin darkish-orange, glossy shellac-like sheen. Plant: smaller than Tioga, leaves lighter and more yellow than those of Tioga, less susceptible to Verticillium wilt than Tioga and Tufts. Recommended for home gardens as 'day-neutral'. Can be used fruit 3 months after planting. Brooks and Olmo, 1983.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 04/18/1996.

PI 616763. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "His Excellency"; CFRA 1477.

PI 616764. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Latecross"; CFRA 1478. Pedigree - European selection of cultivated strawberry.

PI 616765. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Petrina"; CFRA 1479. Pedigree - Unknown parents.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Hancock. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 04/23/1996.

PI 616766. *Fragaria chiloensis* (L.) Mill.
Wild. NAH 11; *F. chiloensis*; CFRA 1481. Collected 04/01/1996 in Tungurahua, Ecuador. Latitude 1° 17' S. Longitude 78° 38' W. Elevation 3000 m. 3-4 km west of Huachi Grande near an area known as Santa Rosa. Commercial fields of Alberto Villacis. Volcanic ash, very dry - as Popenoe (1921) described. 35 cm annual rainfall, plants are not irrigated. Field has been Huachi strawberry for 100-250 years. Plants spaced about 1 plant per 0.3 square meter. Pedigree - collected from the wild in Tungurahua, Ecuador.

The following were collected by Rodrigo Infante, Universidad di Talca, Facultad de Recursos Naturales, Casilla 747, Talca, Maule, Chile; Pasquale Rosati, Università degli Studi di Ancona, Dipartimento di Biotechnologie Agrarie, Via Breccie Bianche-Segreteria, Ancona, Marche 60131, Italy. Donated by Pasquale Rosati, Università degli Studi di Ancona, Dipartimento di Biotechnologie Agrarie, Via Breccie Bianche-Segreteria, Ancona, Marche 60131, Italy. Received 03/04/1996.

PI 616767. *Fragaria chiloensis* (L.) Mill. f. *chiloensis*
Landrace. *F. chiloensis* subsp. c. forma c.; CFRA 1484. Collected 01/17/1996 in Chile. Latitude 38° 50' S. Longitude 73° 30' W. OP

seed from clone collected from farm 'El Cometa' of Mr. Werner Hansen, km 7 of the Road Carahne - Puerto Saavedra - in Chile, about 80 km W of Temuco & 25 km E of Pacific Ocean. Pedigree - open pollinated seed of white fruited *F. chiloensis*.

The following were collected by Catherine I. Wright, Alaska Plant Materials Center, HCO2, Box 7440, Palmer, Alaska 99645, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/08/1996.

PI 616768. *Fragaria chiloensis* subsp. *pacifica* Staudt

Wild. *F. chiloensis* subsp. *pacifica* Cordova; KHCW 96-01-01; CFRA 1485. Collected 07/29/1996 in Alaska, United States. Latitude 60° 32' 41" N. Longitude 145° 45' 44" W. Elevation 5 m. Breakwater Ave, Cordova Docks, across from AC Market. Coarse gravel-sandy soil, very well drained, near granite open, direct sun, north facing slope. Associated plants: *Alnus sinuata*, *Epilobium angustifolium*, *Epilobium latifolium*, *Aquillia millifolium*, *Selaginella selaginoides*. Pedigree - collected from the wild in Alaska. Typical *Fragaria chiloensis* subsp. *pacifica* with spreading hairs on pedioles. Fruit past ripe on 29 August 1996. One flower in bloom. USDA Sponsored plant collecting expedition, 1996.

PI 616769. *Fragaria chiloensis* subsp. *pacifica* Staudt

Wild. *F. chiloensis* subsp. *pacifica* Cordova; KHCW 96-01-02; CFRA 1486. Collected 07/29/1996 in Alaska, United States. Latitude 60° 32' 41" N. Longitude 145° 45' 44" W. Elevation 5 m. Breakwater Ave, Cordova Docks, across from AC Market. Coarse gravel-sandy soil, very well drained, near granite open, direct sun, north facing slope. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Alnus sinuata*, *Epilobium angustifolium*, *Epilobium latifolium*, *Aquillia millifolium*, *Selaginella selaginoides* (L.) Link.

PI 616770. *Fragaria chiloensis* subsp. *lucida* (E. Vilm. ex Gay) Staudt

Wild. *F. chiloensis* subsp. *pacifica* Hartney; KHCW 96-03-01; CFRA 1487. Collected 07/30/1996 in Alaska, United States. Latitude 60° 30' 9" N. Longitude 145° 51' 41" W. Elevation 5 m. Whitshed Road just after bridge at Hartney Bay, about 6 miles southwest of Cordova. Along roadside edge. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Alnus sinuata*, *Epilobium angustifolium*, *Epilobium latifolium*, *Aquillia millifolium*, *Festuca*, *Picea sitchensis*, *Heracleum lantanum*, *Rubus spectabilis*.

PI 616771. *Fragaria chiloensis* subsp. *pacifica* Staudt

Wild. *F. chiloensis* subsp. *pacifica* Cabin Lake; KHCW 96-13-01A; CFRA 1488. Collected 07/31/1996 in Alaska, United States. Latitude 60° 30' N. Longitude 145° 30' W. Elevation 15 m. Between Cabin Lake and the parking lot, 3.5 miles north of Cordova Airport off Copper River Road. Edge of Cabin Lake outlet stream. Pedigree - clone collected of naturalized *F. chiloensis*. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Rubus arcticus*, *Vaccinium ovalifolium*, *Rubus pedatus*, *Alnus*, *Picea sitchensis*.

PI 616772. *Fragaria chiloensis* subsp. *pacifica* Staudt
Wild. *F. chiloensis* subsp. *pacifica* Cabin Lake; KHCW 96-13-01B; CFRA 1489. Collected 07/31/1996 in Alaska, United States. Latitude 60° 30' N. Longitude 145° 30' W. Elevation 15 m. Between Cabin Lake and the parking lot, 3.5 miles north of Cordova Airport off Copper River Road. Edge of Cabin Lake outlet stream. Pedigree - clone collected of naturalized *F. chiloensis*. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Rubus arcticus*, *Vaccinium ovalifolium*, *Rubus pedatus*, *Alnus*, *Picea sitchensis*.

PI 616773. *Fragaria chiloensis* subsp. *pacifica* Staudt
Wild. *F. chiloensis* subsp. *pacifica* Hartney; KHCW 96-14-01A; CFRA 1490. Collected 07/31/1996 in Alaska, United States. Latitude 60° 30' N. Longitude 145° 51' W. Elevation 5 m. About 6 miles southwest of Cordova on bluff, Cordova side of Bridge, at Hartney Bay. Open road edge. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Rubus arcticus*, *Vaccinium ovalifolium*, *Rubus pedatus*, *Alnus*, *Picea sitchensis*.

PI 616774. *Fragaria chiloensis* subsp. *pacifica* Staudt
Wild. *F. chiloensis* subsp. *pacifica* Hartney; KHCW 96-14-01B; CFRA 1491. Collected 07/31/1996 in Alaska, United States. Latitude 60° 30' N. Longitude 145° 51' W. Elevation 5 m. About 6 miles southwest of Cordova on bluff, Cordova side of Bridge, at Hartney Bay. Open road edge. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Rubus arcticus*, *Vaccinium ovalifolium*, *Rubus pedatus*, *Alnus*, *Picea sitchensis*.

PI 616775. *Fragaria x ananassa* Duchesne ex Rozier
Cultivated. *F. x ananassa* Bay View KHCW 96-25-02; KHCW 96-25-02; CFRA 1493. Collected 08/04/1996 in Alaska, United States. Latitude 59° 39' N. Longitude 151° 33' W. Elevation 35 m. 3 miles north of Homer, Bay View Inn, on bank behind cabins. Open slope facing southwest. Pedigree - selection of cultivated Sitka strawberries suspected to be planted 40 years ago. USDA Sponsored plant collecting expedition, 1996.

PI 616776. *Fragaria x ananassa* Duchesne ex Rozier
Cultivated. *F. x ananassa* Girdwood KHCW 96-28-01; KHCW 96-28-01; CFRA 1494. Collected 08/04/1996 in Alaska, United States. Latitude 60° 55' N. Longitude 149° 0' W. Elevation 100 m. Strawberries very fragrant and prolific. Plants and fruit plentiful. Open edge of road, Alberg Street, Cordova. Pedigree - selection of cultivated Sitka strawberries. USDA Sponsored plant collecting expedition, 1996.

The following were developed by C.C. Georgeson, Agricultural Experiment Station, Sitka, Alaska, United States. Donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 616777. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Sitka"; CFRA 1495. Pedigree - *F. chiloensis* subsp. *pacifica* x *F. ananassa*. USDA Sponsored plant collecting expedition, 1996.

PI 616778. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "K1"; K1 Sitka Hybrid; Sitka Hybrid K1; CFRA 1496. Pedigree -

F. chiloensis subsp. *pacifica* x *F. ananassa*. At Palmer, tests of 74 varieties from other states indicated that none was hardy enough for Alaska, even when mulched. Sitka hybrids, from Georgeson's work, that had survived thirty years, were collected and observed at Matanuska from 1950 to 1953. Crosses were first made in 1952 to obtain winter hardy, red-fruited varieties. Several hundred selfed seedlings of these hybrids were tested; also about 30,000 seedlings of crosses of Sitka D with varieties from other states ... were set in the field in Palmer. - George M. Darrow. 1966. The strawberry. p. 226.

PI 616779. *Fragaria* x *ananassa* Duchesne ex Rozier
Cultivar. Sl; CFRA 1497. Pedigree - *F. chiloensis* subsp. *pacifica* x *F. ananassa*. USDA Sponsored plant collecting expedition, 1996.

The following were developed by Curtis H. Dearborn. Donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 616780. *Fragaria* x *ananassa* Duchesne ex Rozier
Cultivar. "Matared"; CFRA 1498. Pedigree - F2 of Sitka. Fruit is large, deep-red and good tasting. Plants have a moderate everbearing tendency, especially when August is warm but late fruits seldom ripen. Winter hardiness is fair. No disease problems. USDA Sponsored plant collecting expedition, 1996.

The following were donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 616781. *Fragaria* x *ananassa* Duchesne ex Rozier
Cultivar. "Skwentna"; CFRA 1499. Developed in United States. Pedigree - Sitka hybrid derivative. USDA Sponsored plant collecting expedition, 1996.

PI 616782. *Fragaria* x *ananassa* Duchesne ex Rozier
Cultivar. "Talkeetna"; CFRA 1500. Developed in United States. Pedigree - Sitka strawberry derivative. USDA Sponsored plant collecting expedition, 1996.

The following were developed by University of Alaska, Agricultural Experiment Station, College, Alaska, United States. Donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 616783. *Fragaria virginiana* Mill.
Cultivar. "Toklat"; CFRA 1501. Pedigree - Derivative of Alaskan *F. virginiana*. Fruit larger than 'Pioneer' but susceptible to gray mold. Calyx is difficult to remove. This cultivar is slowly replacing 'Pioneer' as a standard home-grown Alaskan variety. USDA Sponsored plant collecting expedition, 1996.

The following were collected by R. Buttner, Genebank For Fruit, Dorfplatz 2, Dresden, Saxony D-01326, Germany. Received 10/02/1996.

PI 616784. *Fragaria* sp.

Wild. *F. sp. vesca, moschata, viridis* mixed; CFRA 1514. Collected 1994 in Germany. Pedigree - Mixture of *F. moschata*, *F. viridis*, and *F. vesca*. Vials were opened in the mail and seed was mixed. Seeds were collected from the wild in 1993 through 1995.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Jerry A. Payne, Wildlife Biology Department, Rt. 5, Box 180, Forsyth, Georgia 31029, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 08/29/1996.

PI 616785. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-19-2; NC 96-19-2; CFRA 1516. Collected 07/10/1996 in Alabama, United States. Latitude 32° 32' 21" N. Longitude 85° 28' 26" W. County road 159, 0.5 mile north of county road 010, just south of Martin Marietta quarry, Lee county. Mixed open woodland and roadsides. Sandy loam surface soil. *Fragaria virginiana* abundant *V. stamineum* scattered. Longleaf pine, *P. teada* on site, along with scattered *J. virginiana*. *Cratageus uniflora* was the only hawthorn present. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616786. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-19-3; NC 96-19-3; CFRA 1517. Collected 07/10/1996 in Alabama, United States. Latitude 32° 32' 21" N. Longitude 85° 28' 26" W. County road 159, 0.5 mile north of county road 010, just south of Martin Marietta quarry, Lee county. Mixed open woodland and roadsides. Sandy loam surface soil. *Fragaria virginiana* abundant *V. stamineum* scattered. Longleaf pine, *P. teada* on site, along with scattered *J. virginiana*. *Cratageus uniflora* was the only hawthorn present. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616787. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-20-1; NC 96-20-1; CFRA 1518. Collected 07/10/1996 in Alabama, United States. Latitude 32° 39' 35" N. Longitude 85° 34' 45" W. County road 188, 5.0 miles north of Loachapoka, Lee county. Roadsides and woods edge. Piedmont; mixed pine and Hardwood. *Fragaria virginiana* scattered on the site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616788. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-20-2; NC 96-20-2; CFRA 1519. Collected 07/10/1996 in Alabama, United States. Latitude 32° 39' 35" N. Longitude 85° 34' 45" W. County road 188, 5.0 miles north of Loachapoka, Lee county. Roadsides and woods edge. Piedmont; mixed pine and Hardwood. *Fragaria virginiana* scattered on the site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616789. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-20-3; NC 96-20-3; CFRA 1520. Collected 07/10/1996 in Alabama, United States. Latitude 32° 39' 35" N. Longitude 85° 34' 45" W. County road 188, 5.0 miles north of Loachapoka, Lee county. Roadsides and woods edge. Piedmont; mixed pine and Hardwood. *Fragaria virginiana* scattered on the site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616790. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-21-1; NC 96-21-1; CFRA 1521. Collected 07/10/1996 in Alabama, United States. Latitude 32° 55' 35" N. Longitude 85° 23' 51" W. Along U.S. 431, two miles north of Lafayette, Chambers county, Alabama. Roadsides under powerline right-of-way, and in pine forest understory. *Fragaria virginiana* scattered on site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616791. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-21-2; NC 96-21-2; CFRA 1522. Collected 07/10/1996 in Alabama, United States. Latitude 32° 55' 35" N. Longitude 85° 23' 51" W. Along U.S. 431, two miles north of Lafayette, Chambers county, Alabama. Roadsides under powerline right-of-way, and in pine forest understory. *Fragaria virginiana* scattered on site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616792. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-21-3; NC 96-21-3; CFRA 1523. Collected 07/10/1996 in Alabama, United States. Latitude 32° 55' 35" N. Longitude 85° 23' 51" W. Along U.S. 431, two miles north of Lafayette, Chambers county, Alabama. Roadsides under powerline right-of-way, and in pine forest understory. *Fragaria virginiana* scattered on site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616793. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-22-2; NC 96-22-2; CFRA 1525. Collected 07/10/1996 in Alabama, United States. Latitude 33° 0' 32" N. Longitude 85° 21' 54" W. Along U.S. 431, 0.9 mile north of Lafayette, Chambers county, Alabama. Roadsides and woods edge. Site very dry at present and plants wilted. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616794. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-23-1; NC 96-23-1; CFRA 1527. Collected 07/10/1996 in Alabama, United States. Latitude 32° 48' 12" N. Longitude 85° 18' 46" W. On county road 1083, 7.3 miles southeast of highway 50 from Lafayette, Chambers county, Alabama. Roadside, understory by roadside and powerline right-of-way. Piedmont, mixed pines and hardwoods. *Fragaria virginiana* scattered on the site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616795. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-23-2; NC 96-23-2; CFRA 1528. Collected 07/10/1996 in Alabama, United States. Latitude 32° 48' 12" N. Longitude 85° 18' 46" W. On county road 1083, 7.3 miles southeast of highway 50 from Lafayette, Chambers county, Alabama. Roadside, understory by roadside and powerline right-of-way. Piedmont, mixed pines and hardwoods. *Fragaria virginiana* scattered on the site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616796. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-23-3; NC 96-23-3; CFRA 1529. Collected 07/10/1996 in Alabama, United States. Latitude 32° 48' 12" N. Longitude 85° 18' 46" W. On county road 1083, 7.3 miles southeast of highway 50 from Lafayette, Chambers county, Alabama. Roadside, understory by roadside and powerline right-of-way. Piedmont, mixed pines and hardwoods. *Fragaria virginiana* scattered on the site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616797. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-24-1; NC 96-24-1; CFRA 1530. Collected 07/11/1996 in Alabama, United States. Latitude 33° 1' 47" N. Longitude 85° 41' 52" W. Right roadside along German's Ferry road for approximately 400 yards. Road is on the right just across Emuckfaw Creek on highway 22, 5.7 miles east of New Site, Tallapoosa county, Alabama. *Fragaria virginiana* on shoulder of road and in ditch. *Vaccinium elliotii* scattered and occasional *V. pallidum*. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616798. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-24-2; NC 96-24-2; CFRA 1531. Collected 07/11/1996 in Alabama, United States. Latitude 33° 1' 47" N. Longitude 85° 41' 52" W. Right roadside along German's Ferry road for approximately 400 yards. Road is on the right just across Emuckfaw Creek on highway 22, 5.7 miles east of New Site, Tallapoosa county, Alabama. *Fragaria virginiana* on shoulder of road and in ditch. *Vaccinium elliotii* scattered and occasional *V. pallidum*. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616799. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-24-3; NC 96-24-3; CFRA 1532. Collected 07/11/1996 in Alabama, United States. Latitude 33° 1' 47" N. Longitude 85° 41' 52" W. Right roadside along German's Ferry road for approximately 400 yards. Road is on the right just across Emuckfaw Creek on highway 22, 5.7 miles east of New Site, Tallapoosa county, Alabama. *Fragaria virginiana* on shoulder of road and in ditch. *Vaccinium elliotii* scattered and occasional *V. pallidum*. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616800. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-25-1; NC 96-25-1; CFRA 1533. Collected 07/11/1996 in Alabama, United States. Latitude 32° 52' 30" N. Longitude 85° 36' 30" W. Along county road 89, 4.5 miles north of

highway 50 at powerline right-of-way. Tallapoosa county. Roadsides, *Fragaria virginiana* scattered. Site very dry at present. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616801. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-25-2; NC 96-25-2; CFRA 1534. Collected 07/11/1996 in Alabama, United States. Latitude 32° 52' 30" N. Longitude 85° 36' 30" W. Along county road 89, 4.5 miles north of highway 50 at powerline right-of-way. Tallapoosa county. Roadsides, *Fragaria virginiana* scattered. Site very dry at present. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616802. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-25-3; NC 96-25-3; CFRA 1535. Collected 07/11/1996 in Alabama, United States. Latitude 32° 52' 30" N. Longitude 85° 36' 30" W. Along county road 89, 4.5 miles north of highway 50 at powerline right-of-way. Tallapoosa county. Roadsides, *Fragaria virginiana* scattered. Site very dry at present. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616803. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-25-4; NC 96-25-4; CFRA 1536. Collected 07/11/1996 in Alabama, United States. Latitude 32° 52' 30" N. Longitude 85° 36' 30" W. Along county road 89, 4.5 miles north of highway 50 at powerline right-of-way. Tallapoosa county. Roadsides, *Fragaria virginiana* scattered. Site very dry at present. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616804. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-27-1; NC 96-27-1; CFRA 1537. Collected 07/11/1996 in Alabama, United States. Latitude 32° 40' 13" N. Longitude 85° 53' 8" W. Beulah road off highway 50, 7.0 miles west of highway 49. Tallapoosa county. *Fragaria virginiana* collected over about 200 yards along right side of the road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616805. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-27-2; NC 96-27-2; CFRA 1538. Collected 07/11/1996 in Alabama, United States. Latitude 32° 40' 13" N. Longitude 85° 53' 8" W. Beulah road off highway 50, 7.0 miles west of highway 49. Tallapoosa county. *Fragaria virginiana* collected over about 200 yards along right side of the road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616806. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-27-3; NC 96-27-3; CFRA 1539. Collected 07/11/1996 in Alabama, United States. Latitude 32° 40' 13" N. Longitude 85° 53' 8" W. Beulah road off highway 50, 7.0 miles west of highway 49. Tallapoosa county. *Fragaria virginiana* collected over about 200 yards along right side of the road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616807. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-28-1; NC 96-28-1; CFRA 1540. Collected 07/11/1996 in Alabama, United States. Latitude 33° 3' 31" N. Longitude 86° 6' 49" W. County road 66, 2.4 miles west of county road 52 at Hatchet creek. Roadbanks on both sides of the creek. Coosa county. *Fragaria virginiana* scattered over both sides of creek. *Rhododendron minus* also on bluff east of the bridge. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616808. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-28-2; NC 96-28-2; CFRA 1541. Collected 07/11/1996 in Alabama, United States. Latitude 33° 3' 31" N. Longitude 86° 6' 49" W. County road 66, 2.4 miles west of county road 52 at Hatchet creek. Roadbanks on both sides of the creek. Coosa county. *Fragaria virginiana* scattered over both sides of creek. *Rhododendron minus* also on bluff east of the bridge. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616809. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-28-4; NC 96-28-4; CFRA 1543. Collected 07/11/1996 in Alabama, United States. Latitude 33° 3' 31" N. Longitude 86° 6' 49" W. County road 66, 2.4 miles west of county road 52 at Hatchet creek. Roadbanks on both sides of the creek. Coosa county. *Fragaria virginiana* scattered over both sides of creek. *Rhododendron minus* also on bluff east of the bridge. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616810. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-29-1; NC 96-29-1; CFRA 1544. Collected 07/11/1996 in Alabama, United States. Latitude 32° 48' 52" N. Longitude 86° 13' 48" W. Southern Coosa county. County road 14 to the right off U.S. highway 231/Alabama 21. Roadsides along Road 14 for about 500 yards. Roadside. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616811. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-29-2; NC 96-29-2; CFRA 1545. Collected 07/11/1996 in Alabama, United States. Latitude 32° 48' 52" N. Longitude 86° 13' 48" W. Southern Coosa county. County road 14 to the right off U.S. highway 231/Alabama 21. Roadsides along Road 14 for about 500 yards. Roadside. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616812. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-29-3; NC 96-29-3; CFRA 1546. Collected 07/11/1996 in Alabama, United States. Latitude 32° 48' 52" N. Longitude 86° 13' 48" W. Southern Coosa county. County road 14 to the right off U.S. highway 231/Alabama 21. Roadsides along Road 14 for about 500 yards. Roadside. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616813. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-30-1; NC 96-30-1; CFRA 1547. Collected 07/12/1996 in Alabama, United States. Latitude 32° 0' 21" N.

Longitude 86° 9' 52" W. Roadbank on the left along county road 39, Montgomery county, Alabama. Moist shaded roadbank. Predominantly pine overstory on top of the bank. One large colony of *Fragaria virginiana*. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616814. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-32-1; NC 96-32-1; CFRA 1548. Collected in Alabama, United States. Latitude 31° 53' 37" N. Longitude 87° 2' 5" W. Highway 10, 3.6 miles east of junction with highway 21 at Oak Hill, Alabama. Old home site on right side of road. Mobil home removed from site fairly recently. Large oaks predominate the site. One very large colony of strawberry next to the woods at the rear of the site in shade. Vigorous, profuse runner. Also a few plants away from the main colony. Very fertile soil. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616815. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-33-1; NC 96-33-1; CFRA 1549. Collected 07/14/1996 in Alabama, United States. Latitude 32° 13' 53" N. Longitude 86° 59' 40" W. Along highway 41, 1.8 miles north of the road to Dallas county public fishing lake, Alabama. Roadsides and a limestone cedar glade. Vegetation typical of cedar glades. *Fragaria virginiana* scattered on the site. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616816. *Fragaria virginiana* Mill.

Wild. NC 96-33-2; *F. virginiana* NC 96-33-2; CFRA 1550. Collected 07/14/1996 in Alabama, United States. Latitude 32° 13' 53" N. Longitude 86° 59' 40" W. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616817. *Fragaria virginiana* Mill.

Wild. NC 96-33-3; *F. virginiana* NC 96-33-3; CFRA 1551. Collected 07/14/1996 in Alabama, United States. Latitude 32° 13' 53" N. Longitude 86° 59' 40" W. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616818. *Fragaria virginiana* Mill.

Wild. NC 96-33-4; *F. virginiana* NC 96-33-4; CFRA 1552. Collected 07/14/1996 in Alabama, United States. Latitude 32° 13' 53" N. Longitude 86° 59' 40" W. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616819. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-34-1; NC 96-34-1; CFRA 1553. Collected 07/14/1996 in Alabama, United States. Latitude 32° 23' 52" N. Longitude 86° 47' 3" W. County road 15 to the right off highway 14, 4.5 miles east of Big Mulberry Creek on the Autauga county line. Follow road 15 to Jones Bluff Recreation Area, Autauga county. Rich woods, sticky soil. *Fragaria virginiana* scattered along the woods edge around the parking lot. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616820. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-34-2; NC 96-34-2; CFRA 1554. Collected 07/14/1996 in Alabama, United States. Latitude 32° 23' 52" N.

Longitude 86° 47' 3" W. County road 15 to the right off highway 14, 4.5 miles east of Big Mulberry Creek on the Autauga county line. Follow road 15 to Jones Bluff Recreation Area, Autauga county. Rich woods, sticky soil. *Fragaria virginiana* scattered along the woods edge around the parking lot. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616821. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-34-3; NC 96-34-3; CFRA 1555. Collected 07/14/1996 in Alabama, United States. Latitude 32° 23' 52" N. Longitude 86° 47' 3" W. County road 15 to the right off highway 14, 4.5 miles east of Big Mulberry Creek on the Autauga county line. Follow road 15 to Jones Bluff Recreation Area, Autauga county. Rich woods, sticky soil. *Fragaria virginiana* scattered along the woods edge around the parking lot. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616822. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-39-1; NC 96-39-1; CFRA 1558. Collected 07/17/1996 in Alabama, United States. Latitude 32° 54' 27" N. Longitude 86° 20' 30" W. Coosa county road 29, 5.4 miles north of highway 22. Roadside ditches and shoulders with scattered *Fragaria virginiana*. Highly disturbed roadside, plant crowns often recently buried. Often competing with Johnson grass or Bahia grass. Young pine plantation on both sides of road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616823. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-39-2; NC 96-39-2; CFRA 1559. Collected 07/17/1996 in Alabama, United States. Latitude 32° 54' 27" N. Longitude 86° 20' 30" W. Coosa county road 29, 5.4 miles north of highway 22. Roadside ditches and shoulders with scattered *Fragaria virginiana*. Highly disturbed roadside, plant crowns often recently buried. Often competing with Johnson grass or Bahia grass. Young pine plantation on both sides of road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616824. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-39-3; NC 96-39-3; CFRA 1560. Collected 07/17/1996 in Alabama, United States. Latitude 32° 54' 27" N. Longitude 86° 20' 30" W. Coosa county road 29, 5.4 miles north of highway 22. Roadside ditches and shoulders with scattered *Fragaria virginiana*. Highly disturbed roadside, plant crowns often recently buried. Often competing with Johnson grass or Bahia grass. Young pine plantation on both sides of road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

PI 616825. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-39-4; NC 96-39-4; CFRA 1561. Collected 07/17/1996 in Alabama, United States. Latitude 32° 54' 27" N. Longitude 86° 20' 30" W. Coosa county road 29, 5.4 miles north of highway 22. Roadside ditches and shoulders with scattered *Fragaria virginiana*. Highly disturbed roadside, plant crowns often recently buried. Often competing with Johnson grass or Bahia grass. Young pine plantation on both sides of road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.

- PI 616826. *Fragaria virginiana* Mill.**
Wild. *F. virginiana* NC 96-40-1; NC 96-40-1; CFRA 1562. Collected 07/17/1996 in Alabama, United States. Latitude 33° 3' 18" N. Longitude 85° 55' 53" W. County road 63, 9 miles north of junction with highway 22. In northwestern Tallapoosa county. Roadside adjacent to a pasture. A single small colony of *Fragaria virginiana* surviving. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.
- PI 616827. *Fragaria virginiana* Mill.**
Wild. *F. virginiana* NC 96-41-1; NC 96-41-1; CFRA 1563. Collected 07/17/1996 in Alabama, United States. Latitude 32° 43' 55" N. Longitude 85° 30' 21" W. Roadsides along side road to the left off highway 147, 3.8 miles south of U.S. 431. Location in southern Chambers county, Alabama. *Fragaria virginiana* growing in roadside gravel, into the road and into the pasture on both sides of the road. Pedigree - collected from the wild in Alabama. USDA Sponsored plant collecting expedition, 1996.
- PI 616828. *Fragaria virginiana* Mill.**
Wild. *F. virginiana* NC 96-43-2; NC 96-43-2; CFRA 1567. Collected 07/19/1996 in South Carolina, United States. Latitude 34° 12' 4" N. Longitude 81° 49' 31" W. Both roadsides along SC 34, 2.8 miles east of Chappells, Newberry county, South Carolina. Gray sandy loam soil. Strawberries growing with competitive grasses, honeysuckle, Virginia creeper and poison ivy. Wild rose also growing with 2 of 3 colonies collected. Scattered *Vaccinium stamineum* and *V. arboreum* on drier areas of site. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616829. *Fragaria virginiana* Mill.**
Wild. *F. virginiana* NC 96-43-3; NC 96-43-3; CFRA 1568. Collected 07/19/1996 in South Carolina, United States. Latitude 34° 12' 4" N. Longitude 81° 49' 31" W. Both roadsides along SC 34, 2.8 miles east of Chappells, Newberry county, South Carolina. Gray sandy loam soil. Strawberries growing with competitive grasses, honeysuckle, Virginia creeper and poison ivy. Wild rose also growing with 2 of 3 colonies collected. Scattered *Vaccinium stamineum* and *V. arboreum* on drier areas of site. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616830. *Fragaria virginiana* Mill.**
Wild. *F. virginiana* NC 96-44-1; NC 96-44-1; CFRA 1569. Collected 07/19/1996 in South Carolina, United States. Latitude 34° 12' 31" N. Longitude 82° 16' 4" W. Abbeville county road 61 at John's Creek, 2.2 miles off SC 72. Roadside, growing in sandy soil in partial shade. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616831. *Fragaria virginiana* Mill.**
Wild. *F. virginiana* NC 96-44-2; NC 96-44-2; CFRA 1570. Collected 07/19/1996 in South Carolina, United States. Latitude 34° 12' 31" N. Longitude 82° 16' 4" W. Abbeville county road 61 at John's Creek, 2.2 miles off SC 72. Roadside, growing in sandy soil in partial shade. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616832. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-44-3; NC 96-44-3; CFRA 1571. Collected 07/19/1996 in South Carolina, United States. Latitude 34° 12' 31" N. Longitude 82° 16' 4" W. Abbeville county road 61 at John's Creek, 2.2 miles off SC 72. In full sun on the right roadbank. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616833. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-45-1; NC 96-45-1; CFRA 1572. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 23' 13" N. Longitude 81° 56' 40" W. Left roadside both north and south of Little River, 6.3 miles south of Clinton on SC 72, Laurens county, South Carolina. *Fragaria virginiana* occasional on dry roadbanks over about 300 yards along road. *Rosa carolina* also associated with strawberry. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616834. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-45-2; NC 96-45-2; CFRA 1573. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 23' 13" N. Longitude 81° 56' 40" W. Left roadside both north and south of Little River, 6.3 miles south of Clinton on SC 72, Laurens county, South Carolina. *Fragaria virginiana* occasional on dry roadbanks over about 300 yards along road. *Rosa carolina* also associated with strawberry. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616835. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-45-3; NC 96-45-3; CFRA 1574. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 23' 13" N. Longitude 81° 56' 40" W. Left roadside both north and south of Little River, 6.3 miles south of Clinton on SC 72, Laurens county, South Carolina. *Fragaria virginiana* occasional on dry roadbanks over about 300 yards along road. *Rosa carolina* also associated with strawberry. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616836. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-45-4; NC 96-45-4; CFRA 1575. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 23' 13" N. Longitude 81° 56' 40" W. Left roadside both north and south of Little River, 6.3 miles south of Clinton on SC 72, Laurens county, South Carolina. *Fragaria virginiana* occasional on dry roadbanks over about 300 yards along road. *Rosa carolina* also associated with strawberry. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616837. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-46-1; NC 96-46-1; CFRA 1576. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 41' 30" N. Longitude 81° 49' 57" W. Roadside on the right just above the Tyger River 0.3 mile north of the town limits of Cross Anchor, on county road 56, Spartanbury county, South Carolina. One scattered colony of *Fragaria virginiana* growing on the dry shoulder of the road. *Rosa caroliniana* also

on the site. Climbing milkweed between the site and the river. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616838. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-47-1; NC 96-47-1; CFRA 1577. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 38' 56" N. Longitude 81° 39' 46" W. Roadsides along Union county road 61 just south of Fairforest Creek, 3.3 miles north of Rose Hill State Park. 0.6 mile northeast of the junction of roads 44 and 61. *Fragaria virginiana* scattered along the roads shoulders on both sides and into the edge of the ditches. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616839. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-47-2; NC 96-47-2; CFRA 1578. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 38' 56" N. Longitude 81° 39' 46" W. Roadsides along Union county road 61 just south of Fairforest Creek, 3.3 miles north of Rose Hill State Park. 0.6 mile northeast of the junction of roads 44 and 61. *Fragaria virginiana* scattered along the roads shoulders on both sides and into the edge of the ditches. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616840. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-47-3; NC 96-47-3; CFRA 1579. Collected 07/20/1996 in South Carolina, United States. Latitude 34° 38' 56" N. Longitude 81° 39' 46" W. Roadsides along Union county road 61 just south of Fairforest Creek, 3.3 miles north of Rose Hill State Park. 0.6 mile northeast of the junction of roads 44 and 61. *Fragaria virginiana* scattered along the roads shoulders on both sides and into the edge of the ditches. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616841. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-49-1; NC 96-49-1; CFRA 1581. Collected 07/21/1996 in South Carolina, United States. Latitude 34° 35' 18" N. Longitude 80° 52' 10" W. Roadside on the right above Camp Creek, 1.2 miles down SC 97, east of the junction with SC 200, on the east side of the Catawba River Bridge. Growing in part shade on the dry shoulder of the road. Occasional *Vaccinium arboreum*, *V. elliotii* and *V. stamineum* occurred on top of roadbanks and in dry woods. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616842. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-50-1; NC 96-50-1; CFRA 1582. Collected 07/21/1996 in South Carolina, United States. Latitude 34° 31' 18" N. Longitude 80° 35' 25" W. Woods and road interface on the left (headed north) on U.S. 521, 1.8 miles north of the Lancaster county line (headed toward Kershaw) and at Hanging Rock Creek. Growing in dense shade, with proportionally large leaves and petioles. Appears to be fertile soil, very dry at present. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616843. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-51-1; NC 96-51-1; CFRA 1583. Collected 07/22/1996 in South Carolina, United States. Latitude 34° 55' 43" N. Longitude 81° 27' 5" W. On north side of York county road 363, 0.6 mile west of county road 345, and just above Beaverdam Creek. Scattered along roadside, mostly in partial shade. Piedmont hardwood canopy in the woods on both sides. On road shoulder and in the ditch. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616844. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-51-2; NC 96-51-2; CFRA 1584. Collected 07/22/1996 in South Carolina, United States. Latitude 34° 55' 43" N. Longitude 81° 27' 5" W. On north side of York county road 363, 0.6 mile west of county road 345, and just above Beaverdam Creek. Scattered along roadside, mostly in partial shade. Piedmont hardwood canopy in the woods on both sides. On road shoulder and in the ditch. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616845. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-51-3; NC 96-51-3; CFRA 1585. Collected 07/22/1996 in South Carolina, United States. Latitude 34° 55' 43" N. Longitude 81° 27' 5" W. On north side of York county road 363, 0.6 mile west of county road 345, and just above Beaverdam Creek. Scattered along roadside, mostly in partial shade. Piedmont hardwood canopy in the woods on both sides. Growing in full sun about 80 feet above the bridge. Competing with sericea lespodeza and bermuda grass. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616846. *Fragaria virginiana* Mill.

Wild. *F. virginiana* NC 96-52-1; NC 96-52-1; CFRA 1586. Collected 07/23/1996 in South Carolina, United States. Latitude 35° 40' 57" N. Longitude 80° 36' 23" W. Growing on the side of a ditch, on left, behind the Poultry Unit at North Carolina ARS Piedmont Research Station at Salisbury, Rowan county, North Carolina. On Sherrills Ford Road (county road 1526), 5.2 miles north of highway 150. Wooded roadside and ditch along a field road leading down to a creek bottom. Pedigree - collected from the wild in South Carolina. USDA Sponsored plant collecting expedition, 1996.

The following were developed by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States; Carl Shanks, Washington State University, SW Research & Extension Unit, Vancouver, Washington 98665, United States. Donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States. Received 06/14/1996.

PI 616847. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. BC 840104A x Chandler 92002 D; CFRA 1587. Pedigree - BC 840104A x Chandler.

- PI 616848. *Fragaria x ananassa*** Duchesne ex Rozier
Breeding. Selva x Del Norte 92006 D; CFRA 1588. Pedigree - Selva x Del Norte. Low aphid, moderate mite susceptibility.
- PI 616849. *Fragaria x ananassa*** Duchesne ex Rozier
Breeding. Selva x LCM-19 92009 D; CFRA 1589. Pedigree - Selva x LCM-19. Moderate aphid, very high mite susceptibility.
- PI 616850. *Fragaria x ananassa*** Duchesne ex Rozier
Breeding. Selva x X-11 92012 I; CFRA 1590. Pedigree - Selva x X-11. High aphid, high mite susceptibility.
- PI 616851. *Fragaria x ananassa*** Duchesne ex Rozier
Breeding. Totem x CL-5 92015 T; CFRA 1591. Pedigree - Totem x CL-5. Very high aphid, low mite susceptibility.
- PI 616852. *Fragaria x ananassa*** Duchesne ex Rozier
Breeding. Totem x DL-40 92017 U; CFRA 1592. Pedigree - Totem x DL-40. Low aphid, low mite susceptibility.

The following were developed by David W. Simpson, East Malling Research Station, Maidstone, England ME19 6BJ, United Kingdom. Donated by Sue Stookes, NSA Plants Limited, Bradbourne House, Stabel Block, East Malling, West Malling, Kent, England ME19 6DZ, United Kingdom. Received 06/18/1996.

- PI 616853. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Melody"; SCRI71WC64; CFRA 1593. Pedigree - SCRI 66 M1 x Senga (Sengana SCRI 66 M1 is a highly red-stele resistant third generation derivative of *F. virginiana*). Fruit: small to medium size; firm, easy calyx removal, good external and internal color, ripens midseason, processing use. Plant: yield same or slightly better than Cambridge Favourite; runners well. Highly field resistant to red stele; moderately resistant to verticillium wilt in laboratory tests. ASHS Press. 1997. The Brooks and Olmo Register of Fruit and Nut Varieties. p. 705.
- PI 616854. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Emily"; CFRA 1594. Pedigree - Honeoye x Gea.

The following were collected by Ray Gekosky, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/02/1996.

- PI 616855. *Fragaria virginiana*** Mill.
Wild. *F. virginiana*; CFRA 1595. Collected 06/27/1996 in Colorado, United States. Latitude 38° 57' 12" N. Longitude 106° 18' 55" W. Elevation 3048 m. Collected 40 miles S.W. of Leadville in Chaffee county, Colorado. Mixed fir forest. Pedigree - ?Ray.

The following were collected by Hakan Schuberg, Gluntens Vag 9-807, Umea, Vasterbotten 903 31, Sweden. Received 11/04/1996.

PI 616856. *Fragaria vesca* L.

Cultivated. *F. vesca*; CFRA 1596. Collected in Vasterbotten, Sweden. Latitude 63° 55' N. Longitude 20° 0' E. Elevation 0 m. Brannland, Umea. On the riverbank of the Ume River. Riverbanks are steep and sandy and have been kept open for 3000 years or more. Collected 08/23/1996 in Vasterbotten, Sweden. Latitude 63° 55' N. Longitude 20° 0' E. Elevation 0 m. Brannland, Umea. On the riverbank of the Ume River. Riverbanks are steep and sandy and have been kept open for 3000 years or more. Pedigree - collected from the wild in Sweden.

The following were collected by Hakan Schuberg, Gluntens Vag 9-807, Umea, Vasterbotten 903 31, Sweden. Developed by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/04/1996.

PI 616857. *Fragaria viridis* Weston

Wild. *F. viridis*; CFRA 1597. Collected 09/19/1996 in Gotland, Sweden. Latitude 57° 20' N. Longitude 18° 40' E. Elevation 10 m. Southeastern Gotland, close to and 2 km along coast south of the stream Naarsaan, 20 km south of Ljugarn. The soil is heavy clay and very rich in Calcium about 50 cm deep over calcium bedrock. A very dry site in the summer. Former pasture for cattle, sheep and horse. Associated with *Quercus*, *Betula*, *Fraxinus* and *Ulmus*. Pedigree - collected from the wild in Sweden.

The following were developed by Anatoly Panteev, Belarus Research Institute, Kovaleva Street 2, Samokhvalovitchy, Minsk, Belarus. Received 03/01/1996.

PI 616858. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Red Shore (Krasny Bereg)"; Kb K; CFRA 1598. Pedigree - selection of cultivated strawberry from Russia.

PI 616859. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Pavlovtchanka"; C K; CFRA 1599. Pedigree - selection of cultivated strawberry from Russia.

The following were developed by Aldona Miseviciute, Vytenai Experimental Station for Horticultural Crops, Kaunas distr., Babtai, Lithuania. Donated by Anatoly Panteev, Belarus Research Institute, Kovaleva Street 2, Samokhvalovitchy, Minsk, Belarus. Received 03/01/1996.

PI 616860. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Venta"; Z 53; CFRA 1600. Certificate 4534. Pedigree - Senga Sengana x Festivalnaja.

PI 616861. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. "Venta"; V 26.12 53; CFRA 1601. Certificate 4534. Pedigree - Senga Sengana x Festivalnaja.

The following were collected by Miho Mihov, Institute for Wheat and Sunflower, "Dobroudja" 9520, General Toschevo, Tolbukhin 9520, Bulgaria; Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Yana K.

Guteva, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/22/1996.

PI 616862. *Fragaria vesca* L.

Wild. *F. vesca*; B96-112; CFRA 1603; *F. vesca* B96-112. Collected 07/06/1996 in Bulgaria. Latitude 41° 57' 24" N. Longitude 24° 7' 33" E. Elevation 1067 m. Middle range Rodope mountains near Rakitovo, north exposure. Spruce wood, with *Corylus*, under heavy canopy. Pedigree - Collected from the wild in Bulgaria. USDA Sponsored plant collecting expedition, 1996.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Yana K. Guteva, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/22/1996.

PI 616863. *Fragaria vesca* L.

Wild. *F. vesca*; B96-148; CFRA 1604. Collected 07/08/1996 in Bulgaria. Latitude 41° 59' 43" N. Longitude 24° 47' 26" E. Elevation 1082 m. Middle range Rodope mountains, north exposure. Growing under black pine near open meadow of grass and vetch. Pedigree - Collected from the wild in Bulgaria.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Yana K. Guteva, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Siyka Angelova, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/22/1996.

PI 616864. *Fragaria vesca* L.

Wild. *F. vesca*; B96-176; CFRA 1605; *F. vesca* B96-176. Collected 07/09/1996 in Bulgaria. Latitude 41° 41' 52" N. Longitude 24° 41' 28" E. Elevation 1219 m. East range of Rodope mountains, 1km south of Chepalari, on steep slope, west exposure. Pedigree - Collected from the wild in Bulgaria.

PI 616865. *Fragaria vesca* L.

Wild. *F. vesca*; B96-191; CFRA 1606; *F. vesca* B96-191. Collected 07/10/1996 in Bulgaria. Latitude 41° 39' 59" N. Longitude 24° 24' 37" E. Elevation 884 m. Rocky area on side of road near village of Gela, north exposure. Pedigree - Collected from the wild in Bulgaria.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Yana K. Guteva, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Datcho P. Shamov, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/22/1996.

PI 616866. *Fragaria vesca* L.

Wild. *F. vesca*; B96-267; CFRA 1607. Collected 07/12/1996 in Bulgaria. Latitude 42° 48' 32" N. Longitude 24° 38' E. Elevation 1067 m. North (just over ridge) side of Balkans. In beech (*Fagus*) forest. Pedigree - Collected from the wild in Bulgaria.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Yana K. Guteva, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/22/1996.

PI 616867. *Fragaria vesca* L.

Wild. *F. vesca*; B96-312; CFRA 1608; *F. vesca* B96-312. Collected 07/14/1996 in Bulgaria. Latitude 42° 51' 42" N. Longitude 24° 31' 13" E. Elevation 991 m. North side of Bulkan mountains, southwest exposure. Pedigree - Collected from the wild in Bulgaria.

The following were donated by Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Received 10/24/1996.

PI 616868. *Fragaria orientalis* Losinsk.

Wild. *F. orientalis*; 96128; CFRA 1609. Collected 09/1992 in Hubei, China. Latitude 31° 40' N. Longitude 110° 36' E. Elevation 2300 m. Shennongjia Nature Preserve. Mountains. Pedigree - collected from the wild in Hubei, China.

PI 616869. *Fragaria nilgerrensis* Schltdl. ex J. Gay

Wild. *F. nilgerrensis*; 96125; CFRA 1610. Collected 09/1996 in Hubei, China. Latitude 31° 40' N. Longitude 110° 36' E. Elevation 0 m. Shennongjia Nature Preserve. Mountains. Pedigree - collected from the wild in Hubei, China.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Sheng Ke Xi, The Chinese Academy of Forestry, Beijing, Beijing, China; Qinghua Zhang, Institute of Forest Ecology and

Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/24/1996.

PI 616870. *Fragaria orientalis* Losinsk.

Wild. *F. orientalis*; 96059; CFRA 1611. Collected in China. Latitude 42° 20' N. Longitude 129° 0' E. Elevation 1514 m. Roadside in Changbaishan Nature Preserve near Tiza He (River). Mountains. Pedigree - collected from the wild in Jilin, China.

The following were collected by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 11/22/1996.

PI 616871. *Fragaria x ananassa* Duchesne ex Rozier

Breeding. CFRA 1613; Missionary hybrid. Collected 07/1995 in Louisiana, United States. Pedigree - Wild *F. virginiana* introgressed with Missionary.

The following were donated by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 11/22/1996.

PI 616872. *Fragaria vesca* f. *roseiflora* (Boulay) Staudt

Breeding. *F. vesca* ssp. *roseiflora*; CFRA 1614. Collected 07/1995. Pedigree - selection of wild *vesca* with slight pink flowers.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 06/27/1996.

PI 616873. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-4-1; CFRA 1615. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 55' 12" N. Longitude 78° 3' 53" W. Highway US 117, 1.4 miles north of Magnolia city limits, Duplin county, North Carolina. Roadside on right heading north. Roadside between ditch and woods of mixed pines and hardwoods. Plants scattered with *P. canadensis*, *Rubus* ssp. among grasses and herbs. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616874. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-4-2; CFRA 1616. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 55' 12" N. Longitude 78° 3' 53" W. Highway US 117, 1.4 miles north of Magnolia city limits, Duplin county, North Carolina. Roadside on right heading north. Roadside between ditch and woods of mixed pines and hardwoods. Plants scattered with *P. canadensis*, *Rubus* ssp. among grasses and herbs. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

- PI 616875. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-4-3; CFRA 1617. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 55' 12" N. Longitude 78° 3' 53" W. Elevation 0 m. Highway US 117, 1.4 miles north of Magnolia city limits, Duplin county, North Carolina. Roadside on right heading north. Roadside between ditch and woods of mixed pines and hardwoods. Plants scattered with *P. canadensis*, *Rubus* ssp. among grasses and herbs. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616876. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-1; CFRA 1618. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616877. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-2; CFRA 1619. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616878. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-4; CFRA 1621. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616879. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-5; CFRA 1622. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616880. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-6; CFRA 1623. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

- PI 616881. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-7; CFRA 1624. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616882. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-8; CFRA 1625. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616883. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-5-9; CFRA 1626. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 29" N. Longitude 77° 14' 21" W. Roadside on the right, headed north on highway US 17; 1.3 miles south of Chadwick, Jones county, North Carolina. Scattered near woods edge and in disturbed roadside. Primarily pine overstory. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616884. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-6-1; CFRA 1627. Collected 05/14/1996 in North Carolina, United States. Latitude 35° 1' 44" N. Longitude 77° 7' 46" W. Scattered along left side of county road 1004, at woods edge, 0.4 miles beyond Island Creek. Jones county, North Carolina. Scattered near woods edge. Rich woods of Beech, hop hornbeam and associated vegetation. *Duchesnea indica*, *P. canadensis*, along with *Rubus* spp., also present. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616885. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-6-2; CFRA 1628. Collected 05/14/1996 in North Carolina, United States. Latitude 35° 1' 44" N. Longitude 77° 7' 46" W. Scattered along left side of county road 1004, at woods edge, 0.4 miles beyond Island Creek. Jones county, North Carolina. Scattered near woods edge. Rich woods of Beech, hop hornbeam and associated vegetation. *Duchesnea indica*, *P. canadensis*, along with *Rubus* spp., also present. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616886. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-6-3; CFRA 1629. Collected 05/14/1996 in North Carolina, United States. Latitude 35° 1' 44" N. Longitude 77° 7' 46" W. Scattered along left side of county road 1004, at woods edge, 0.4 miles beyond Island Creek. Jones county, North Carolina. Scattered near woods edge. Rich woods of Beech, hop hornbeam and associated vegetation. *Duchesnea indica*, *P. canadensis*, along with *Rubus* spp., also present. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

- PI 616887. *Fragaria virginiana* Mill.**
 Wild. *F. virginiana*; NC 96-7-1; CFRA 1630. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 4' 26" N. Longitude 77° 9' 31" W. US highway 17, 5 miles south of junction of US 17 and US 70 in New Bern, Craven county, North Carolina. Roadside on left (heading north), under powerline right-of-way. On the woods side of slope above roadside ditch. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616888. *Fragaria virginiana* Mill.**
 Wild. *F. virginiana*; NC 96-7-2; CFRA 1631. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 4' 26" N. Longitude 77° 9' 31" W. US highway 17, 5 miles south of junction of US 17 and US 70 in New Bern, Craven county, North Carolina. Roadside on left (heading north), under powerline right-of-way. On the woods side of slope above roadside ditch. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616889. *Fragaria virginiana* Mill.**
 Wild. *F. virginiana*; NC 96-7-3; CFRA 1632. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 4' 26" N. Longitude 77° 9' 31" W. US highway 17, 5 miles south of junction of US 17 and US 70 in New Bern, Craven county, North Carolina. Roadside on left (heading north), under powerline right-of-way. Extensive colony at woods edge, rich mesic woods, pines and hardwoods. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616890. *Fragaria virginiana* Mill.**
 Wild. *F. virginiana* x *ananassa*; NC 96-8-1; CFRA 1633. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 8' 21" N. Longitude 76° 58' 39" W. Highway 55 east from New Bern, roadsides, between Broad Creek and Olympia Road. Just into Pamlico county, North Carolina. About 35m east of the bridge. Found on dry roadside. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616891. *Fragaria virginiana* Mill.**
 Wild. *F. virginiana*; NC 96-8-2; CFRA 1634. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 8' 21" N. Longitude 76° 58' 39" W. Elevation 0 m. Highway 55 east from New Bern, roadsides, between Broad Creek and Olympia Road. Just into Pamlico county, North Carolina. About 35m east of the bridge. Found on dry roadside. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616892. *Fragaria virginiana* Mill.**
 Wild. *F. virginiana*; NC 96-9-1; CFRA 1635. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 8' 9" N. Longitude 76° 53' 27" W. Highway 55 east, 0.2 miles west of Reelsboro, Pamlico county, North Carolina. Roadside on left along the woods edge. Mature pine overstory, fairly moist site with the usual associates. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616893. *Fragaria virginiana* Mill.**
 Wild. *F. virginiana*; NC 96-9-2; CFRA 1636. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 8' 9" N. Longitude 76° 53'

27" W. Highway 55 east, 0.2 miles west of Reelsboro, Pamlico county, North Carolina. Roadside on left along the woods edge. Mature pine overstory, fairly moist site with the usual associates. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616894. *Fragaria virginiana* Mill.

Wild. *F. virginiana* x *ananassa*; NC 96-9-3; CFRA 1637. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 8' 9" N. Longitude 76° 53' 27" W. Highway 55 east, 0.2 miles west of Reelsboro, Pamlico county, North Carolina. Roadside on left along the woods edge. Mature pine overstory, fairly moist site with the usual associates. Pedigree - selection of wild *F. virginiana* x *ananassa* (probable). Fairly good fruit size, seeds only partly sunken, USDA Sponsored plant collecting expedition, 1996.

PI 616895. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-11-1; CFRA 1638. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 31' 19" N. Longitude 76° 48' 50" W. Just past junction of US 246 and county road 1339, powerline right-of-way on right, by highway 264, Beaufort county, North Carolina. Site varies from moist to dry upland, with mixed mature forest adjacent. Ericaceous species fairly abundant, including *Vaccinium* ssp., *Gaylussacia frondosa* and *Rhododendron atlanticum*. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616896. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-11-3; CFRA 1639. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 31' 19" N. Longitude 76° 48' 50" W. Just past junction of US 246 and county road 1339, powerline right-of-way on right, by highway 264, Beaufort county, North Carolina. Site varies from moist to dry upland, with mixed mature forest adjacent. Ericaceous species fairly abundant, including *Vaccinium* ssp., *Gaylussacia frondosa* and *Rhododendron atlanticum*. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616897. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-12-1; CFRA 1640. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 53' 21" N. Longitude 77° 7' 40" W. County road 1417, 1.6 miles off highway 125, out of Williamston, across Conoho Creek. Martin county, North Carolina. Roadsides in moderate shade. Rich moist woods, mostly broadleaf species. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616898. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-12-2; CFRA 1641. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 53' 21" N. Longitude 77° 7' 40" W. County road 1417, 1.6 miles off highway 125, out of Williamston, across Conoho Creek. Martin county, North Carolina. Roadsides in moderate shade. Rich moist woods, mostly broadleaf species. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616899. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-13-1; CFRA 1642. Collected 05/16/1996 in North Carolina, United States. Latitude 34° 54' 18" N. Longitude 76° 55' 2" W. Right off US 17 onto county road 1521, go 6.6 miles, Right on 1500 go 0.7 miles, turn right on 1519, go 2.4 miles, turn right on 1518, go 0.6 miles. Site is across and uphill from small stream by road. Bertie county, North Carolina. Rich deciduous woods; mostly broad leafed trees. In partial shade to full sun. Baldcypress also present along stream. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616900. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-13-2; CFRA 1643. Collected 05/16/1996 in North Carolina, United States. Latitude 34° 54' 18" N. Longitude 76° 55' 2" W. Right off US 17 onto county road 1521, go 6.6 miles, Right on 1500 go 0.7 miles, turn right on 1519, go 2.4 miles, turn right on 1518, go 0.6 miles. Site is across and uphill from small stream by road. Bertie county, North Carolina. Rich deciduous woods; mostly broad leafed trees. In partial shade to full sun. Baldcypress also present along stream. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616901. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-13-3; CFRA 1644. Collected 05/16/1996 in North Carolina, United States. Latitude 34° 54' 18" N. Longitude 76° 55' 2" W. Right off US 17 onto county road 1521, go 6.6 miles, Right on 1500 go 0.7 miles, turn right on 1519, go 2.4 miles, turn right on 1518, go 0.6 miles. Site is across and uphill from small stream by road. Bertie county, North Carolina. Rich deciduous woods; mostly broad leafed trees. In partial shade to full sun. Baldcypress also present along stream. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616902. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-14-1; CFRA 1645. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 2' 14" N. Longitude 76° 35' 7" W. County road 1114, 1.3 miles southeast of highway 32, south of Edenton, Chowan county, North Carolina. Both roadsides. Typical roadside. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616903. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-14-2; CFRA 1646. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 2' 14" N. Longitude 76° 35' 7" W. County road 1114, 1.3 miles southeast of highway 32, south of Edenton, Chowan county, North Carolina. Both roadsides. Typical roadside. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616904. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-14-3; CFRA 1647. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 2' 14" N. Longitude 76° 35' 7" W. County road 1114, 1.3 miles southeast of highway 32, south of Edenton, Chowan county, North Carolina. Both roadsides. Typical roadside. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

- PI 616905. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-15-1; CFRA 1648. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 12' 49" N. Longitude 76° 26' 39" W. County road 1220, 0.5 miles north of US highway 17. Vicinity of Cedar Grove Methodist Church. Both roadsides. Perquimans county, North Carolina. Mainly pine overstory, usual associates. Full sun to partial shade. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616906. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-15-2; CFRA 1649. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 12' 49" N. Longitude 76° 26' 39" W. County road 1220, 0.5 miles north of US highway 17. Vicinity of Cedar Grove Methodist Church. Both roadsides. Perquimans county, North Carolina. Mainly pine overstory, usual associates. Full sun to partial shade. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616907. *Fragaria virginiana* Mill.**
Wild. *F. virginiana* x *ananassa*; NC 96-15-3; CFRA 1650. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 12' 49" N. Longitude 76° 26' 39" W. County road 1220, 0.5 miles north of US highway 17. Vicinity of Cedar Grove Methodist Church. Both roadsides. Perquimans county, North Carolina. Mainly pine overstory, usual associates. Full sun to partial shade. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616908. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-16-1; CFRA 1651. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 19' 31" N. Longitude 76° 10' 27" W. Highway 158/34, 3.2 miles east of the Pasquotank River in Camden county, North Carolina. Roadside on left under power line right-of-way. Rich mixed woods. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616909. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-16-2; CFRA 1652. Collected 05/16/1996 in North Carolina, United States. Latitude 36° 19' 31" N. Longitude 76° 10' 27" W. Highway 158/34, 3.2 miles east of the Pasquotank River in Camden county, North Carolina. Roadside on left under power line right-of-way. Rich mixed woods. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616910. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-17-1; CFRA 1653. Collected 05/17/1996 in North Carolina, United States. Latitude 36° 25' 12" N. Longitude 76° 22' 40" W. Highway 158, 2.1 miles west of the junction with US 17 north from Elizabeth City, Pasquotank county, North Carolina. Roadside on the left, just east and across from Mt. Carmel Baptist Church. Roadside adjacent to mixed woods, moist site. Usual associates. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.
- PI 616911. *Fragaria virginiana* Mill.**
Wild. *F. virginiana*; NC 96-17-2; CFRA 1654. Collected 05/17/1996 in North Carolina, United States. Latitude 36° 25' 12" N. Longitude 76° 22' 40" W. Highway 158, 2.1 miles west of the junction with US

17 north from Elizabeth City, Pasquotank county, North Carolina. Road side on the left, just east and across from Mt. Carmel Baptist Church. Roadside adjacent to mixed woods, moist site. Usual associates. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

PI 616912. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; NC 96-17-3; CFRA 1655. Collected 05/17/1996 in North Carolina, United States. Latitude 36° 25' 12" N. Longitude 76° 22' 40" W. Highway 158, 2.1 miles west of the junction with US 17 north from Elizabeth City, Pasquotank county, North Carolina. Road side on the left, just east and across from Mt. Carmel Baptist Church. Roadside adjacent to mixed woods, moist site. Usual associates. Pedigree - collected from the wild in North Carolina. USDA Sponsored plant collecting expedition, 1996.

The following were collected by Barbara Reed, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/09/1997.

PI 616913. *Fragaria virginiana* Mill. subsp. *virginiana*

Wild. *F. virginiana* ssp. *virginiana*; CFRA 1657. Collected 06/07/1997 in Nebraska, United States. Latitude 41° 38' N. Longitude 95° 55' W. Elevation 0 m. Six miles south and 1/2 mile east of Nebraska City, Otoe county, Nebraska. A native prairie site, used as a hay field. With Phlox and miscellaneous wild flowers and grasses. Pedigree - collected from the wild in Nebraska.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/21/1997.

PI 616914. *Fragaria virginiana* Mill.

Wild. *F. virginiana*; CFRA 1659. Collected in Maine, United States. Latitude 44° 18' N. Longitude 68° 33' W. Elevation 2 m. Acadia National Park, about 10 km south of Bar Harbor along roadside just east of bridge where park loop road crosses Otter Cove. Along roadside, seashore vegetation. Collected 07/11/1997 in Maine, United States. Latitude 44° 18' N. Longitude 68° 33' W. Elevation 2 m. Acadia National Park, about 10 km south of Bar Harbor along roadside just east of bridge where park loop road crosses Otter Cove. Along roadside, seashore vegetation. Pedigree - collected from the wild in Maine.

The following were collected by Catherine I. Wright, Alaska Plant Materials Center, HCO2, Box 7440, Palmer, Alaska 99645, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/18/1997.

PI 616915. *Fragaria virginiana* Mill.

Wild. *F. virginiana* S1 Utah; CFRA 1660. Collected 07/26/1997 in Utah, United States. Latitude 41° 0' N. Longitude 111° 45' W. Elevation 2500 m. 0.5 mile on wooden walkway behind the Solitude Nordic Center Building. Boggy area, associated with *Potentilla* (marsh fivefinger), *Geum*, *Geranium*, *Carex* and *Epilobium*. Pedigree - collected from the wild in Utah.

PI 616916. *Fragaria virginiana* Mill.

Wild. *F. virginiana* S2 Utah; CFRA 1661. Collected 07/26/1997 in Utah, United States. Latitude 41° 0' N. Longitude 111° 45' W. Elevation 2500 m. one mile on wooden walkway behind the Solitude Nordic Center Building. Open wooded area, under white fir growing in organic duff on top of sandy loam. Associated with *Potentilla* (marsh fivefinger), *Geum*, *Geranium*, *Carex* *Epilobium*, white fir. Pedigree - collected from the wild in North Carolina.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/26/1997.

PI 616917. *Fragaria vesca* subsp. *bracteata* (A. Heller) Staudt

Wild. *F. vesca* ssp. *bracteata*; CFRA 1662. Collected in Hawaii, United States. Latitude 20° 42' 30" N. Longitude 156° 21' 32" W. Elevation 3000 m. Kula Botanical Garden, Kula, Maui county, Hawaii. Near Polipoli State Park and Haleakala National Park. Southwest facing slope of Haleakala. In shady areas along path edges in sandy loam. Collected 06/27/1997 in Hawaii, United States. Latitude 20° 42' 30" N. Longitude 156° 21' 32" W. Elevation 3000 m. Kula Botanical Garden, Kula, Maui county, Hawaii. Near Polipoli State Park and Haleakala National Park. Southwest facing slope of Haleakala. In shady areas along path edges in sandy loam. Pedigree - collected from the wild in Hawaii.

Unknown source. Received 03/10/1998.

PI 616918. *Fragaria* x *ananassa* Duchesne ex Rozier

Cultivar. "Northeaster"; MDUS 4787; CFRA 1664. Pedigree - MDUS 4380 x Holiday. The Agricultural Research Service, U.S. Department of Agriculture, the Ohio Agricultural Research and Development Center, and the New Jersey Agricultural Experiment Station hereby release to nurserymen for propagation NORTHEASTER, an early-season, di sease-resistant Junebearing strawberry cultivar. NORTHEASTER, tested as MDUS 4787, was selected in 1976 at Queenstown, Maryland by A. D. Draper and P. Rosati, from a 1974 cross of MDUS 4380 x the Holiday cultivar, made at Beltsville, MD by D. H. Scott. NORTHEASTER is resistant to five eastern U. S. races of red stele root rot, but susceptible to powdery mildew. NORTHEASTER has performed well in Maryland, New Jersey, Pennsylvania, Ohio, and Kentucky. On sandy soils it yields and ripens with Earliglow, does not make as full a plant bed, but is larger-fruited than Earliglow. On heavy soils, NORTHEASTER's yield, fruit size, and plant vigor are much better than those of Earliglow NORTHEASTER fruit is firm, large, and has the strong flavor and aroma of its Holiday parent. It is expected to be best adapted to the Northeaster U. S. and adjacent areas where Holiday was grown. NORTHEASTER is suggested for trial as a

fresh market or frozen berry for growers with clay or silt loam soils who need an early, large, red stele resistant strawberry cultivar with good fruit quality. An early ripening, red stele-resistant strawberry adapted to the northeastern United States. Fruit: large; firm; ripening season simladed for fresh market and processed frozen; strong flavor and aroma, similar to Holiday. Plant: yields on sandy soil similar to Earliglow; less vigouous than Earliglow on lighter soils and more vigorous on heavier soils. Resistant to five races of red stele causal organism; susceptible to powdery mildew.

Unknown source. Received 03/24/1998.

PI 616919. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Shortcake"; CFRA 1666. Pedigree - [(Canall x Twentieth Century) x Twentieth Century] x Ogallala. Berry: medium to large, long conic to conic; skin medium red. Slightly glossy, attractive, flesh firm, ripens midseason about with Catskill. Plant: everbearing, highly productive, vigorous, produces medium number of runners. APS Press. Brooks and Olmo Register of Fruit and Nut Varieties.

Unknown source. Received 03/24/1998.

PI 616920. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "September Sweet"; CFRA 1667.

The following were donated by Darby Brothers Farms,Ltd., Bars Hall Farm, West Dereham, Kings Lynn, England, United Kingdom. Received 05/20/1998.

PI 616921. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Bolero"; EMR63; CFRA 1668. Pedigree - Selva x LA 988 (complex pedigree involving Redgauntlet, Wiltguard, Gorella, Cardinal and Selva).

PI 616922. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Pegasus"; ES608; CFRA 1670. Pedigree - Redgauntlet x Gorella.

PI 616923. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Calypso"; EMR 28; CFRA 1671. Pedigree - Rapella x Selva.

PI 616924. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Eros"; EIV1220; CFRA 1672. Pedigree - Elsanta and Allstar.

PI 616925. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Tango"; EMR25; CFRA 1673. Pedigree - Rapella x Selva.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 06/03/1998.

PI 616926. *Fragaria orientalis* Losinsk.
Cultivated. CFRA 1674. Pedigree - Open pollinated seed from CFRA 1612 seedlings.

Unknown source. Received 07/10/1998.

PI 616927. *Fragaria orientalis* Losinsk.

Wild. CFRA 1676. Collected 06/29/1998 in Khabarovsk, Russian Federation. Latitude 49° 0' N. Longitude 132° 29' E. Elevation 0 m. Train station market in Bira, Birobijan (Jewish OA) region, Khabarovsk Krai. 3 hour train ride west of Khabarovsk. Pedigree - Wild fruit sold at public market in Bira, Khabarovsk, Russia.

Unknown source. Received 07/10/1998.

PI 616928. *Fragaria orientalis* Losinsk.

Wild. CFRA 1677. Collected 07/01/1998 in Khabarovsk, Russian Federation. Latitude 43° 37' N. Longitude 132° 12' E. Elevation 110 m. Roadside in the hills, a short distance south, above VIR (N.I. Vavilov Institute) station, 25k north of Vadivostok. Roadside, dense vegetation including *Actinidia* sp. Pedigree - Collect from the Wild in the Russian Federation.

The following were donated by Clive Simms, Woodhurst, 6 Stamford Rd., Essendine, Stamford, Stamford, England PE9 4LQ, United Kingdom. Received 08/04/1998.

PI 616929. *Fragaria virginiana* Mill.

Cultivar. "Little Scarlet"; CFRA 1678. Pedigree - Cultivar grown since the sixteenth hundreds.

PI 616930. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Eastern Pine"; CFRA 1679. Pedigree - Cultivar grown since the late 1700s, original species from United States but grown in Europe since then.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/20/1998.

PI 616931. *Fragaria virginiana* Mill.

Wild. CFRA 1680. Collected 08/15/1998 in Oregon, United States. Latitude 44° 18' N. Longitude 119° 41' W. Elevation 1828 m. Strawberry Wilderness in Malheur Nation Forest; T14S R34E Sec. 30; Strawberry Lake Campground at end of Forest Road 6001. From Prairie City take Highway 60 (Strawberry Road) south, which becomes Forest Road 6001. Associated with *Fragaria vesca*.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/22/1998.

PI 616932. *Fragaria virginiana* Mill.

Wild. KH98-11; Sled Dog 1; CFRA 1681. Collected 08/09/1998 in Alaska, United States. Latitude 64° 49' 54" N. Longitude 147° 31' 59" W. Elevation 30 m. Sled Dog RV Park, Badger Loop Road on the banks of the Chena River. About 4 miles east of Fairbanks, Alaska. Soil was dark brown, very sandy-loam, very little organic matter. Associated plants:

grasses, ladyfern, red raspberry. Pedigree - Collected from the wild in Alaska.

PI 616933. *Fragaria virginiana* Mill.

Wild. KH98-16; Birch Lake; CFRA 1682. Collected 08/10/1998 in Alaska, United States. Latitude 64° 18' 16" N. Longitude 146° 40' 6" W. Elevation 23 m. Birch Lake pulloff by lake, milepost xx on Richardson Highway (route 2). Collected from gravel parking area near lake. Associated plants: Sieboldia, Yarrow, Grasses, Willow. Pedigree - Collected from the wild in Alaska.

The following were collected by James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Received 07/27/1998.

PI 616934. *Fragaria chiloensis* subsp. *sandwicensis* (Decne.) Staudt

Wild. Maui 2-1; CFRA 1683. Collected 09/1998 in Hawaii, United States. Latitude 20° 56' N. Longitude 156° 31' W. Elevation 1900 m. Collected multiple spots along the road to Polipoli Spring State Recreation Area on the slope of the valcano Haleakela, Maui, Hawaii. It is the section of road that runs along the flank of the mountain after you go up all the switchbacks. The soil was a layer of humus over valcanic ash and pumice. Mostly typical Hawaiian sub-alpine scrub with exotic forest species of California Redwood, Douglas Fir and Western Red Cedar; growing in the damp fog/cloud zone. Pedigree - Collected from the wild in Hawaii.

The following were donated by Thompson & Morgan Seed Co., 220 Faraday Avenue, P.O. Box 1308, Jackson, New Jersey 08527-0308, United States. Received 02/05/1999.

PI 616935. *Fragaria vesca* L.

Cultivar. "Mignonette"; CFRA 1686. Pedigree - Selectin of *F. vesca*.

The following were developed by David K. Wildung, University of Minnesota, North Central Research and Outreach Center, 1861 East Highway 169, Grand Rapids, Minnesota 55744, United States; G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Donated by Indiana Berry and Fruit Co., 5218 West 500 S., Huntingburg, Indiana 47542, United States. Received 02/25/1999.

PI 616936. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Mesabi"; MNUS 248; CFRA 1687. Mesabi. Pedigree - Glooscap x MNUS 99. Mesabi (MNUS 248) strawberry is a mid-season, Junebearing (short day) strawberry (*Fragaria x ananassa*) that is notable for high productivity and being tolerant of cold winter and warm summer temperatures that are typical of the continental climate of Minnesota where it was developed. It will likely be useful for strawberry producers in the Midwestern and Northeastern U.S. and adjacent parts of Canada. Mesabi strawberry has been productive in matted row production systems on soils of heavy and light texture in Minnesota and in hill systems in Maryland. Plants of Mesabi strawberry are resistant to five

eastern North American races of *Phytophthora fragariae*, the causal organism of red stele root rot and moderate resistance to leaf spot, leaf scorch and powdery mildew. Mesabi is from the cross of Glooscap x MNUS 99. The word Mesabi is a transliteration of the Ojibway word for "giant" and is a popular geographical name in northern Minnesota. Mesabi strawberry has generally produced high yields and medium to large berries. The fruit matures in the middle part of the season for short-day cultivars, approximately at the same time as its parent, Glooscap, and other common midseason cultivars grown in Minnesota such as Kent and Cavendish. In all trials in Minnesota, Mesabi strawberry consistently had yields similar to or greater than these other mid-season varieties. Glooscap is probably the most popular mid-season cultivar with commercial Minnesota producers. Between 1992 to 1996, Mesabi strawberry had a greater yield than its parent, Glooscap, in 10 of 15 trials and greater average berry weight in 14 of 15 trials. The fruit of Mesabi strawberry have a glossy scarlet skin that does not tend to darken as much as Glooscap, and a uniform red interior color. The flavor is well balanced between sugars and acids with a characteristic strawberry aroma. The flesh is firm with a creamy, meeting mouthfeel. The skin is medium to tough but tends to become weak in hot weather.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Ted Mackey, Horticultural Crops Research Laboratory, 3420 Orchard St., Corvallis, Oregon 97330, United States; Suzanna Yorgey, Oregon State University, Corvallis, Oregon, United States; Kirsten Wennstrom, Oregon State University, Department of Horticulture, Lewis-Brown Farm, Corvallis, Oregon 97331, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/19/1994.

PI 616937. *Fragaria virginiana* Mill.

Wild. CFRA 1688. Collected 08/1993 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 04/27/2000.

PI 616938. *Fragaria virginiana* Mill.

Wild. NC 98-2-1; CFRA 1705. Collected in Tennessee, United States. Latitude 36° 1' 9" N. Longitude 83° 44' 49" W. Elevation 425 m. From I-40 take strawberry Plains PIke north for 1.9 miles miles to McCubbins Cemetary Lane for 0.1 mile to Mcubbins Cemetary. Site is McCubbins Cemetary grounds. Dry uplands, silty topsoil, shale underneath. Largely *Quercus alba* overstory in the cemetary along with several *Pinus virginiana* along front edge. Collected 09/25/1998 in Tennessee, United States. Latitude 36° 1' 9" N. Longitude 83° 44' 49" W. Elevation 425 m. From I-40 take strawberry Plains PIke north for 1.9 miles miles to McCubbins Cemetary Lane for 0.1 mile to Mcubbins Cemetary. Site is McCubbins Cemetary grounds. Dry uplands, silty topsoil, shale underneath. Largely *Quercus alba* overstory in the cemetary along with several *Pinus virginiana* along front edge. Pedigree - Collected from the wild in Tennessee.

PI 616939. *Fragaria virginiana* Mill.

Wild. NC 98-2-2; CFRA 1706. Collected 09/25/1998 in Tennessee, United States. Latitude 36° 1' 9" N. Longitude 83° 44' 49" W. Elevation 425 m. From I-40 take Strawberry Plains PIke north for 1.9 miles to McCubbins Cemetary Lane. Turn right and go 0.1 mile to Mcubbins Cemetary. Site is McCubbins Cemetary grounds. Knox county. Dry uplands, silty topsoil, shale underneath. *Quercus alba*, *Pinus virginiana*, *Pespalum* subsp., *Potentilla canadensis*, *Andropogon* sp., *Plantogo* sp., *Ulmus* sp., *Acer rubra* and *Acer barbatum*. Mosses, lichens and grasses. Pedigree - Collected from the wild in Tennessee.

PI 616940. *Fragaria virginiana* Mill.

Wild. NC 98-2-3; CFRA 1707. Collected 09/25/1998 in Tennessee, United States. Latitude 36° 1' 9" N. Longitude 83° 44' 49" W. Elevation 425 m. From I-40 take Strawberry Plains PIke north for 1.9 miles to McCubbins Cemetary Lane. Turn right and go 0.1 mile to Mcubbins Cemetary. Site is McCubbins Cemetary grounds. Knox county. Dry uplands, silty topsoil, shale underneath. *Quercus alba*, *Pinus virginiana*, *Pespalum* subsp., *Potentilla canadensis*, *Andropogon* sp., *Plantogo* sp., *Ulmus* sp., *Acer rubra* and *Acer barbatum*. Mosses, lichens and grasses. Pedigree - Collected from the wild in Tennessee.

PI 616941. *Fragaria virginiana* Mill.

Wild. NC 98-2-4; CFRA 1708. Collected 09/25/1998 in Tennessee, United States. Latitude 36° 1' 9" N. Longitude 83° 44' 49" W. Elevation 425 m. From I-40 take Strawberry Plains PIke north for 1.9 miles to McCubbins Cemetary Lane. Turn right and go 0.1 mile to Mcubbins Cemetary. Site is McCubbins Cemetary grounds. Knox county. Dry uplands, silty topsoil, shale underneath. *Quercus alba*, *Pinus virginiana*, *Pespalum* subsp., *Potentilla canadensis*, *Andropogon* sp., *Plantogo* sp., *Ulmus* sp., *Acer rubra* and *Acer barbatum*. Mosses, lichens and grasses. Pedigree - Collected from the wild in Tennessee.

PI 616942. *Fragaria x ananassa* Duchesne ex Rozier

Wild. NC 98-3-1; CFRA 1709. Collected 09/25/1998 in Tennessee, United States. Latitude 36° 1' 9" N. Longitude 83° 44' 49" W. Elevation 425 m. Take I-75 south off I-40 (west of knoxville) to exit 72, to exit 72, then east on Hwy.72 to Loudon, then south on Hwy 11 for 2.1 miles. Loudon county. Limestone outcrop in a pasture, woody roadbank. Competing with *Festuca* and associated herbaceons and seedling woody subsp. Pedigree - Collected from the wild in Tennessee.

PI 616943. *Fragaria virginiana* Mill.

Wild. NC 98-4-1; CFRA 1710. Collected 09/26/1998 in Tennessee, United States. Latitude 35° 43' 49" N. Longitude 84° 29' 6" W. Elevation 382 m. Hwy 72 west off I-75, 0.2 mi. west of Roane Co. Line on 72. Roadside ditch on right, downhill beyond abandoned store. Roane county. Mixed pine and hardware forest above. Gravelly clay soil on roadbank. Pedigree - Collected from the wild in Tennessee.

PI 616944. *Fragaria virginiana* Mill.

Wild. NC 98-6-1; CFRA 1711. Collected 09/26/1998 in Tennessee, United States. Latitude 35° 46' 59" N. Longitude 84° 33' 10" W. Elevation 362 m. Roadside ditch and bank on left along highway 72, 6.1 miles west of Roane county line. Mixed pine and hardwood forest above the roadbank. Pedigree - Collected from the wild in Tennessee.

PI 616945. *Fragaria virginiana* Mill.

Wild. NC 98-7-2; CFRA 1712. Collected 09/26/1998 in Tennessee, United States. Latitude 35° 49' 23" N. Longitude 84° 32' 51" W. Elevation 330 m. Highway 58, 1.8 miles North of junction with 72. Roadbanks on both sides. Roadsides above cove forest along US 70. Roane county. Morning sun on left side, evening sun on right. Partial or full shade where strawberries found. Pine-oak forest above road banks on both sides. Heavy clay soil, very dry at this time. Pedigree - Collected from the wild in Tennessee.

PI 616946. *Fragaria virginiana* Mill.

Wild. NC 98-7-3; CFRA 1713. Collected 09/26/1998 in Tennessee, United States. Latitude 35° 49' 23" N. Longitude 84° 32' 51" W. Elevation 330 m. Highway 58, 1.8 miles North of junction with 72. Roadbanks on both sides. Roadsides above cove forest along US 70. Roane county. Morning sun on left side, evening sun on right. Partial or full shade where strawberries found. Pine-oak forest above road banks on both sides. Heavy clay soil, very dry at this time. Pedigree - Collected from the wild in Tennessee.

PI 616947. *Fragaria virginiana* Mill.

Wild. NC 98-9-1; CFRA 1714. Collected 09/26/1998 in Tennessee, United States. Latitude 35° 52' 52" N. Longitude 84° 48' 39" W. Elevation 578 m. Highway 70, Ozone, Tennessee. Trailside near entrance to Ozone Natural Area and rocky outcrop near the bluff along the trail into the natural area. Cumberland county. Thin dark loamy soil near entrance, very dry at present. Grassy trailside. *Rubus hispidus* scattered in thin soil areas, scattered on rock outcrops. Pedigree - Collected from the wild in Tennessee.

PI 616948. *Fragaria virginiana* Mill.

Wild. NC 98-10-1; CFRA 1715. Collected 09/26/1998 in Tennessee, United States. Latitude 35° 53' 28" N. Longitude 84° 50' 42" W. Elevation 612 m. Highway 70, 2.5 miles west of OzoneTennessee, at the Crab Orchard City Limit. Roadside ditch on left. Cumberland county. In partial to heavy shade. Typical pine-hardwood forest above. Heavy soil-gravelly clay. Pedigree - Collected from the wild in Tennessee.

PI 616949. *Fragaria virginiana* Mill.

Wild. NC 98-14-1; CFRA 1716. Collected 09/27/1998 in Tennessee, United States. Latitude 36° 4' 46" N. Longitude 86° 19' 5" W. Elevation 333 m. Ceders of Lebanon State Park, roadside ditch above swimming pool. Ditch adjacent to modest size cedar glade. Wilson county. Cedar glade with typical vegetation. Pedigree - Collected from the wild in Tennessee.

PI 616950. *Fragaria virginiana* Mill.

Wild. NC 98-14-2; CFRA 1717. Collected 09/27/1998 in Tennessee, United States. Latitude 36° 4' 25" N. Longitude 86° 18' 38" W. Elevation 340 m. Ceders of Lebanon State Forest. 0.7 mile down State Forest road from the 'Pork'. Road edge on the right and 3 to 4 miles into a very large cedar glade. Wilson county. Cedar glade with typical vegetation. Pimarily growing through a mat of mosses. Some plants suffering from severe drought. *Rhus aromatica*, *Rosa* sp. and *Rhamus caroliniana* occasional to scattered. Pedigree - Collected from the wild in Tennessee.

PI 616951. *Fragaria virginiana* Mill.

Wild. NC 98-14-3; CFRA 1718. Collected 09/27/1998 in Tennessee, United States. Latitude 36° 4' 25" N. Longitude 86° 18' 38" W.

Elevation 340 m. Ceders of Lebanon State Forest. 0.7 mile down State Forest road from the 'Pork'. Road edge on the right and 3 to 4 miles into a very large cedar glade. Wilson county. Cedar glade with typical vegetation. Pimarily growing through a mat of mosses. Some plants suffering from severe drought. *Rhus aromatica*, *Rosa* sp. and *Rhamus caroliniana* occasional to scattered. Pedigree - Collected from the wild in Tennessee.

PI 616952. *Fragaria virginiana* Mill.

Wild. NC 98-14-4; CFRA 1719. Collected 09/27/1998 in Tennessee, United States. Latitude 36° 4' 25" N. Longitude 86° 18' 38" W.

Elevation 340 m. Ceders of Lebanon State Forest. 0.7 mile down State Forest road from the 'Pork'. Road edge on the right and 3 to 4 miles into a very large cedar glade. Wilson county. Cedar glade with typical vegetation. Pimarily growing through a mat of mosses. Some plants suffering from severe drought. *Rhus aromatica*, *Rosa* sp. and *Rhamus caroliniana* occasional to scattered. Pedigree - Collected from the wild in Tennessee.

PI 616953. *Fragaria virginiana* Mill.

Wild. NC 98-14-5; CFRA 1720. Collected 09/27/1998 in Tennessee, United States. Latitude 36° 4' 25" N. Longitude 86° 18' 38" W.

Elevation 340 m. Ceders of Lebanon State Forest. 0.7 mile down State Forest road from the 'Pork'. Road edge on the right and 3 to 4 miles into a very large cedar glade. Wilson county. Cedar glade with typical vegetation. Pimarily growing through a mat of mosses. Some plants suffering from severe drought. *Rhus aromatica*, *Rosa* sp. and *Rhamus caroliniana* occasional to scattered. Pedigree - Collected from the wild in Tennessee.

PI 616954. *Fragaria virginiana* Mill.

Wild. NC 98-15-1; CFRA 1721. Collected in Arkansas, United States.

Latitude 34° 25' 25" N. Longitude 92° 57' 57" W. Elevation 278 m. Roadside ditches on both sides of Highway 171, 0.4 mile north of junction with Hwy. 290. Pine oak woodland, between two channels of a creek. *Rubus* sp. scattered throughout site, *Vaccinium* occasional at wood edge. Collected 09/28/1998 in Arkansas, United States. Latitude 34° 25' 25" N. Longitude 92° 57' 57" W. Elevation 278 m. Roadside ditches on both sides of Highway 171, 0.4 mile north of junction with Hwy. 290. Pine oak woodland, between two channels of a creek. *Rubus* sp. scattered throughout site, *Vaccinium* occasional at wood edge. Pedigree - Collected from the wild in Arkansas.

PI 616955. *Fragaria virginiana* Mill.

Wild. NC 98-15-2; CFRA 1722. Collected in Arkansas, United States.

Latitude 34° 25' 25" N. Longitude 92° 57' 57" W. Elevation 278 m. Roadside ditches on both sides of Highway 171, 0.4 mile north of junction with Hwy. 290. Pine oak woodland, between two channels of a creek. *Rubus* sp. scattered throughout site, *Vaccinium* occasional at wood edge. Collected 09/28/1998 in Arkansas, United States. Latitude 34° 25' 25" N. Longitude 92° 57' 57" W. Elevation 278 m. Roadside ditches on both sides of Highway 171, 0.4 mile north of junction with Hwy. 290. Pine oak woodland, between two channels of a creek. *Rubus* sp.

scattered throughout site, *Vaccinium* occasional at wood edge. Pedigree - Collected from the wild in Arkansas.

PI 616956. *Fragaria virginiana* Mill.

Wild. NC 98-15-3; CFRA 1723. Collected in Arkansas, United States. Latitude 34° 25' 25" N. Longitude 92° 57' 57" W. Elevation 278 m. Roadside ditches on both sides of Highway 171, 0.4 mile north of junction with Hwy. 290. Pine oak woodland, between two channels of a creek. *Rubus* sp. scattered throughout site, *Vaccinium* occasional at wood edge. Collected 09/28/1998 in Arkansas, United States. Latitude 34° 25' 25" N. Longitude 92° 57' 57" W. Elevation 278 m. Roadside ditches on both sides of Highway 171, 0.4 mile north of junction with Hwy. 290. Pine oak woodland, between two channels of a creek. *Rubus* sp. scattered throughout site, *Vaccinium* occasional at wood edge. Pedigree - Collected from the wild in Arkansas.

PI 616957. *Fragaria virginiana* Mill.

Wild. NC 98-16-1; CFRA 1724. Collected 09/28/1998 in Arkansas, United States. Latitude 34° 28' 25" N. Longitude 93° 39' 44" W. Elevation 430 m. Roadbanks on both sides, 1-1.2 mi. up Forest Service Rd 177 in Ouachita National Forest east of Hwy. 27. Pedigree - Collected from the wild in Arkansas.

PI 616958. *Fragaria virginiana* Mill.

Wild. NC 98-16-2; CFRA 1725. Collected 09/28/1998 in Arkansas, United States. Latitude 34° 28' 18" N. Longitude 93° 39' 48" W. Elevation 420 m. Roadbanks on both sides, 1-1.2 mi. up Forest Service Rd 177 in Ouachita National Forest east of Hwy. 27. Pedigree - Collected from the wild in Arkansas.

PI 616959. *Fragaria virginiana* Mill.

Wild. NC 98-16-3; CFRA 1726. Collected 09/28/1998 in Arkansas, United States. Latitude 34° 28' 18" N. Longitude 93° 39' 48" W. Elevation 420 m. Roadbanks on both sides, 1-1.2 mi. up Forest Service Rd 177 in Ouachita National Forest east of Hwy. 27. Pedigree - Collected from the wild in Arkansas.

PI 616960. *Fragaria virginiana* Mill.

Wild. NC 98-18-1; CFRA 1727. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 4' 27" N. Longitude 93° 10' 31" W. Elevation 270 m. From I-30 exit 73 in Arkadelphia, Arkansas. West on 8/26/51 to 26/51, go left for 4.7 mi to 51. Left on 51 for 0.6 mile to Shiloh Rd. Left on Shiloh Rd. for 0.8 mile to a blackland limestone cedar prairie on right. Prairie with *Juniperus virginiana*. Pedigree - Collected from the wild in Arkansas. At present the *Juniperus virginiana* trees are being cut down to attempt to return the site to a prairie. This will in all likelihood result in loss of the majority of the *Fragaria virginiana* population.

PI 616961. *Fragaria virginiana* Mill.

Wild. NC 98-18-2; CFRA 1728. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 4' 27" N. Longitude 93° 10' 31" W. Elevation 270 m. From I-30 exit 73 in Arkadelphia, Arkansas. West on 8/26/51 to 26/51, go left for 4.7 mi to 51. Left on 51 for 0.6 mile to Shiloh Rd. Left on Shiloh Rd. for 0.8 mile to a blackland limestone cedar prairie on right. Prairie with *Juniperus virginiana*. Pedigree - Collected from the wild in Arkansas. At present the *Juniperus virginiana*

trees are being cut down to attempt to return the site to a prairie. This will in all likelihood result in loss of the majority of the *Fragaria virginiana* population.

PI 616962. *Fragaria virginiana* Mill.

Wild. NC 98-18-3; CFRA 1729. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 4' 27" N. Longitude 93° 10' 31" W. Elevation 270 m. From I-30 exit 73 in Arkadelphia, Arkansas. West on 8/26/51 to 26/51, go left for 4.7 mi to 51. Left on 51 for 0.6 mile to Shiloh Rd. Left on Shiloh Rd. for 0.8 mile to a blackland limestone cedar prairie on right. Prairie with *Juniperus virginiana*. Pedigree - Collected from the wild in Arkansas. At present the *Juniperus virginiana* trees are being cut down to attempt to return the site to a prairie. This will in all likelihood result in loss of the majority of the *Fragaria virginiana* population.

PI 616963. *Fragaria virginiana* Mill.

Wild. NC 98-18-4; CFRA 1730. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 4' 27" N. Longitude 93° 10' 31" W. Elevation 270 m. From I-30 exit 73 in Arkadelphia, Arkansas. West on 8/26/51 to 26/51, go left for 4.7 mi to 51. Left on 51 for 0.6 mile to Shiloh Rd. Left on Shiloh Rd. for 0.8 mile to a blackland limestone cedar prairie on right. Prairie with *Juniperus virginiana*. Pedigree - Collected from the wild in Arkansas. At present the *Juniperus virginiana* trees are being cut down to attempt to return the site to a prairie. This will in all likelihood result in loss of the majority of the *Fragaria virginiana* population.

PI 616964. *Fragaria virginiana* Mill.

Wild. NC 98-18-5; CFRA 1731. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 4' 27" N. Longitude 93° 10' 31" W. Elevation 270 m. From I-30 exit 73 in Arkadelphia, Arkansas. West on 8/26/51 to 26/51, go left for 4.7 mi to 51. Left on 51 for 0.6 mile to Shiloh Rd. Left on Shiloh Rd. for 0.8 mile to a blackland limestone cedar prairie on right. Prairie with *Juniperus virginiana*. Pedigree - Collected from the wild in Arkansas. At present the *Juniperus virginiana* trees are being cut down to attempt to return the site to a prairie. This will in all likelihood result in loss of the majority of the *Fragaria virginiana* population.

PI 616965. *Fragaria virginiana* Mill.

Wild. NC 98-18-6; CFRA 1732. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 4' 27" N. Longitude 93° 10' 31" W. Elevation 270 m. From I-30 exit 73 in Arkadelphia, Arkansas. West on 8/26/51 to 26/51, go left for 4.7 mi to 51. Left on 51 for 0.6 mile to Shiloh Rd. Left on Shiloh Rd. for 0.8 mile to a blackland limestone cedar prairie on right. Prairie with *Juniperus virginiana*. Pedigree - Collected from the wild in Arkansas. At present the *Juniperus virginiana* trees are being cut down to attempt to return the site to a prairie. This will in all likelihood result in loss of the majority of the *Fragaria virginiana* population.

PI 616966. *Fragaria virginiana* Mill.

Wild. NC 98-19-1; CFRA 1733. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 5' 22" N. Longitude 93° 10' 21" W.

Elevation 280 m. Jct. of Rd. 51 and Shiloh Rd., 0.6 mi. from where 26 and 51 separate. Roadside in the corner on the right. 0.3 mi back up Rd. 51 from location 98-19 also with *F. Virginiana*. Roadside under the edge of a tree canopy. Pedigree - Collected from the wild in Arkansas.

PI 616967. *Fragaria virginiana* Mill.

Wild. NC 98-19-2; CFRA 1734. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 5' 22" N. Longitude 93° 10' 21" W. Elevation 280 m. Jct. of Rd. 51 and Shiloh Rd., 0.6 mi. from where 26 and 51 separate. Roadside in the corner on the right. 0.3 mi back up Rd. 51 from location 98-19 also with *F. Virginiana*. Roadside under the edge of a tree canopy. Pedigree - Collected from the wild in Arkansas.

PI 616968. *Fragaria virginiana* Mill.

Wild. NC 98-19-3; CFRA 1735. Collected 09/30/1998 in Arkansas, United States. Latitude 34° 5' 22" N. Longitude 93° 10' 21" W. Elevation 280 m. Jct. of Rd. 51 and Shiloh Rd., 0.6 mi. from where 26 and 51 separate. Roadside in the corner on the right. 0.3 mi back up Rd. 51 from location 98-19 also with *F. Virginiana*. Roadside under the edge of a tree canopy. Pedigree - Collected from the wild in Arkansas.

PI 616969. *Fragaria virginiana* Mill.

Wild. NC 98-20-1; CFRA 1736. Collected 10/02/1998 in Louisiana, United States. Latitude 34° 5' 25" N. Longitude 93° 10' 10" W. Elevation 247 m. Hwy. 51, 0.3 mi from when 26 & 51 separate. Extensive Cedar Glade Prarie on the left side of the highway. Grassland. Pedigree - Collected from the wild in Arkansas.

PI 616970. *Fragaria virginiana* Mill.

Wild. NC 98-20-2; CFRA 1737. Collected 10/02/1998 in Louisiana, United States. Latitude 34° 5' 25" N. Longitude 93° 10' 10" W. Elevation 247 m. Hwy. 51, 0.3 mi from when 26 & 51 separate. Extensive Cedar Glade Prarie on the left side of the highway. Growing under pine on left side of road. seedlings under the canopy. Trees dried completely Mowed meadows adn woods edges in South Cumberland State Park. Pedigree - Collected from the wild in Arkansas.

PI 616971. *Fragaria virginiana* Mill.

Wild. NC 98-22-1; CFRA 1738. Collected 10/04/1998 in Tennessee, United States. Latitude 35° 15' 21" N. Longitude 85° 47' 26" W. Elevation 685 m. South Cumberland State Park, Maury Co. Mowed meadows. Meadow areas formerly part of golf course. Sandstone bedrock, with a few limestone outcrops observed along parkt trails. Pedigree - Collected from the wild in Tennessee.

PI 616972. *Fragaria virginiana* Mill.

Wild. NC 98-22-2; CFRA 1739. Collected 10/04/1998 in Tennessee, United States. Latitude 35° 15' 21" N. Longitude 85° 47' 26" W. Elevation 685 m. South Cumberland State Park, Maury Co. Mowed meadows. Meadow areas formerly part of golf course. Sandstone bedrock, with a few limestone outcrops observed along parkt trails. Pedigree - Collected from the wild in Tennessee.

PI 616973. *Fragaria virginiana* Mill.

Wild. NC 98-22-3; CFRA 1740. Collected 10/04/1998 in Tennessee, United States. Latitude 35° 15' 21" N. Longitude 85° 47' 26" W. Elevation 685 m. South Cumberland State Park, Maury Co. Mowed meadows.

Meadow areas formerly part of golf course. Sandstone bedrock, with a few limestone outcrops observed along park trails. Pedigree - Collected from the wild in Tennessee.

PI 616974. *Fragaria x ananassa* Duchesne ex Rozier

Wild. NC 98-22-4; CFRA 1741. Collected 10/04/1998 in Tennessee, United States. Latitude 35° 15' 21" N. Longitude 85° 47' 26" W. Elevation 685 m. South Cumberland State Park, Maury Co. Mowed meadows. Meadow areas formerly part of golf course. Sandstone bedrock, with a few limestone outcrops observed along park trails. Pedigree - Collected from the wild in Tennessee.

PI 616975. *Fragaria virginiana* Mill.

Wild. NC 98-23-1; CFRA 1742. Collected 10/22/1998 in North Carolina, United States. Latitude 36° 10' 51" N. Longitude 79° 34' 38" W. Elevation 274 m. Highway 61, 4 mi north of the junction with Frieden Rd. (At Frieden Lutheran Church). Roadside and roadbank on the left approx. 300 ft. north and above a bridge over creek. North facing side of road. Pedigree - Collected from the wild in North Carolina.

PI 616976. *Fragaria virginiana* Mill.

Wild. NC 98-24-1; CFRA 1743. Collected 10/22/1998 in North Carolina, United States. Latitude 36° 10' 53" N. Longitude 79° 34' 36" W. Elevation 244 m. Intersection of Moss Street and Hwy. 158/bus. 29 in Reidsville, 1 mi. North of the junction (overpass) with Rd. 65/87. In corner on right shoulder just after left turn on Moss St. (Across Hwy. from Moss St School.). Pedigree - Collected from the wild in North Carolina.

PI 616977. *Fragaria virginiana* Mill.

Wild. NC 98-25-1; CFRA 1744. Collected 10/28/1998 in North Carolina, United States. Latitude 35° 44' 32" N. Longitude 79° 33' 38" W. Elevation 155 m. Hwy. US 64, 0.9 mi. west of the Randolph and Chatham Co. lines (0.1 mi west of Hicks Rd. intersection). Mixed pine and mostly hardwood forest off the road. Roadside and shoulder on the left, slightly more moist than forest off the road. Roadside and shoulder on the left, slightly more moist than. Pedigree - Collected from the wild in North Carolina.

PI 616978. *Fragaria virginiana* Mill.

Wild. NC 98-27-1A; CFRA 1745. Collected 10/28/1998 in North Carolina, United States. Latitude 35° 27' 54" N. Longitude 80° 17' 37" W. Elevation 0 m. Jct. of Paul's Crossing Rd. and Hwy 49, 1.4 mi west of jct. of hwy 49 and 52 m Richfield, NC. Primarily hardwood forest with occas. *Pinus virginiana* and *Juniperus virginiana* off the road, typical *Uwbarrie* vegetation. *Rhus aromatica* noted in drier woods edges. Pedigree - Collected from the wild in North Carolina.

PI 616979. *Fragaria virginiana* Mill.

Wild. NC 98-27-1B; CFRA 1746. Collected 10/28/1998 in North Carolina, United States. Latitude 35° 27' 54" N. Longitude 80° 17' 37" W. Elevation 0 m. Jct. of Paul's Crossing Rd. and Hwy 49, 1.4 mi west of jct. of hwy 49 and 52 m Richfield, NC. Primarily hardwood forest with occas. *Pinus virginiana* and *Juniperus virginiana* off the road, typical *Uwbarrie* vegetation. *Rhus aromatica* noted in drier woods edges. Pedigree - Collected from the wild in North Carolina.

- PI 616980. *Fragaria virginiana* Mill.**
Wild. NC 98-27-2; CFRA 1747. Collected 10/28/1998 in North Carolina, United States. Latitude 35° 27' 54" N. Longitude 80° 17' 37" W. Elevation 0 m. Jct. of Paul's crossing Rd. and Hyw. 49, 1.4 mi west of jct of hwys.49 and 52 m Richfield, NC. Primarily hardwood forest with occas. *Pinus virginiana* and *Juniperus virginiana* off the road, typical Uwharrie vegetation. *Rhus aromatica* noted in drier woods edges. Pedigree - Collected from the wild in North Carolina.
- PI 616981. *Fragaria virginiana* Mill.**
Wild. NC 98-27-3A; CFRA 1748. Collected 10/28/1998 in North Carolina, United States. Latitude 35° 27' 54" N. Longitude 80° 17' 37" W. Elevation 0 m. Jct. of Paul's crossing Rd. and Hyw. 49, 1.4 mi west of jct of hwys.49 and 52 m Richfield, NC. Primarily hardwood forest with occas. *Pinus virginiana* and *Juniperus virginiana* off the road, typical Uwharrie vegetation. *Rhus aromatica* noted in drier woods edges. Pedigree - Collected from the wild in North Carolina.
- PI 616982. *Fragaria virginiana* Mill.**
Wild. NC 98-27-3B; CFRA 1749. Collected 10/28/1998 in North Carolina, United States. Latitude 35° 27' 54" N. Longitude 80° 17' 37" W. Elevation 0 m. Jct. of Paul's crossing Rd. and Hyw. 49, 1.4 mi west of jct of hwys.49 and 52 m Richfield, NC. Primarily hardwood forest with occas. *Pinus virginiana* and *Juniperus virginiana* off the road, typical Uwharrie vegetation. *Rhus aromatica* noted in drier woods edges. Pedigree - Collected from the wild in North Carolina.
- PI 616983. *Fragaria virginiana* Mill.**
Wild. NC 98-27-4; CFRA 1750. Collected 10/28/1998 in North Carolina, United States. Latitude 35° 27' 54" N. Longitude 82° 17' 37" W. Elevation 0 m. Jct. of Paul's crossing Rd. and Hyw. 49, 1.4 mi west of jct of hwys.49 and 52 m Richfield, NC. Primarily hardwood forest with occas. *Pinus virginiana* and *Juniperus virginiana* off the road, typical Uwharrie vegetation. *Rhus aromatica* noted in drier woods edges. Pedigree - Collected from the wild in North Carolina.
- PI 616984. *Fragaria virginiana* Mill.**
Wild. NC 98-28-1; CFRA 1751. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 9' 21" N. Longitude 82° 48' 51" W. Elevation 700 m. Hwy. US 64, 1.0 mi east of jet, with US 178. The location is a grossed mowed roadside on th left side of US 64, just belo a pull-off on the right. Mowed grrass area. Pedigree - Collected from the wild in North Carolina.
- PI 616985. *Fragaria virginiana* Mill.**
Wild. NC 98-28-2; CFRA 1752. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 9' 21" N. Longitude 82° 48' 51" W. Elevation 700 m. Hwy. US 64, 1.0 mi east of jet, with US 178. The location is a grossed mowed roadside on th left side of US 64, just belo a pull-off on the right. Mowed grass area. Pedigree - Collected from the wild in North Carolina.
- PI 616986. *Fragaria virginiana* Mill.**
Wild. NC 98-29-1A; CFRA 1753. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 6' 36" N. Longitude 83° 9' 28" W. Elevation 1189 m. From the intersection of US 64 and hwy 107 in Cushiors, NC US 64 west for 3.3 mi to Norton Creek Rd. Right on Norton

Creek Rd. for 0.9 mi to an unpaved field road to the left at Norton Creek Form. Pedigree - Collected from the wild in North Carolina.

PI 616987. *Fragaria virginiana* Mill.

Wild. NC 98-29-2; CFRA 1754. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 6' 36" N. Longitude 83° 9' 28" W. Elevation 1189 m. From the intersection of US 64 and hwy 107 in Cushiors, NC US 64 west for 3.3 mi to Norton Creek Rd. Right on Norton Creek Rd. for 0.9 mi to an unpaved field road to the left at Norton Creek Form. Woody area. Pedigree - Collected from the wild in North Carolina.

PI 616988. *Fragaria virginiana* Mill.

Wild. NC 98-29-3A; CFRA 1755. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 6' 36" N. Longitude 83° 9' 28" W. Elevation 1189 m. From the intersection of US 64 and hwy 107 in Cushiors, NC US 64 west for 3.3 mi to Norton Creek Rd. Right on Norton Creek Rd. for 0.9 mi to an unpaved field road to the left at Norton Creek Form. Woody area. Pedigree - Collected from the wild in North Carolina.

PI 616989. *Fragaria virginiana* Mill.

Wild. NC 98-29-3B; CFRA 1756. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 6' 36" N. Longitude 83° 9' 28" W. Elevation 1189 m. From the intersection of US 64 and hwy 107 in Cushiors, NC US 64 west for 3.3 mi to Norton Creek Rd. Right on Norton Creek Rd. for 0.9 mi to an unpaved field road to the left at Norton Creek Form. Woody area. Pedigree - Collected from the wild in North Carolina.

PI 616990. *Fragaria virginiana* Mill.

Wild. NC 98-29-4; CFRA 1757. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 6' 36" N. Longitude 83° 9' 28" W. Elevation 1189 m. From the intersection of US 64 and hwy 107 in Cushiors, NC US 64 west for 3.3 mi to Norton Creek Rd. Right on Norton Creek Rd. for 0.9 mi to an unpaved field road to the left at Norton Creek Form. Woody area. Pedigree - Collected from the wild in North Carolina.

PI 616991. *Fragaria virginiana* Mill.

Wild. NC 98-30-1; CFRA 1758. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 15' 13" N. Longitude 83° 7' 24" W. Elevation 700 m. Hwy. 107, 0.8 mi, south of the jct with hwy. 281 in Tuckasegee, NC. Field edges next to creek on the left. Pedigree - Collected from the wild in North Carolina.

PI 616992. *Fragaria virginiana* Mill.

Wild. NC 98-30-2; CFRA 1759. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 15' 13" N. Longitude 83° 7' 24" W. Elevation 700 m. Hwy. 107, 0.8 mi, south of the jct with hwy. 281 in Tuckasegee, NC. Field edges next to creek on the left. Pedigree - Collected from the wild in North Carolina.

PI 616993. *Fragaria virginiana* Mill.

Wild. NC 98-30-3; CFRA 1760. Collected 10/29/1998 in North Carolina, United States. Latitude 35° 15' 13" N. Longitude 83° 7' 24" W. Elevation 700 m. Hwy. 107, 0.8 mi, south of the jct with hwy. 281 in

Tuckasegee, NC. Field edges next to creek on the left. Pedigree - Collected from the wild in North Carolina.

PI 616994. *Fragaria virginiana* Mill.

Wild. NC 98-31-3; CFRA 1761. Collected 11/17/1998 in North Carolina, United States. Latitude 35° 51' 16" N. Longitude 79° 16' 36" W. Elevation 165 m. Vicinity of jct. of hwy. 87 and Russel Rd. (City Rd 2343) on left and Mt. Olive Church Rd. (City Rd. 4800) on right. 10.7 mi. north of jct. of US 64 and hwy. 87 in Pittsboro. *Fragaria* clone found 100 ft. down Russel Rd. to west. Mowed shrubs along roadside. Pedigree - Collected from the wild in North Carolina.

PI 616995. *Fragaria virginiana* Mill.

Wild. NC 99-4-1; CFRA 1762. Collected 04/14/1999 in North Carolina, United States. Latitude 36° 17' 43" N. Longitude 79° 37' 18" W. Elevation 0 m. Rockingham Co., 100 ft. up the western end of Perkins Loop, to the right off NC 87, 1.1 mi. west of NC 150 jct. in ditch right of road. Pedigree - Collected from the wild in North Carolina.

PI 616996. *Fragaria virginiana* Mill.

Wild. NC 99-4-2; CFRA 1763. Collected 04/14/1999 in North Carolina, United States. Latitude 36° 17' 43" N. Longitude 79° 37' 18" W. Elevation 0 m. Rockingham Co., 100 ft. up the western end of Perkins Loop, to the right off NC 87, 1.1 mi. west of NC 150 jct. in ditch right of road. Pedigree - Collected from the wild in North Carolina.

PI 616997. *Fragaria virginiana* Mill.

Wild. NC 99-6-1; CFRA 1764. Collected 05/14/1999 in North Carolina, United States. Latitude 35° 46' 23" N. Longitude 78° 40' 39" W. Elevation 0 m. North Carolina State University, Centennial Campus. Woods edge along a field road and abandoned pasture. Growing with *Rhus radicans*, *Parthenocissus quinquefolia*, trailing *Rubus* and associated vegetation. Pedigree - Collected from the wild in North Carolina.

The following were developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 04/14/2000.

PI 616998. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Independence"; ORUS 1076-126; CFRA 1765. Pedigree - ORUS 850-48 ('Linn' x ORUS 3727) x ORUS 750-1 ('Totem' x ORUS 3746). 'Independence', a June-bearing strawberry (*Fragaria x ananassa* Duch.), was tested as ORUS 1076-126, selected in 1985 from the cross ORUS 850-48 ('Linn' x ORUS 3727) x ORUS 750-1 ('Totem' x ORUS 3746). 'Independence' has had consistently high yields in Oregon and Washington, higher than 'Totem' and 'Puget Reliance' in the first and second seasons in Oregon. In Washington, yields have been similar to 'Totem'. 'Independence' has shown much greater tolerance to root weevils in naturally infested fields than 'Totem' or 'Puget Reliance'. In Oregon, 'Independence' has been more tolerant of adverse winter conditions than 'Totem'. 'Independence' fruit are similar in size or slightly larger than 'Totem'. The fruit is wedge shaped with pronounced ridges on the primary fruit. The fruit have been rated excellent as a processed product, however, the fruit are extremely difficult to cap. Fruit is firm with a fairly tough skin. The flavor is excellent although it tends to be acidic. 'Independence' commonly shows white streak in its foliage; this does not seem to affect

performance in any manner. 'Independence' has a late ripening period, 5-7 days later than the current late season standard 'Redcrest'. Flowers very late, reducing the risk of crop loss due to frost. Pick-your-own growers will be able to extend their harvest season. 'Independence' is outstanding because of its large, firm, high quality, very late ripening fruit, and its high yields that are produced on a plant that is very tolerant of biotic and abiotic stresses. 'Independence' plants being propagated have tested negative for tomato ringspot, strawberry mild yellow edge and tobacco streak viruses by ELISA and have indexed negative on grafting to *F. vesca* and *F. virginiana*.

Unknown source. Received 10/23/1996.

PI 616999. *Fragaria x ananassa* Duchesne ex Rozier
Cultivated. NAH 1; Ambato; CFRA 1766. Pedigree - Open pollinated California strawberry selection sold in a market in Ecuador.

Unknown source. Received 10/23/1996.

PI 617000. *Fragaria x ananassa* Duchesne ex Rozier
Cultivated. NAH 2; CFRA 1767. Pedigree - Selection from Floresta Market in Quito, Ecuador.

Unknown source. Received 10/23/1996.

PI 617001. *Fragaria chiloensis* (L.) Mill.
Cultivated. NAH 7; CFRA 1768. Pedigree - Collected from commercial field.

Unknown source. Received 10/23/1996.

PI 617002. *Fragaria x ananassa* Duchesne ex Rozier
Cultivated. NAH 8; CFRA 1769. Pedigree - Ulba selection, probably open pollinated California selection.

Unknown source. Received 10/23/1996.

PI 617003. *Fragaria x ananassa* Duchesne ex Rozier
Cultivated. NAH 9; CFRA 1770. Pedigree - Probably a selection of open pollinated California cultivar.

Unknown source. Received 10/23/1996.

PI 617004. *Fragaria chiloensis* (L.) Mill.
Cultivated. NAH 12; CFRA 1771. Pedigree - Collected from commercial field.

Unknown source. Received 10/23/1996.

PI 617005. *Fragaria x ananassa* Duchesne ex Rozier

Cultivated. NAH 13; CFRA 1772. Pedigree - Huachi Grande land race as male parent.

The following were developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 06/09/2000.

PI 617006. *Fragaria x ananassa* Duchesne ex Rozier

Cultivar. "Firecracker"; ORUS 1077-47; CFRA 1773. Pedigree - ORUS 850-48 (Linn x ORUS 3727) x Totem. Firecracker has yielded consistently well in Oregon and Washington. Yields have been higher than 'Totem' but lower than 'Puget Reliance' in the first harvest season and similar to 'Puget Reliance' in the second harvest season in Washington. In Oregon, yield has been similar to 'Totem' in both first and second harvest seasons. In wet fields or root weevil infested fields 'Firecracker' has not yielded as well as 'Totem'. 'Firecracker' has performed well in grower fields in Oregon. In some trials, the fruit size of 'Firecracker' has exceeded that of 'Totem', however, in general, 'Firecracker' fruit size is similar to that of 'Totem'. 'Firecracker' has tended to have more uniformly sized fruit than does 'Totem' or 'Puget Reliance' with nearly all of the fruit falling in the medium fruit size class (2 to 3 cm sieve). Firecracker has very good processing characteristics. When compared with 'Totem', it caps as well, it has similar or greater firmness, lower drip loss, lower pH greater titratable acidity, and similar or higher soluble solid levels. In consumer panels, 'Firecracker' has been rated better for color than 'Totem'. As measured with a color difference meter the L*, a*, and b* readings are similar to 'Totem' as an IQF fruit and as a puree. In a consumer panel, the flavor of thawed, sugared and sliced product was similar to 'Totem' and rated better than 'Hood'. The most outstanding characteristic of 'Firecracker' is its extremely late ripening period. The picking season for 'Firecracker' is 5 to 7 days later than the current late season standard, 'Redcrest'. Pick-your-own growers will be able to extend their harvest season. Processors who are interested in berries later than 'Redcrest' will find 'Firecracker' valuable. Firecracker plants for propagation have tested negative for tomato ringspot, strawberry mild yellow edge and tobacco streak viruses by ELISA and have indexed negative on grafting to *F. vesca* and *F. virginiana*.

Unknown source. Received 08/16/2000.

PI 617007. *Fragaria* hybrid

Cultivar. "Hokowase"; CFRA 1776. Pedigree - Kogyoku(Fairfax self seedling) x Tahoe. Fruits are small, not-firm, and sweetness, very weak acidity. The degree of dormancy is deeper than 'Nyoho'. The most popular cultivar for forcing culture. The number of flowers per inflorescence is 15 on the average. The yield is higher than 'Nyoho'. Fruits are large as 15 grams, conical, and have very shining scarlet color, so they look very good. They have firm peel and flesh so the keeping quality is high. They have strong sweetness, weak acidity, and very juicy, so the taste is excellent. The resistance to anthracnose and powdery mildew is similar to 'Nyoho'.

Unknown source. Received 08/16/2000.

PI 617008. *Fragaria hybrid*

Cultivar. "Tochiotome"; CFRA 1777. Pedigree - Kurume 49 (Toyonoka x Nyoho) x Tochinomine (Kei 511(Florida 69-266 x Reiko) x Nyoho). Vigorous and produces runners well. The leaves are large and dark green. The degree of dormancy is similar to 'Nyoho', the most popular cultivar for forcing culture. The number of flowers per inflorescence is 15 on the average. The yield is higher than 'Nyoho'. Fruits are as large as 15 grams, conical, and have very shining scarlet color, so they look very good. They have firm peel and flesh so the keeping quality is high. They have strong sweetness, weak acidity, and very juicy, so the taste is excellent. The resistance to anthracnose and powdery mildew is similar to 'Nyoho'.

Unknown source. Received 08/16/2000.

PI 617009. *Fragaria hybrid*

Cultivar. "Toyonoka"; CFRA 1778. The leading strawberry in Japan, adapted to forcing under plastic in warmer regions, producing from November to May. Orig. at the Kurume Branch, Natl. Res. Inst. of Vegetables, Ornamental Plants and Tea, Japan, by F. Honda. Arunoka pollen parent; introd. in 1983. Fruit: large; firm; glossy scarlet; globular shape; good shelf life; juicy, sweet flavor. Plant: productive; low chilling requirement. Susceptible to powdery mildew; intermediate susceptibility to fusarium wilt.

Unknown source. Received 08/16/2000.

PI 617010. *Fragaria hybrid*

Cultivar. "Nyoho"; CFRA 1779. Pedigree - Kei 210 x Reiko. Fruit: relatively small; glossy scarlet color; conic; aromatic. Plant: vigorous; relatively low chilling requirement. Relatively susceptible to powdery mildew; susceptible to fusarium wilt and anthracnose.

Unknown source. Received 05/10/2000.

PI 617011. *Fragaria chiloensis* (L.) Mill.

Cultivar. "Aulon"; CFRA 1781. Pedigree - selection of *F. chiloensis*. Cultivar of Arboretum at the Rancho Santa Ana Botanical Garden. One of the first selections made of this species; allegedly sterile and non-fruit bearing but has produced 1 or 2 fruits in container at Rancho Santa Ana Botanical Garden. Range: Cultivar of *Fragaria chiloensis*, a species that occurs on ocean beaches and grasslands of the central and north coasts of California to Alaska as well as SW South America, generally below 600 ft. Color: Dark green, glossy leaves with three, toothed leaflets that take on red tints in the winter; large white flowers in spring but does not produce fruit. Habit: Spreading, low-growing, lush perennial forming broad mats 6-12 in. high; spreads by rhizomes and leafless stolons.

The following were donated by Stan Hokanson, USDA, ARS, Fruit Laboratory, Building 010A, Room 210, BARC-West, Beltsville, Maryland 20705, United States. Received 09/27/2000.

- PI 617012. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Arnika"; CFRA 1782. Pedigree - Talisman x Guardsman.
- PI 617013. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Regina"; Brandenburg; CFRA 1783. Pedigree - Luiza x Deutsch Evern. Regina replaced Deutsch Evern as the standard early varieties until the introduction of Senga Precosa. Regina ripens about two days before Deutsch Evern; it is medium in size, light to medium red, and medium firm; its flavor is good, sweet to subacid; it is productive for an early variety, but is susceptible to mildew, and the very early blossoms and even the flower buds are endangered by late frost. German plant patent, 1951. George M. Darrow. 1966. *The Strawberry*. p. 281-282.
- PI 617014. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Desna"; CFRA 1784. Pedigree - Oesluhoanka x Red Coat.
- PI 617015. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Fratina"; CFRA 1785. Pedigree - Valentine x Senga Sengana.
- PI 617016. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Gaja"; CFRA 1786.
- PI 617017. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Istochnik"; CFRA 1787. Pedigree - Pocahontas x Grenadier.
- PI 617018. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Jaune"; CFRA 1788. Pedigree - Talisman x Grenadier.
- PI 617019. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Jonsok"; CFRA 1789. Pedigree - Senga Sengana x Valentine.
- PI 617020. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Kama"; CFRA 1790. Pedigree - Senga Sengana x Cavalier.
- PI 617021. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Lambada"; IVT-82044; CFRA 1791. Pedigree - (Sivetta x Holiday) x (Karina x Primella).
- PI 617022. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Lavril"; CFRA 1792.

The following were developed by M. Etscheidt, Obernburg, Bavaria, Germany. Donated by Stan Hokanson, USDA, ARS, Fruit Laboratory, Building 010A, Room 210, BARC-West, Beltsville, Maryland 20705, United States. Received 09/27/2000.

- PI 617023. *Fragaria x ananassa*** Duchesne ex Rozier
Cultivar. "Lihama"; CFRA 1793. Pedigree - Selection of strawberry from Germany.

The following were donated by Stan Hokanson, USDA, ARS, Fruit Laboratory, Building 010A, Room 210, BARC-West, Beltsville, Maryland 20705, United States. Received 09/27/2000.

PI 617024. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Lvovskaya Rannaya"; "L'vovskaya Rannaya"; CFRA 1794. Pedigree - Korallova 100 x Kijevskaia Raoaja.

PI 617025. *Fragaria x ananassa* Duchesne ex Rozier
Cultivar. "Prisvyata"; CFRA 1795.

The following were developed by Chao-Chien Jan, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Jose Fernandez-Martinez, Instituto de Agricultura Sostenible, Apartado 4084, Alameda del Obispo s/n, Cordoba, Cordoba 14080, Spain; J. Ruso, Instituto de Agricultura Sostenible, Dept. de Mejora y Agronomia, CSIC, Apt. 4084, E-14080, Cordoba, Cordoba, Spain; J. Munoz-Ruz, Instituto de Agricultura Sostenible, Dept. de Mejora y Agronomia, CSIC, Apdo. 4084, E-14080, Cordoba, Cordoba, Spain. Donated by Chao-Chien Jan, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States. Received 03/02/2001.

PI 617026. *Helianthus annuus* L.
Breeding. Population. BR1. GP-262. Pedigree - P21 ms//H. grosseserratus-001/P21,PD/3/HA89, sib. Plant height 122 cm. Flowers 59 days after planting. Seeds black with 54 g/1000 seed weight, and self-pollinated seed set 72% indicating good self-compatibility. Plants nonbranched. Resistance genes against broomrape, including the new race, race F, recently identified in Spain.

PI 617027. *Helianthus annuus* L.
Breeding. Population. BR2. GP-263. Pedigree - H. maximiliani-004/P21,D//P21/3/HA89, sib. Plant height 147 cm. Flowers 64 days after planting. Seeds black with 61 g/1000 seed weight, and self-pollinated seed set of 82%, indicating good self-compatibility. Plants nonbranched. Resistance genes against broomrape, including the new race, race F, recently identified in Spain.

PI 617028. *Helianthus annuus* L.
Breeding. Population. BR3. GP-264. Pedigree - H. divaricatus-830/P21,D//P21/3/HA89, self. Plant height 139 cm. Flowers 71 days after planting. Seeds black with 26 g/1000 seed weight, and self-pollinated seed set of 49%, indicating good self-compatibility. Plants multibranched. Resistance genes against broomrape, including the new race, race F, recently identified in Spain.

PI 617029. *Helianthus annuus* L.
Breeding. Population. BR4. GP-265. Pedigree - H. divaricatus-830/P21,D/2/H. grosseserratus-001/P21,D/3/P21/4/HA89, sib. Plant height 103 cm. Flowers 60 days after planting. Seeds black with 47 g/1000 seed weight, and self-pollinated seed set of 66%, indicating good self-compatibility. Plants nonbranched. Resistance genes against broomrape, including the new race, race F, recently identified in Spain.

The following were developed by F.M. Bourland, University of Arkansas, Dept. of Agronomy, PTSC 115, Fayetteville, Arkansas 72701, United States; C. Wayne Smith, Texas A&M University, Department of Soil and Crop Sciences, 2474 TAMUS, College Station, Texas 77843-2474, United States. Received 02/26/2001.

PI 617030. *Gossypium hirsutum* L.

Breeding. Pureline. Arkot A306. GP-732. Pedigree - Rex 713 / Delcot 277J // DES 422. Morphological traits similar to DES 422 and DES 119. In 23 tests (1989-1995) in Mississippi River Delta, yielded 94% as much as DES 119, was early maturing (4% higher open boll percentage) and had higher HVI fiber bundle strength (12 kN m kg⁻¹ stronger), but had lower lint percentage (1.5% less), shorter fiber length (1.3 mm less), and a lower fiber elongation (0.3% less) than DES 119. More susceptible than DES 119 to tarnished plant bug (*Lygus lineolari*) in field tests, but more resistant than the frego-bract susceptible check. In the Regional Cotton Fusarium Wilt Test at Tallassee, AL, resistance to fusarium wilt (*Fusarium oxysporum*) was equal to the resistant check.

PI 617031. *Gossypium hirsutum* L.

Breeding. Pureline. Arkot A314. GP-733. Pedigree - Rex 713 / Delcot 277J // Stoneville 7A / PD 2164. Morphological traits similar to DES 422 and DES 119. In six tests from 1997 through 1999 at four Arkansas Agricultural Research Station sites in the Mississippi River Delta, was equal in yield and fiber length, was earlier maturing (4% higher open boll percentage), and had higher HVI fiber bundle strength (4 kN m kg⁻¹ stronger) than SureGrow 125. Lower lint percentage (1.6% less), lower fiber elongation (0.9% less) and higher micronaire reading (0.15 units) than SureGrow 125.

The following were developed by T.J. Martin, Kansas State University, Agric. Research Center-Hays, 1232 240th Avenue, Hays, Kansas 67601, United States. Received 03/22/2001.

PI 617032. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "LAKIN"; KS96HW115. PVP 200200049. Pedigree - KS89H130 / Arlin. Hard white, semi-dwarf wheat with a winter growth habit and medium maturity. Resistant to soilborne mosaic virus and has a moderate level of resistance to wheat streak mosaic virus and barley yellow dwarf mosaic virus. Good bread baking cultivar. Medium to medium-strong mixing stren.

PI 617033. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "STANTON"; KS95H167-3. PVP 200200050. Pedigree - PI 220350 / KS87H57 // TAM200 / KS87H66 /3/KS87H325. Hard red winter, tall semi-dwarf wheat with medium late maturity. Adapted to dryland production in western Kansas. Resistant to Russian wheat aphid (*Diuraphis noxia*), leaf rust (*Puccinia recondita*), and stem rust (*P. graminis*). Moderately resistant to wheat streak mosaic and Hessian fly (*Mayetiola destructor*). Medium-strong dough mixing characters and has good overall baking characters.

The following were developed by Patrick M. Hayes, Oregon State University, Department of Crop Science, Crop Science Building 107, Corvallis, Oregon 97331-3002, United States; Larry Robertson, University of Idaho, Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210-0530, United States;

Chia-Tsang Liu, University of Idaho, Ag. Coop. Extension, 1214 Joseph St., Moscow, Idaho 83843, United States; Russ S. Karow, Oregon State University, Dept. of Crop & Soil Science, Corvallis, Oregon 97331-3002, United States; Roland F. Line, USDA, ARS, Washington State University, 361 Johnson Hall, Pullman, Washington 99164, United States; Steven E. Ullrich, Washington State University, Department of Crop & Soil Sciences, Pullman, Washington 99164-6420, United States; Darrell M. Wesenberg, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; Vadim Jitkov, Washington State University, Dept. of Crop & Soil Sciences, Pullman, Washington 99164-6420, United States; Carl E. Muir, Washington State University, Washington Agric. Exp. Station, Dept. of Agronomy & Soils, Pullman, Washington, United States; Patrick E. Reisenauer, Washington State University, Crop & Soil Department, Ag. Research Tech., Pullman, Washington 99164-6420, United States; J.W. Burns, Washington State University, Dept. of Crop and Soil Sciences, Pullman, Washington 99164-6420, United States; Xianming Chen, USDA, ARS, Washington State University, 361 Johnson Hall, Pullman, Washington 99164-6430, United States. Received 03/09/2001.

PI 617034. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "FARMINGTON"; WA9504-94. CV-302. Pedigree - Klages/WA8189-69(WA10698-76)//Pirolina SD Mutant/Valticky SD Mutant (WA8517-74)(WA7190-86)/3/Maresi. Released 2001. Two-row spring covered semi-dwarf feed barley with adaptation to mid to high precipitation and irrigated areas in eastern Washington and adjoining areas of Idaho and Oregon and partial resistance or tolerance to barley stripe rust (*Puccinia striiformis*). Heads lax and nodding. Awns long and rough, Kernels covered, with white aluerone, long rachilla hairs, narrow crease, promi.

The following were developed by HZPC Holland B.V., Netherlands. Received 03/22/2001.

PI 617035 PVPO. *Solanum tuberosum* L.

Cultivar. "REMARKA". PVP 9700117.

The following were developed by C. Meijer, B.V., Netherlands. Received 03/22/2001.

PI 617036 PVPO. *Solanum tuberosum* L.

Cultivar. "LADY ROSETTA". PVP 9700191.

The following were developed by Melodee L. Fraser, Pure Seed Testing, Inc., P.O. Box 176, 606 Main Street, Rolesville, North Carolina 27571, United States. Received 03/23/2001.

PI 617037. *Festuca longifolia* Thuill.

Cultivar. Population. "AURORA GOLD"; PST-4RU. Pedigree - Origin traces to Aurora hard fescue and resulted from five cycles of phenotypic recurrent selection for tolerance to glyphosate. Exhibits resistance to glyphosate in both turf and seed production.

PI 617038. *Festuca arundinacea* Schreb.

Cultivar. Population. "PURE GOLD"; PST-5DU. Pedigree - Advanced-generation synthetic selected from the progenies of 20 parental

clones. These 20 parents were selected from three separate glyphosate screening trials. These parents trace their maternal origins to the following sources: five from Coronado, one from Shortstop, four from Apache II, one from Safari, two from Tomahawk, one from Murietta, two from Matador, three from 5 RU and one from Bonsai. Exhibits resistance to applications of glyphosate both in seed production and in turf.

The following were developed by A. Doug Brede, J.R. Simplot Co., 5300 West Riverbend Avenue, Post Falls, Idaho 83854-9499, United States; S.H. Samudio, Jacklin Seed by Simplot, 5300 West Riverbend Avenue, Post Falls, Idaho 83854-9499, United States. Received 03/23/2001.

PI 617039. *Lolium perenne* L.

Cultivar. "GOALKEEPER"; J-1704. CV-218. Pedigree - Developed from the maternal progenies of 21 clones, tracing to plants maternally selected from: 9.5% Advent, 19% Allaire, 9.5% APM, 4.8% Fiesta II, 14.3% Morningstar, 9.5% Saturn, and 9.5% SR4000 perennial ryegrass varieties, 14.3% from advanced generation progeny from PI 231590 and 9.5% from an Elka hybrid. Plant height in Oregon averaged 50.6 cm and flag leaf length and width 9.6 cm and 4.0 mm, respectively. Moderate resistance to pink snow mold (*Microdochium nivale*) and net blotch (*Drechslera dictyoides*), and moderate to good resistance to dollar spot (*Lanzia* and *Moellerodiscus* spp.).

The following were developed by William D. Branch, University of Georgia, Coastal Plain Experiment Station, Department of Crop and Soil Sciences, Tifton, Georgia 31793-0748, United States. Received 03/02/2001.

PI 617040. *Arachis hypogaea* L.

Cultivar. "GEORGIA VALENCIA"; GA 952514. CV-69; PVP 200100132. Pedigree - Georgia Red / UF85I79. Large-podded valenica market type peanut. For four consecutive years (1996-99), produced a significantly higher yield and dollar value return per acre (approx. 30-40%) and significantly larger pod size (>25% more fancy pods) than Georgia Red. Comble to Georgia Red in disease tolerance. Similar to Georgia Red in having a compact bunch growth habit, maturity of between 110-125 days after planting in south Georgia, number of seed per pod (averaged 20-25% 4 seed pod-1, 60-65% 3 seed pod-1, and 10-15% 2 seed pod-1), red testa color, protein and oil content, O/L ratio, and roasted and boiled flavor.

The following were developed by Emerson R. Shipe, Clemson University, Department of Crop & Soil, Environmental Science, Clemson, South Carolina 29634-0359, United States; J.D. Mueller, Edisto Res. and Educ. Ctr., Dept. of Plant Pathology and Physiology, Blackville, South Carolina 29817, United States; P.F., Jr. Williams, Clemson University, Dept. of Agronomy, Clemson, South Carolina 29634, United States; Stephen Lewis, Clemson University, Dept. of Plant Pathology & Physiology, Clemson, South Carolina 29634-0377, United States; R.K. Stephens, Clemson University, Dept. of Crop and Soil Environmental Science, Clemson, South Carolina 29634, United States. Received 03/22/2001.

PI 617041. *Glycine max* (L.) Merr.

Cultivar. Pureline. "Santee"; SC91-2007; SY0107001. CV-453; PVP 200100207. Pedigree - Coker 82-622 x Hutcheson. Early maturity group (MG) VII with determinate growth habit. Tested as a late MG VI strain but because matures four to five days later than Boggs, a late MG VI cultivar, released as a Group VII cv. Adapted to the southeastern U.S. where MG VII cultivars are normally grown. In USDA tests, averaged 94 cm height with a lodging rating of 2.0. Plants have white flowers, gray pubescence, and tan pod walls. Seeds yellow with variable buff hila. Seed size averages 14.1 g 100 seed⁻¹. Seed quality good and seed protein and oil average 429 and 208 g kg⁻¹ (dry wt. basis), respectively. Resistant to soybean cyst nematode, race 3 (*Heterodera glycines*), reniform nematode (*Rotylenchulus reniformis*), and stem canker disease (*Diaporthe phaseolorum*). Moderately resistant to Southern root-knot nematode (*Meloidogyne incognita*).

The following were developed by Peggy Thaxton, Texas A&M University, Dept. of Soil and Crop Science, College Station, Texas 77843, United States; Kamal M. El-Zik, Texas A&M University, Department of Soil & Crop Sciences, College Station, Texas 77843, United States. Received 03/23/2001.

PI 617042. *Gossypium hirsutum* L.

Cultivar. "TAMCOT PYRAMID". PVP 200100114; CV-120. Pedigree - Tamcot Sphinx / unreleased MAR strain CD3HGCBU8S-1-91. Early season, pubescent stems and leaves, glanded, possesses normal leaves and normal bracts, is nectaried, and has dark green leaves. Cylindrical shaped growth habit, flowers with cream colored pollen and storm resistant bolls. Highly resistant to bacterial blight (*Xanthomonas campestris* pv *malvacearum*). Similar levels of resistance to other insects and diseases affecting cotton as Tamcot Sphinx. Average across 2 yrs. at College Station grown under irrigation, reached 55% open bolls in 136 d from planting, while Tamcot Sphinx required 142 d. Average across 17 yield trials in Texas from 1997-1999, 10% higher lint yield and an 11% larger boll than Tamcot Sphinx and Paymaster PM330. Lint fraction similar to Tamcot Sphinx. Upper half mean (UHM) length 3% shorter and fiber bundle strength 7% lower than Tamcot Sphinx. Micronaire reading average 4.1 compared to 4.4 for Tamcot Sphinx.

The following were developed by Phytogen Seed Company, LLC, United States. Received 03/23/2001.

PI 617043 PVPO. *Gossypium hirsutum* L.

Cultivar. "PHY 72 Acala". PVP 200100115.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 03/23/2001.

PI 617044. *Cynosurus cristatus* L.

Cultivar. "SHADE STAR". REST 617044; PVP 200100116. Pedigree - Advanced generation synthetic selected from the progenies of 24 interpollinated. Plants were selected for medium maturity, freedom from disease, medium dark blue green color, and lower mature plant height. 24 clones originate from collections made in Europe during 1993. Upright growth habit with low plant height of 76.5 cm. Exhibited good shade tolerance.

Good winter color. Good resistance to red thread. Useful in overseeding mixtures, to overseed dormant Bermuda in the south and blends well with perennial ryegrass.

The following were developed by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Daryl T. Bowman, North Carolina State University, Department of Crop Science, Box 8604, Raleigh, North Carolina 27695-8604, United States. Received 04/04/2001.

PI 617045. Glycine max (L.) Merr.

Cultivar. Pureline. "NC-Roy"; N94-552; SY 105001. PVP 200100220; CV-475. Pedigree - Holladay x Brim. NC-Roy is maturity group VI cultivar. It has good resistance to lodging and soybean mosaic virus. It is susceptible to both cyst and root knot nematodes. It has white flowers, gray pubescence, buff-hila, and brown pod walls.

The following were developed by California Planting Cotton Seed Distributors, 30597 Jack Ave., Shafter, California 93263, United States. Received 03/23/2001.

PI 617046 PVPO. Gossypium hirsutum L.

Cultivar. "Acala GLS". PVP 200100118.

PI 617047 PVPO. Gossypium hirsutum L.

Cultivar. "Acala Riata RR". PVP 200100119.

The following were developed by Phytogen Seed Company, LLC, United States. Received 03/23/2001.

PI 617048 PVPO. Gossypium barbadense L.

Cultivar. "PHY 76 Pima". PVP 200100120.

The following were developed by Sakata Seed Corporation, Japan. Received 03/23/2001.

PI 617049 PVPO. Catharanthus roseus (L.) G. Don

Cultivar. "Kakegawa EP1". PVP 200100121.

PI 617050 PVPO. Catharanthus roseus (L.) G. Don

Cultivar. "Kakegawa EP2". PVP 200100122.

PI 617051 PVPO. Catharanthus roseus (L.) G. Don

Cultivar. "Kakegawa EP6". PVP 200100123.

PI 617052 PVPO. Catharanthus roseus (L.) G. Don

Cultivar. "Kakegawa EP7". PVP 200100124.

The following were developed by Carl A. Griffey, Virginia Polytechnic Institute, & State University, Dept. of Crop & Soil Env. Sciences, Blacksburg, Virginia 24061-0404, United States; A.M. Price, VPI & SU, Crop &

Soil Environmental Sciences, Blacksburg, Virginia, United States; W.L. Sisson, VPI & SU, Crop & Soil Environmental Sciences, Blacksburg, Virginia, United States; D.E. Brann, VPI & SU, Crop & Soil Environmental Sciences, Blacksburg, Virginia, United States; Wendy Rohrer, Virginia Tech, Crop & Soil Environmental Sciences, 419A Smyth Hall, Blacksburg, Virginia 24061-0404, United States; T.H. Pridgen, Virginia Polytechnic Inst. and State Univ., Crop and Soil Environmental Sciences Dept., Blacksburg, Virginia 24061-040, United States; M.E. Vaughn, Virginia Polytechnic Inst. and State Univ., Crop and Soil Environmental Sciences Dept., Blacksburg, Virginia 24061-0404, United States; Arend E. Smid, Ridgetown College, University of Guelph, Ridgetown, Ontario N0P 2C0, Canada; W.S. Brooks, Virginia Polytechnic Inst. and State Univ., Crop and Soil Environmental Sciences Dept., Blacksburg, Virginia 24061, United States. Received 03/23/2001.

PI 617053. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "SISSON"; VA96W-250. PVP 200100125; CV-926. Pedigree - Coker 9803 / Freedom. Released 2000. Moderately early heading and moderate straw strength similar to parent Coker 9803. Semidwarf with average plant height of 86 cm. Winter hardiness moderately good and only slightly less than parent Freedom. Average grain volume weight is 739 kg cm⁻³. Grain has average values of 765 g kg⁻¹ for straight grade flour yield, 10.5% for endosperm separation index, 54.3% for alkaline water retention capacity, 31.3% for break flour recovery, and 17.4 cm for cookie spread diameter. Flour low in protein concentration (8.8%) and weak glutenin strength making it suitable for pastry production. Coleoptiles predominantly white. Juvenile plants semi-erect growth habit. Plant color at booting blue green and a waxy bloom present on the stem and flag leaf sheath. Anther color is yellow. Spikes tapering, middense, and awnleted. Glumes long and wide, and have oblique shoulders with obtuse beaks. Kernels red, soft, and ovate with a crease of medium width and depth, rounded checks and a long non-collared brush. The phenol reaction is fawn. On the basis of natural field infections in Virginia's State Variety Trials conducted from 1998 to 2001, moderately-resistant to powdery mildew (*Erysiphe graminis*), barley yellow dwarf virus, and glume blotch (*Stagonospora nodorum*). Moderately susceptible to wheat spindle streak mosaic viruses. On the basis of seedling tests conducted at the USDA-ARS Cereal Disease Lab., St. Paul, MN, possess Gene Lr26 and others governing resistance to leaf rust (*Puccinia triticina*), however in most field environments it is moderately susceptible. Resistant to most predominant race of stem rust (*P. graminis*). Susceptible to stripe rust (*P. striiformis*). Susceptible to Hessian fly (*Mayetiola destructor*) biotypes GP, B, C, D, E, and L.

The following were developed by Virginia Tech Intellectual Properties, Inc., Virginia, United States. Received 03/23/2001.

PI 617054 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "CENTURY II"; VA95-52-60. PVP 200100126. Pedigree - Saluda*2/SC824607.

PI 617055 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "USG 3209"; VA94-54-479. PVP 200100127. Pedigree - Saluda/4/Massey*2/3/Massey*3/Balkan//Saluda.

The following were developed by AgResearch Limited, New Zealand. Received 03/23/2001.

PI 617056 PVPO. *Bromus catharticus* Vahl var. *catharticus*
Cultivar. "LAKOTA". PVP 200100128.

PI 617057 PVPO. *Bromus catharticus* Vahl var. *catharticus*
Cultivar. "GRASSLANDS DIXON". PVP 200100129.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 03/23/2001.

PI 617058. *Poa trivialis* L.
Cultivar. "WINTERSTAR". PVP 200100130.

The following were developed by California Planting Cotton Seed Distributors, 30597 Jack Ave., Shafter, California 93263, United States. Received 03/23/2001.

PI 617059 PVPO. *Gossypium hirsutum* L.
Cultivar. "Acala BXN Nova". PVP 200100131.

The following were developed by Mark A. Brick, Colorado State University, Department of Soil and Crop Sciences, Room C113, Fort Collins, Colorado 80521, United States; H.F. Schwartz, Colorado State University, Dept. of Plant Pathology and Weed Science, Fort Collins, Colorado 80523, United States; Calvin H. Pearson, Colorado State University, Agricultural Experiment Station, Western Colorado Research Center - Fruita, Fruita, Colorado 81521, United States; J.B. Ogg, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; J.J. Johnson, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; F. Judson, Fruita Research Station, 1910 L Road, Fruita, Colorado 81521, United States. Received 03/23/2001.

PI 617060. *Phaseolus vulgaris* L.
Cultivar. "SHINY CROW". CV-198; PVP 200100133. Pedigree - Derived from a single plant selection in 1988 from a segregating experimental line obtained from CIAT, Cali, Colombia. The original line designation was not correctly registered in the field book, consequently the pedigree is not known. The single plant selection was planted to a plant-row in 1989 at Fruita, Colorado. The seed produced from this row was bulked and increased for initial yield testing at Fort Collins, CO. From the bulk seed, forty single plants were grown in plant-rows. Among the 40 plant rows, 22 were selected on the basis of uniformity for growth habit, harvest maturity, pod load and seed characteristics and harvested to form the initial breeder seed and used for subsequent testing. Combines mid-season maturity (95-98 d in Colorado, 98-101 d in the Northern Great Plains), high yield potential, and adaptation to the High Plains. Carries the dominant I gene which confers resistance to all pathogroups of bean common mosaic virus. Susceptible to the white mold pathogen (*Sclerotinia sclerotiorum*) based on the straw test and to rust (*Uromyces appendiculatus*) based on the field observations and greenhouse evaluation. Has prostrate Type III (CIAT classification).

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 03/23/2001.

PI 617061. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. NW97S343; NSGC 8690. Pedigree - N91L122/Arlin. Hard white winter wheat.

PI 617062. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. NW96S016; NSGC 8691. Pedigree - Rio Blanco//NIAVT13/Vee 'S'. Hard white winter wheat.

PI 617063. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. NW97S154; NSGC 8692. Pedigree - KSSB-192-3/NE89529. Hard white winter wheat.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; C. James Peterson, Oregon State University, Crop & Soil Science Dept., 107 Crop Science Bldg., Corvallis, Oregon 97331-3002, United States. Received 03/23/2001.

PI 617064. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. N95L11881; NSGC 8693. GP-745. Pedigree - Siouxland/2*N86L177. Released 2002. Hard red winter wheat. These lines carry the 1BL.1RS wheat-rye (*Secale cereale* L.) chromosomal translocation inherited from the hard red winter wheat `Siouxland,? but they possess improved gluten strength relative to this parent. Grain yield (5 Nebraska locations) and quality (3 Nebraska locations) characteristics of N95L11881 and 97L9521 were tested in 1997 and 1998. Grain yield of N95L11881 was significantly ($p = 0.05$) greater than both parental lines, while that of 97L9521 did not differ significantly from either Siouxland or N86L177. Bake mix time, flour protein content, and Mixograph tolerance of 97L9521 were all significantly higher than Siouxland and did not differ significantly from N86L177. N95L11881 was significantly higher than Siouxland in flour protein content, bake mix time, Mixograph mix time and Mixograph tolerance. Bake mix times, an indicator of gluten strength, of both lines exceeded that of Siouxland by at least two minutes and did not differ from that of N86L177. Mixograph tolerance of N95L11881 was intermediate between that of its two parents. Both N95L11881 and 97L9521 are susceptible to prevalent races of leaf rust (*Puccinia triticina* Eriks.) but are resistant to current North American races of stem rust (*Puccinia graminis* Pers.:Pers.). Both carry the stem rust resistance gene Sr31, found on the Kavkaz 1BL.1RS chromosome. In addition, N95L11881 carried Sr24, and is postulated to also carry Lr24 and Lr26. Plant heights and lodging resistance of N95L11881 are similar to Siouxland. 97L9521 is nearly identical to its recurrent parent N86L177 in both plant height and lodging resistance.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 03/23/2001.

PI 617065. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 97L9520; NSGC 8694. Pedigree - Siouxland/4*N86L177.
Hard red winter wheat.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; C. James Peterson, Oregon State University, Crop & Soil Science Dept., 107 Crop Science Bldg., Corvallis, Oregon 97331-3002, United States. Received 03/23/2001.

PI 617066. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 97L9521; NSGC 8695. GP-746. Pedigree - Siouxland/4*N86L177. Released 2002. Hard red winter wheat. These lines carry the 1BL.1RS wheat-rye (*Secale cereale* L.) chromosomal translocation inherited from the hard red winter wheat `Siouxland,? but they possess improved gluten strength relative to this parent. Grain yield (5 Nebraska locations) and quality (3 Nebraska locations) characteristics of N95L11881 and 97L9521 were tested in 1997 and 1998. Grain yield of N95L11881 was significantly ($p = 0.05$) greater than both parental lines, while that of 97L9521 did not differ significantly from either Siouxland or N86L177. Bake mix time, flour protein content, and Mixograph tolerance of 97L9521 were all significantly higher than Siouxland and did not differ significantly from N86L177. N95L11881 was significantly higher than Siouxland in flour protein content, bake mix time, Mixograph mix time and Mixograph tolerance. Bake mix times, an indicator of gluten strength, of both lines exceeded that of Siouxland by at least two minutes and did not differ from that of N86L177. Mixograph tolerance of N95L11881 was intermediate between that of its two parents. Both N95L11881 and 97L9521 are susceptible to prevalent races of leaf rust (*Puccinia triticina* Eriks.) but are resistant to current North American races of stem rust (*Puccinia graminis* Pers.:Pers.). Both carry the stem rust resistance gene Sr31, found on the Kavkaz 1BL.1RS chromosome. In addition, N95L11881 carried Sr24, and is postulated to also carry Lr24 and Lr26. Plant heights and lodging resistance of N95L11881 are similar to Siouxland. 97L9521 is nearly identical to its recurrent parent N86L177 in both plant height and lodging resistance.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 03/23/2001.

PI 617067. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 97L9522; NSGC 8696. Pedigree - Siouxland/4*N86L177.
Hard red winter wheat.

PI 617068. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 97L9531; NSGC 8697. Pedigree - Siouxland/4*N86L177.
Hard red winter wheat.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant

Science Bldg., Lincoln, Nebraska 68583-0915, United States. Received 03/23/2001.

PI 617069. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 96MD7413-58; NSGC 8698. GP-773. Pedigree - NE90616/Ike. Released 2002. Hard red winter wheat. A partial waxy wheat which carries non-functional (null) alleles (Wx-Alb, Wx-B1b) at two of the three hexaploid wheat Wx loci.

PI 617070. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 96MD7413-36; NSGC 8699. GP-774. Pedigree - NE90616/Ike. Released 2002. Hard red winter wheat. A partial waxy wheat which carries non-functional (null) alleles (Wx-Alb, Wx-B1b) at two of the three hexaploid wheat Wx loci.

PI 617071. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 96MD7110-71; NSGC 8700. GP-775. Pedigree - MT8713/NE87612//Ike. Released 2002. Hard red winter wheat. A partial waxy wheat which carries non-functional (null) alleles (Wx-Alb, Wx-B1b) at two of the three hexaploid wheat Wx loci.

The following were developed by Craig F. Morris, USDA-ARS, Western Wheat Quality Lab., E-202 FSHN Facility East, Pullman, Washington 99164-6394, United States; Victor L. Demacon, USDA-ARS, Western Wheat Quality Lab, E-202 FSHN Facility East, Pullman, Washington 99164-6394, United States; Kimberlee Kidwell, Washington State University, Dept. of Crop & Soil Sciences, Pullman, Washington 99164-6420, United States; Nilisa Bosque-Perez, University of Idaho, Dept of Plant, Soil, & Entomological Sciences, Moscow, Idaho 83844-2339, United States; G.S. Shelton, Washington State University, Dept. of Crop and Soil Sciences, Pullman, Washington 99164-6420, United States; Xianming Chen, USDA-ARS, WSU - Wheat Genetics Unit, PO Box 646430, Pullman, Washington 99164-6430, United States; J.W. Burns, Washington State University, Dept. of Crop and Soil Sciences, Pullman, Washington 99164-6420, United States; B.P. Carter, Washington State University, Dept. of Crop and Soil Sciences, Pullman, Washington 99164-6420, United States. Received 03/26/2001.

PI 617072. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "MACON"; WA007899; HW000021; NSGC 8701. CV-928; PVP 200200130. Pedigree - Serra/Westbred926//Tanager 'S' (PI 519878)/Pewee 'S' (PI 519819). Released 2002. Hard white spring wheat. Semi-dwarf, awned, mid-season maturity, white straw and white glumes. Broadly adapted to a wide range of production conditions across eastern Washington as a replacement for Idaho 377s and Winsome due to its resistance to the Hessian fly and superior bread baking quality. Demonstrated tolerance to the Hessian fly in natural field infestations. Susceptible to the Russian wheat aphid. Moderately resistant to stripe rust. Yield potential is slightly lower than Idaho 377s and similar to Winsome. Test weight is slightly lower than Idaho 377s but similar to Winsome. Grain protein concentrations are similar to Idaho 377s and Winsome. Acceptable noodle color; soft noodle texture. Outstanding bread baking quality. Loaf volumes are significantly higher than Idaho 377s and Winsome and similar to Klasic. High molecular weight glutenin subunits of 2*(1A), 17+18(1B), and 5+10(1D).

The following were developed by Craig F. Morris, USDA-ARS, Western Wheat Quality Lab., E-202 FSHN Facility East, Pullman, Washington 99164-6394, United States; Jimmie H. Hatchett, USDA-ARS, Dept of Entomology, Waters Hall, Manhattan, Kansas 66506-4004, United States; Kimberlee Kidwell, Washington State University, Dept. of Crop & Soil Sciences, Pullman, Washington 99164-6420, United States; G.S. Shelton, Washington State University, Dept. of Crop and Soil Sciences, Pullman, Washington 99164-6420, United States; Xianming Chen, USDA-ARS, WSU - Wheat Genetics Unit, PO Box 646430, Pullman, Washington 99164-6430, United States; J.W. Burns, Washington State University, Dept. of Crop and Soil Sciences, Pullman, Washington 99164-6420, United States; B.P. Carter, Washington State University, Dept. of Crop and Soil Sciences, Pullman, Washington 99164-6420, United States. Received 03/26/2001.

PI 617073. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "TARA 2002"; WA007824; NSGC 8702. CV-919; PVP 200200129. Pedigree - Kodiak/Spillman//Westbred 906R. Released 2002. Hard red spring wheat. Semi-dwarf, awned, mid-season maturity, white straw and white glumes. Targeted to the Northeastern and Southeastern production regions of Washington State as a replacement for Westbred 926 due to its resistance to the Hessian fly, high yield potential and superior bread baking quality. Demonstrated resistance to the Hessian fly in natural infestations as well as controlled insect screening trials. Susceptible to the Russian wheat aphid. Moderately resistant to stripe rust and leaf rust. Outstanding gluten strength compared to other hard red spring wheat varieties in commercial production in the Pacific Northwest. Test weight is higher than Westbred 926, however its grain protein concentration is typically 0.5% lower. High molecular weight glutenin subunits of 2*(1A), 17+18(1B) and 5+10(1D).

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 09/15/1989.

PI 617074. *Trigonella foenum-graecum* L.

Wild. 100689-0402; W6 2086. Collected 06/10/1989 in Siirt, Turkey. Latitude 37° 33' N. Longitude 42° 26' E. Elevation 1580 m. Recently disturbed deep red soil along road. Region of coppiced and cut over oak park forest. 5-9km W of Sirkak on the Sirkak Erüh road. Four plants collected. Pods large, thick walled and long (6-8cm).

The following were collected by Mohammad El Hadi, Washington State University, Crops and Soils Dept., Johnson Hall, Pullman, Washington 99164, United States. Received 05/21/1993.

PI 617075. *Trigonella foenum-graecum* L.

Uncertain. W6 11577. Collected 04/29/1993 in Morocco. Latitude 31° 30' N. Longitude 8° 5' W. Contaminate in *Lens culinaris*, W6 11576, from a market place in Marrakech.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Donated by Miho Mihov, Institute for Wheat and Sunflower, "Dobroudja" 9520, General Toschevo, Tolbukhin 9520, Bulgaria. Received 06/30/1995.

- PI 617076. *Trigonella foenum-graecum* L.**
Cultivated. W6 17233. Collected 06/28/1995 in Bulgaria.
- PI 617077. *Trigonella foenum-graecum* L.**
Cultivated. IB-2-5; W6 17234. Collected 06/28/1995 in Bulgaria.
- PI 617078. *Trigonella foenum-graecum* L.**
Cultivated. IB-2-10; W6 17235. Collected 06/28/1995 in Bulgaria.
- PI 617079. *Trigonella foenum-graecum* L.**
Cultivated. IB-2-14; W6 17236. Collected 06/28/1995 in Bulgaria.

The following were donated by Miho Mihov, Institute for Wheat and Sunflower, "Dobroudja" 9520, General Toschevo, Tolbukhin 9520, Bulgaria; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/30/1995.

- PI 617080. *Trigonella foenum-graecum* L.**
Cultivated. IB-2-15; W6 17237. Collected 06/28/1995 in Bulgaria.

The following were donated by Clemson University, South Carolina Agric. Exp. Station, Clemson, South Carolina 29817, United States. Received 1961.

- PI 617081. *Capsicum annuum* L.**
Cultivated. CAROLINA HOT.

The following were donated by Joseph Harris Company, Inc., 3670 Buffalo Road, Rochester, New York 14624, United States. Received 1961.

- PI 617082. *Capsicum annuum* L.**
Cultivated. HUNGARIAN WAX.

The following were donated by Corneli Seed Company, 101 Chouteau Avenue, Saint Louis, Missouri 63102, United States. Received 1961.

- PI 617083. *Capsicum annuum* L.**
Cultivated. KEYSTONE RESISTANT GIANT.

The following were donated by Asgrow Seed Company, Kalamazoo, Michigan, United States. Received 1963.

- PI 617084. *Capsicum annuum* L.**
Cultivated. YOLO WONDER L.

The following were donated by Northrup, King & Company, 1500 Jackson N.E., Minneapolis, Minnesota 55413, United States. Received 1963.

PI 617085. *Capsicum annuum* L.

Cultivated. EMERALD GIANT. Fruit thick-walled, 4-lobed, blocky. Flesh dark green, smooth. Plants vigorous, erect, medium tall (28"). Seed World 1963,pg.7.

The following were developed by Glenn W. Burton, USDA, ARS, Forage & Turf Research, Georgia Coastal Plain Experiment Station, Tifton, Georgia 31793, United States. Donated by USDA, ARS, Georgia Coastal Plain Experiment Station, Crops Research Division, Tifton, Georgia 31794, United States. Received 07/06/1939.

PI 617086. *Cynodon dactylon* (L.) Pers. var. *dactylon*

Cultivar. "Tifway"; Tifton 419; CSR 42; CSR 7; Reg. No. 7. CV-7. Pedigree - Chance hybrid between *Cynodon transvaalensis* and *C. dactylon*. Chance F1 hybrid between *C. transvaalensis* and *C. dactylon* in lot of *C. transvaalensis* seed received from D. Meredith, Johannesburg, Union of South Africa, in 1954. Darker green, greater frost resistance, earlier spring growth, greater resistance to sod webworm and mole cricket, better herbicide tolerance, and stiffer leaf blades than Tifline or Tifgreen. Sheds no pollen to annoy hay fever victims. Well suited for fine lawns, fairways, and tees. Must be propagated vegetatively. Released - 1960, cooperatively by Georgia Coastal Plain Experiment Station and Plant Science Research Division, ARS.

The following were donated by D. Nickson, The Peninsula Country Golf Club, Skye Road, P.O. Box 145, Frankston, Victoria 3199, Australia. Received 05/08/1989.

PI 617087. *Cynodon dactylon* (L.) Pers. var. *dactylon*

1; Q 27766. Collected in Australia. Latitude 38° 8' S. Longitude 145° 7' E. Ecotype from golf club grounds, Frankston.

PI 617088. *Cynodon dactylon* (L.) Pers. var. *dactylon*

3; Q 27768. Collected in Australia. Latitude 38° 8' S. Longitude 145° 7' E. Ecotype from golf club grounds, Frankston.

The following were donated by Arden A. Baltensperger, New Mexico State University, Dept. of Agronomy & Horticulture, Box 3Q, Las Cruces, New Mexico 88003, United States. Received 07/11/2000.

PI 617089. *Cynodon dactylon* (L.) Pers. var. *dactylon*

Breeding. A-2; CCYN 1.

The following were developed by Arden A. Baltensperger, New Mexico State University, Dept. of Agronomy & Horticulture, Box 3Q, Las Cruces, New Mexico 88003, United States; Charlie Rodgers, Seeds West, Inc., 37860 West Smith-Enke Road, Maricopa, Arizona 85239, United States; Pennington Seeds / Seeds West, Inc., Arizona, United States. Donated by Arden A. Baltensperger, New Mexico State University, Dept. of Agronomy & Horticulture, Box 3Q, Las Cruces, New Mexico 88003, United States. Received 07/11/2000.

PI 617090. *Cynodon dactylon* (L.) Pers. var. *dactylon*
Breeding. A-3; CCYN 2. PL-1.

PI 617091. *Cynodon dactylon* (L.) Pers. var. *dactylon*
Breeding. A-4; CCYN 3. PL-2.

The following were donated by Arden A. Baltensperger, New Mexico State University, Dept. of Agronomy & Horticulture, Box 3Q, Las Cruces, New Mexico 88003, United States. Received 07/11/2000.

PI 617092. *Cynodon dactylon* (L.) Pers. var. *dactylon*
Breeding. 15-1; CCYN 4.

PI 617093. *Cynodon dactylon* (L.) Pers. var. *dactylon*
Breeding. AP-1; CCYN 5.

The following were collected by Charles M. Taliaferro, Oklahoma State University, Plant and Soil Science Department, 368 Agricultural Hall, Stillwater, Oklahoma 74078-6028, United States. Donated by Reed E. Barker, USDA, ARS, Natl. Forage Seed Prod. Res. Ctr., Oregon State University, Corvallis, Oregon 97331-7102, United States. Received 07/12/2000.

PI 617094. *Cynodon nlemfuensis* var. *robustus* Clayton & J. R. Harlan
Wild. CCYN 27; Cultivar No. 2. Collected in Zimbabwe. Latitude 17° 35' S. Longitude 30° 59' E. Elevation 0 m. Henderson Research Station, 30 km north of Harare, Zimbabwe. Along fence row on station.

The following were donated by Reed E. Barker, USDA, ARS, Natl. Forage Seed Prod. Res. Ctr., Oregon State University, Corvallis, Oregon 97331-7102, United States. Received 07/12/2000.

PI 617095. *Cynodon hybrid*
Cultivar. "Coastal"; REG NO 1; CCYN 32. F1 hybrid between Tift bermudagrass (discovered by J.L. Stephens in old cotton patch near Tifton in 1929) and tall-growing introduction from Union of South Africa. When compared with common bermudagrass, Coastal has larger and longer stems, stolons, and rhizomes; grows much taller; is lighter green; has deeper and more efficient root system; is more resistant to foliage diseases, root knot nematode, frost, and drought; is much more efficient in nutrient and water use; is more palatable and produces nearly twice as much forage and animal products. This superiority holds throughout most of bermudagrass belt, demonstrating wide adaptation. Produces few seed heads that rarely contain viable seed; must be propagated vegetatively. Released 1943, cooperatively by Georgia Coastal Plain Experiment Station and Plant Science Research Division, ARS.

The following were collected by E. Ramona Garner, USDA, NRCS, Plant Materials Center, 1036 Miller Street Southwest, Los Lunas, New Mexico 87031, United States. Developed by USDA, NRCS, Plant Materials Center, 1036 Miller Street Southwest, Los Lunas, New Mexico 87031, United States; New Mexico State University, Agricultural Science Center at Los Lunas, Los Lunas, New Mexico,

United States. Donated by USDA, NRCS, Plant Materials Center, 1036 Miller Street Southwest, Los Lunas, New Mexico 87031, United States. Received 04/10/2001.

PI 617096. *Penstemon angustifolius* Pursh

Cultivar. "San Juan Germplasm"; SFD-99-F34; 9066069; Ames 26206. Collected 1990 in New Mexico, United States. Latitude 36° 42' 54" N. Longitude 108° 24' 36" W. Elevation 1793 m. South of Area 3 Office Complex, BHP-Minerals Navajo Mine, south of Fruitland, San Juan County. Sandy loam soils. Stout, smooth, waxy, gray-green perennial herb. Plant grows from 20 to 50 cm with several stout, erect or somewhat curving stems. Flowers range from 17 to 23 mm and are various shades of violet and pink. Guidelines may or may not be present. Leaves are gray-green and waxy. Selected from a narrow leaf penstemon collection from the San Juan basin of New Mexico. The collection was evaluated for survival under agronomic conditions. After 5 years of establishment in fields at the New Mexico Plant Materials Center, plants were selected for hardiness. Seed from hardy plants were collected and used to establish the San Juan germplasm field of narrow leaf penstemon. Potential uses include erosion control, wildlife food/cover, restoration of disturbed sites, increasing plant diversity of rangelands, and for low water use beautification of urban and rural landscapes. Found from western Kansas to southern Utah, southward into New Mexico and northern Arizona. It commonly inhabits sandy places on plains, hills, and dunes at 1520 to 2128 meters. Requires a minimum of 160 growing season days in late winter-early spring, a cold hardiness zone of 3 to 7, and precipitation between 13 and 25 cm.

The following were developed by Jeff Ehlers, University of California, Department of Botany & Plant Sciences, Riverside, California 92521-0124, United States. Received 03/16/2001.

PI 617097. *Vigna unguiculata* (L.) Walp.

Breeding. C93W-24-125B; 24-125B. Pedigree - IT86D-364 / IT81D-1138. Both are advanced breeding lines developed at IITA, Ibadan, Nigeria. Contains unusually high levels of sucrose (about 6% (w/w) vs. approx. 2% (w/w) in other cowpea germplasm). Possesses medium-size (14-16 grams/100 seeds) white grains with medium brown hilum color. Moderate resistance to bacterial blight (*Xanthomonas vignicola*), high levels of resistance to Cowpea Aphid borne Mosaic Virus (CABMV), and moderate seed resistance to the cowpea weevil *Callosobruchus maculatus*. Additional defining characteristics include photosensitivity, foliage and immature pods distinctively light/pale green, light purple flower color, semi-determinate, spreading plant type with pod presentation primarily over the plant canopy, and maturity roughly 70 d after planting under tropical, short day conditions. Sensitive to long photoperiods and will not flower when daylengths are greater than 12.5 h. Grain yields in the regional performance trials conducted in Cameroon averaged roughly 700 kg/ha under minimal input conditions compared to 550 kg/ha for the check variety BRI. Can produce over 1500 kg/ha with moderate to high levels of inputs.

The following were developed by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Kassim Al-Khatib, Kansas State University, Agronomy Department, Manhattan,

Kansas 66506, United States. Donated by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Received 04/02/2001.

PI 617098. *Helianthus annuus* L.

Breeding. Pureline. HA 425. GP-254. Pedigree - BC2F5 maintainer line from HA 89*3 / PUR *H. annuus*. Maintainer germplasm line resistant to two imidazolinone herbicides, imazamox (Raptor) and imazethapyr (Pursuit). Available for use by sunflower industry and public researchers to create hybrids, parental lines, or improved germplasms with resistance to imidazolinone herbicides. PUR *H. annuus* was selected from a wild *Helianthus annuus* population collected in Kansas. A backcrossing procedure utilizing imazamox as the screening herbicide was utilized. Does not have anthocyanin pigment in seed or plants, single-headed, and seed black with gray stripe.

PI 617099. *Helianthus annuus* L.

Breeding. Pureline. RHA 426. GP-255. Pedigree - F6 restorer germplasm selected from RHA 409 // RHA 376*2/PUR *H. annuus*. Fertility restorer germplasm line resistant to two imidazolinone herbicides, imazamox (Raptor) and imazethapyr (Pursuit). Available for use by sunflower industry and public researchers to create hybrids, parental lines, or improved germplasms with resistance to imidazolinone herbicides. PUR *H. annuus* was selected from a wild *Helianthus annuus* population collected in Kansas. A backcrossing and pedigree breeding procedure utilizing imazamox as the screening herbicide was used. Does not have anthocyanin pigment in seed or plants, are branched, and have black seed.

PI 617100. *Helianthus annuus* L.

Breeding. Pureline. RHA 427. GP-256. Pedigree - F6 restorer germplasm selected from RHA 409 // RHA 376*2/PUR *N. annuus*. Fertility restorer germplasm line resistant to two imidazolinone herbicides, imazamox (Raptor) and imazethapyr (Pursuit). Available for use by sunflower industry and public researches to create hybrids, parental lines, or improved germplasms with resistance to imidazolinone herbicides. PUR *H. annuus* was selected from a wild *helianthus annuus* population collected in Kansas. A backcrossing and pedigree breeding procedure utilizing imazamox as the screening herbicide was used. Does not have anthocyanin pigment in seeds or plants, are branched, and have black seed. Possesses restorer genes for the PET1 cytoplasmic male sterility.

The following were donated by J. Reich, Cornell University, NY Agric. Exper. Sta., Geneva, New York, United States; Charles J. Simon, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616-8607, United States. Received 02/27/1986.

PI 617101. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.

Cultivar. "Geneva # 1"; CACT 30. Developed in United States. Pedigree - Female selection of *Actinidia arguta*. Small to medium sized fruit, about 1 inch long, similar to Meader Female. Ripens late. - Facciola.

PI 617102. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.

Cultivar. "Geneva # 2"; CACT 31. Developed in United States. Pedigree - Selection of *Actinidia arguta* made at New York Agricultural Experiment Station. Small to medium fruit, about 1 inch long, similar to Geneva # 1; ripens late. Good cold tolerance.

The following were donated by Bernadine C. Strik, Oregon State University, Department of Horticulture, 4017 ALS, Corvallis, Oregon 97331, United States. Received 02/04/1999.

- PI 617103. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 74-49; *A. arguta* 74-49; CACT 43. Pedigree - Female selection of *A. arguta* from Chico, California.
- PI 617104. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Ananasnaya"; "Ananasnaja female"; CACT 44.
- PI 617105. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Ananasnaja male"; *A. arguta* (male); CACT 45. Pedigree - Selection of *A. arguta* with good pollen.
- PI 617106. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Issai"; CACT 46. Developed in Japan. Pedigree - Hexaploid selection of *A. arguta*.
- PI 617107. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Hardy Red"; "Arguta Hardy Red"; CACT 47.
- PI 617108. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Jumbo"; CACT 48. Developed in Italy. Pedigree - Female selection of *A. arguta* from Italy. *A. arguta* cv. Jumbo, synonym = 'Green Jumbo', originated in Italy. Fruit qualities: one of the largest fruited of the hardy kiwi varieties; attractive, elongate, weighing up to 30 g (1 oz). Sweet, flavorful and mil>Plant: productive, female. Has potential as a commercial variety.
-- Bob Guthrie, University of Minnesota.
- PI 617109. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Ken's Red"; CACT 49. Developed in New Zealand. Pedigree - Female selection of *A. arguta* var. *cordifolia* x *A. melanandra*.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/02/1999.

- PI 617110. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Qui"; *A. arguta* 'Chang Bai Mountain' seedlings; CACT 50.
Pedigree - Seedlings of cultivar 'Qui' Qui was selected from the wild near Chang Bai Mountain Research Institute of Chinese Academy of Agriculture.

The following were donated by Charles J. Simon, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616-8607, United States. Received 02/23/1999.

- PI 617111. *Actinidia arguta* var. *purpurea*** (Rehder) C. F. Liang
Cultivated. *A. arguta* var. *purpurea*; CACT 51. Pedigree - Selection of *A. arguta* var. *purpurea*.

- PI 617112. *Actinidia callosa* Lindl.**
Cultivar. *A. callosa*; CACT 52. Pedigree - Selection of *A. callosa*.
- PI 617113. *Actinidia hybrid***
Cultivar. 74-32; *A. arguta* 74-32; CACT 54; DACT127.
- PI 617114. *Actinidia hybrid***
Cultivar. 74-55; *A. arguta* 74-55; CACT 56; DACT132.
- PI 617115. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.**
Cultivar. "Ananasnaya"; "Anna"; CACT 57; DACT133.
- PI 617116. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.**
Cultivar. "Issai"; CACT 58; DACT134. Developed in Japan. Pedigree - Hexaploid selection of *A. arguta*.
- PI 617117. *Actinidia hybrid***
Cultivar. "Meader"; CACT 59. Developed in United States. Pedigree - Selection of *A. arguta*.

The following were developed by Ken J. Nobbs, New Zealand. Donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

- PI 617118. *Actinidia hybrid***
Cultivar. "Red Princess"; CACT 60. Pedigree - *Actinidia arguta* x *Actinidia melanandra*. Unique red-fleshed kiwifruit. The fruits are small, ovoid, with a thin, palatable red skin. The flesh is relatively sweet. The vine is moderately vigorous and productive. Fruit: very small, less pronounced kiwi flavor. Skin and flesh color tends to have a mixture of both red and green.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

- PI 617119. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.**
Cultivar. "Jumbo"; CACT 63. Developed in Italy. Pedigree - Female selection of *A. arguta* from Italy. Fruit: one of the largest fruited of the hardy kiwi varieties; attractive, elongate, weighing up to 30 g (1 ounce). Sweet, flavorful and mild, milder than Anna. Plant: productive, female. Has potential as a commercial variety. -- Bob Guthrie, University of Minnesota.
- PI 617120. *Actinidia kolomikta* (Maxim. & Rupr.) Maxim.**
Cultivar. "Nahodka"; CACT 65. Developed in Russian Federation. Pedigree - Female selection of *A. arguta*. Developed in the Russian Far East, named after a seaport in Primorye Territory of Siberia where this species grows wild. Selection of *Actinidia kolomikta*. The species is known as Arctic beauty kiwifruit. The fruit is medium to large. Sugar content is 15.5 % when ripe. Medium high content of vitamin C. Ripens in mid-August.
- PI 617121. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.**
Cultivar. "West"; CACT 66.

The following were developed by I.V. Michurin Central Laboratory of Genetics, Tambovskaya Oblast, Michurinsk, Russian Federation. Donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

- PI 617122. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Krupnoplodnaya"; CACT 67. Pedigree - Female selection of *A. kolomikta* with large fruit. Developed by I. V. Michurin and released out of Leningrad (St. Petersburg), Russia. The name means large green (emerald) fruit. Selection of *Actinidia kolomikta*. The fruit is very large, smooth-skinned, sugar content is 14% when ripe, has a high vitamin C content and excellent flavor. The vine is moderately vigorous, very productive, and ornamental. It is cold hardy to -35 F.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

- PI 617123. *Actinidia callosa*** Lindl.
Cultivated. *A. callosa*; CACT 68. Pedigree - Selection of *A. callosa*.
- PI 617124. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Aromatnaya"; CACT 69. Developed in Russian Federation. Fruit: Medium-sized, very sweet; sugar content 20% when ripe, medium high vitamin C content; ripens early to mid-August. Plant: Vigorous and exceptionally productive. Selected in Russia for good fruit characteristics.
- PI 617125. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. *A. arguta* New Zealand; CACT 70.

The following were developed by Raintree Nursery, 391 Butts Road, Merton, Washington 98356, United States. Donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

- PI 617126. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Raintree"; CACT 71. Pedigree - Male selection of *A. kolomikta*.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

- PI 617127. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. Kuchta; CACT 72.

The following were developed by Michigan State University, Michigan Agr. Exp. Sta., East Lansing, Michigan 48824, United States. Donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

- PI 617128. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Michigan State"; CACT 73. Pedigree - Possibly *A. arguta* x *A. kolomikta*. Fruit: Medium to large; ribbed. 1.5 x 1 inches; flavor

excellent when ripe, good even when not fully ripe. Plant: vigorous; perfect flowered; reported to be partially self-fertile, but produces best when planted with a male.

The following were developed by Elwyn M. Meader, 43 Meaderboro Rd., Rochester, New Hampshire 03867-4235, United States. Donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

PI 617129. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. Meader - Paul Klassen; CACT 74. Pedigree - Selection of *A. arguta*. Selected for productivity, pollination and cold hardiness in New Hampshire.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 03/25/1999.

PI 617130. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Smith 2"; CACT 75.

PI 617131. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Belfast Bay"; CACT 76.

PI 617132. *Actinidia polygama* (Siebold & Zucc.) Maxim.
Cultivar. "UW-1"; *A. polygama* UW-1; CACT 78.

PI 617133. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Geneva #3"; CACT 80. Pedigree - Selection of *Actinidia arguta*.

The following were donated by Tripple Brook Farm, 37 Middle Road, Southamptton, Massachusetts 01073, United States. Received 04/15/1999.

PI 617134. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 74-8; *A. arguta* 74-8; CACT 81.

PI 617135. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Dumbarton Oaks"; CACT 84.

PI 617136. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Michigan State"; CACT 86. Developed in United States. Pedigree - Female selection of a cross of *A. arguta* x *A. kolomikta*. Fruit: Medium to large; ribbed. 1.5 x 1 inches; flavor excellent when ripe, good even when not fully ripe. Plant: vigorous; perfect flowered; reported to be partially self-fertile, but produces best when planted with a male.

PI 617137. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "119-40-B"; *A. arguta* 119-40-B; CACT 87.

PI 617138. *Actinidia kolomikta* (Maxim. & Rupr.) Maxim.
Cultivar. "Krupnoplodnaya"; CACT 88.

PI 617139. *Actinidia kolomikta* (Maxim. & Rupr.) Maxim.
Cultivar. "Pautske"; CACT 89. Developed in Lithuania. Pedigree - Female

selection of *A. kolomikta*. A large, high-quality fruit. Vine is very vigorous. Facciola.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 04/16/1999.

- PI 617140. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. CACT 90; Ogden Point. Pedigree - Female selection of *A. arguta*.
- PI 617141. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Turrets"; CACT 91.
- PI 617142. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "127-40"; *A. arguta* 127-40; CACT 92.
- PI 617143. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Aromatnaya"; CACT 93.
- PI 617144. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Arctic Beauty"; CACT 94.
- PI 617145. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "A-10"; *A. kolomikta* A-10; CACT 95. Pedigree - Selection of wild collected *A. kolomikta*.
- PI 617146. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Krupnoplodnaya"; CACT 96.
- PI 617147. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Matovnaya"; CACT 97. Developed in Russian Federation.
Pedigree - Female selection of *A. kolomikta* for early ripening.
- PI 617148. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Pavlovskaya"; CACT 99. Developed in Russian Federation.
Pedigree - Female selection of *A. kolomikta*. Fruit: large, sugar content 15% when ripe, medium high in vitamin C, ripens early to mid-August. Vine very productive. - Facciola.
- PI 617149. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Sentyabrskaya"; CACT 100.
- PI 617150. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Leningradskaya pozdnaya"; CACT 101.
- PI 617151. *Actinidia melanandra*** Franch.
Cultivar. "1064-79"; *A. melanandra* 1064-79; CACT 102. Pedigree - Selection of *A. melanandra*.

The following were donated by Charles J. Simon, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616-8607, United States. Received 10/27/1999.

PI 617152. *Actinidia arguta* var. *cordifolia* (Miq.) Bean
Cultivated. CACT 104; *A. arguta* var. *cordifolia* F; DACT 123. Pedigree -
Female selection of *A. arguta* var. *cordifolia*.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; David Yarborough, University of Maine, 5722 Deering Hall, Orono, Maine 04469-5722, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/14/1999.

PI 617153. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivated. 99004; CACT 105; *A. arguta*. Collected 09/1999 in Jilin, China. Pedigree - Collected from market near San Lin, China.

PI 617154. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivated. 99011; CACT 106; *A. arguta*. Collected 09/1999 in Jilin, China. Pedigree - Collected from market in China.

PI 617155. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivated. 99014; CACT 107; *A. arguta*. Collected 09/1999 in Jilin, China. Pedigree - Collected from market in China.

The following were donated by Bob Guthrie, 1810 Alameda Street, Roseville, Minnesota 55113, United States. Received 12/09/1999.

PI 617156. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 119-40; *A. arguta* 119-40; CACT 108.

PI 617157. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 125-40; *A. arguta* 125-40; CACT 109.

PI 617158. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 74-8; *A. arguta* 74-8; CACT 110.

PI 617159. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 74-9; *A. arguta* 74-9; CACT 111; 74-9 (ID?).

PI 617160. *Actinidia* hybrid
Cultivar. "Issai"; CACT 112. Developed in Japan. Pedigree - Hexaploid selection of *A. arguta*.

PI 617161. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Dumbarton Oaks"; CACT 115. Pedigree - Female selection of *A. arguta* from a garden in Dumbarton Oaks, in Georgetown, a section of Washington, D.C. Probably brought in by seed from China.

PI 617162. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. "Frenchman's Bay"; CACT 116.

PI 617163. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 127-40; *A. arguta* 127-40; CACT 120.

- PI 617164. *Actinidia arguta* var. *cordifolia*** (Miq.) Bean
Cultivated. *A. arguta* var. *cordifolia* F; CACT 122. Pedigree - Female selection of *A. arguta* var. *cordifolia*.
- PI 617165. *Actinidia arguta* var. *purpurea*** (Rehder) C. F. Liang
Cultivar. "Cherry Bomb"; CACT 123.
- PI 617166. *Actinidia kolomikta*** (Maxim. & Rupr.) Maxim.
Cultivar. "Dr. Szymanowski"; CACT 137.
- PI 617167. *Actinidia arguta*** (Siebold & Zucc.) Planch. ex Miq.
Cultivar. 74-55; *A. arguta* 74-55; CACT 138.
- PI 617168. *Actinidia arguta* var. *purpurea*** (Rehder) C. F. Liang
Cultivated. CACT 139; *A. arguta* var. *purpurea*. Pedigree - Selection of *A. arguta* var. *purpurea*.

The following were collected by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 10/09/1987.

- PI 617169. *Corylus americana*** Marshall
Wild. *C. americana*; American Hazel. Collected 09/18/1987 in Missouri, United States. Latitude 37° 27' N. Longitude 93° 18' W.
Elevation 1220 m. Brighton, in hedgerow on north side of road. Pedigree - Collected from the wild in Missouri.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/30/1991.

- PI 617170. *Corylus sieboldiana*** Blume
Wild. *C. sieboldiana*. Collected 08/21/1991 in Toyama, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1600 m. Hirayu, Mt. Norikura-dake, Nyukawa-mura, Yoshiki-gun, Gifu. Pedigree - selected from the wild in Japan. (This accession was part of the PL,SD 'breakout' - 1992).

The following were developed by Lab. for Fruit Tree Genetics & Breeding, Research Inst. for Fruit Growing, Trustul Pomiculturii, Pitesti-Maracineni, Arges 0300, Romania. Donated by Nicolae Braniste, Institutul de Cercetare si, Productie Pentry Pomicultura, Pitesti-Maricineni, Arges 0300, Romania. Received 03/03/1992.

- PI 617171. *Corylus avellana*** L.
Breeding. Vilcea-22. Pedigree - selection of *C. avellana*.

- PI 617172. *Corylus avellana* L.**
Cultivar. "Cozia". Pedigree - selection of *C. avellana*.
- PI 617173. *Corylus avellana* L.**
Cultivar. "Romavel". Pedigree - selection of *C. avellana*.
- PI 617174. *Corylus avellana* L.**
Cultivar. "Aveline rouge". Pedigree - selection of *C. avellana*.

The following were donated by Leonid A. Burmistrov, N.I. Vavilov Research Institute of Plant Industry, Department of Introduction, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 03/27/1992.

- PI 617175. *Corylus avellana* L.**
Cultivar. "Skorospelka". Developed in Georgia. Pedigree - Uncertain, possibly a selection from the Caucasus. Early flowering, protogynous, and cold-tender in Maykop.
- PI 617176. *Corylus avellana* L.**
Cultivar. "Cherkesskii II"; *C. maxima*. Developed in Russian Federation. Pedigree - Probably a seedling selection. The leading cultivar in the USSR, often used as a parent in breeding. Was a standard cv as early as 1949.
- PI 617177. *Corylus avellana* L.**
Cultivar. "Kudryavchik". Developed in Russian Federation. Pedigree - selection of *C. avellana*. Early maturing, high yielding, and resistant to insects. Considered one of the two best cultivars in Sochi.
- PI 617178. *Corylus avellana* L.**
Cultivar. "Pioneer". Developed in Ukraine. Pedigree - Uncertain, possibly a selection from the Ukraine. Recommended for the Black Sea coast.
- PI 617179. *Corylus avellana* L.**
Cultivar. "Panakhesskii"; *C. maxima*. Developed in Russian Federation. Pedigree - Uncertain, possibly a seedling selection. Very similar to Adygeiskij I but has a higher oil content and better flavor.
- PI 617180. *Corylus avellana* L.**
Cultivar. "Kerasund Dlinnyi". Developed in Turkey. Pedigree - Probably a seedling selection.
- PI 617181. *Corylus* sp.**
Cultivar. *C. sp.* [*C. multiflorum*] [*C. avellana*]; "Multiflorum". Developed in Turkey. Pedigree - selection. Was *Corylus multiflorum* 11/95 - need to verify this taxon, not found in literature. Has a long nut and a long husk.

The following were developed by Michael Dolan, Burnt Ridge Nursery, 432 Burnt Ridge Road, Onalaska, Washington 98570, United States. Received 04/09/1992.

PI 617182. *Corylus avellana* L.

Cultivar. "Red Fortrin". Pedigree - Chance seedling. Probably not desirable for commercial purposes, but does have colorful ornamental qualities. Susc. to big bud mite.

PI 617183. *Corylus avellana* L.

Cultivar. "Purple Fortrin". Pedigree - Chance seedling. Probably not desirable for commercial purposes, but does have colorful ornamental qualities. Susc. to big bud mite.

The following were developed by O. Jemtegaard. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 10/27/1992.

PI 617184. *Corylus avellana* L.

Uncertain. Jemtegaard 76. Pedigree - selection of *C. avellana*.

The following were developed by Cecil Farris, 1919 Hopkins Ave., Lansing, Michigan 48912-3321, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 10/27/1992.

PI 617185. *Corylus* hybrid

Breeding. "Grand Traverse". Pedigree - Faroka x OSU 18.114 (Barcelona x Royal). From Brooks and Olmo: Orig. in Lansing, Mich., by Cecil Farris. Introd. in 1989. Faroka x Royal; cross made in 1977; selected in 1981; tested as 81C. Nut: nearly round, brown; 51% kernel by weight; ripens with Ennis; kernel plump, clean, excellent flavor. Introduced for the in-shell trade. Tree: vigorous, productive, not precocious, winter hardy. Resistant to big bud mites.

The following were developed by J.U. Gellatly, West Bank, British Columbia, Canada. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 10/27/1992.

PI 617186. *Corylus* hybrid

Breeding. "Manoka". Pedigree - *C. cornuta* x *C. avellana*.

The following were collected by Thomas Plocher, 9040 152nd Street North, Hugo, Minnesota 55038, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 10/27/1992.

PI 617187. *Corylus* hybrid

Breeding. Weschcke TP-3. Collected in Wisconsin, United States. Carl Weschcke's farm in Wisconsin. Pedigree - *C. americana* x *C. avellana*.

The following were collected by Steven Breyer, Massachusetts, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 10/27/1992.

PI 617188. *Corylus hybrid*

Wild. "Black Hills #2". Collected in South Dakota, United States. Black Hills of South Dakota. Pedigree - Selection from *C. americana* from the wild.

The following were developed by Centro de Experimentacion Agraria, Apdo 13, Villaviciosa, Oviedo 33300, Spain. Donated by M. Coque-Fuertes, Centro de Experimentacion Agro., Villaviciosa, Oviedo, Spain. Received 12/08/1992.

PI 617189. *Corylus avellana* L.

Cultivar. "Grande". Pedigree - selection of *C. avellana*.

The following were donated by Merce Rovira, IRTA Centro Agropecuari Mas, Bove, Apartat 415, Reus, Tarragona 43200, Spain. Received 12/08/1992.

PI 617190. *Corylus avellana* L.

Cultivar. "Amandi". Developed in Spain. Pedigree - selection of *C. avellana*.

The following were developed by Cecil Farris, 1919 Hopkins Ave., Lansing, Michigan 48912-3321, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/12/1993.

PI 617191. *Corylus sp.*

Cultivar. Farris 88 BS. Pedigree - Faroka x OSU 18.114 (Barcelona x Royal). Released 1980.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/12/1993.

PI 617192. *Corylus sp.*

Cultivar. "Petoka". Developed in Uncertain. Pedigree - *C. avellana* x Peace River *C. cornuta*.

The following were developed by Arnold Arboretum of Harvard University, 125 Arborway, Jamaica Plain, Massachusetts 02130-3500, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/12/1993.

PI 617193. *Corylus jacquemontii* Decne.

Cultivar. *C. jacquemontii* (Arnold). Collected in Uncertain. Pedigree - selection of *C. colurna* var. *lacera*.

The following were donated by Agostino Tombesi, Istituto di Coltivazioni Arboree, Universita di Perugia, Perugia - San Pietro, Italy. Received 04/05/1993.

PI 617194. *Corylus avellana* L.
Cultivar. "Tonda Romana 41". Developed in Italy. Pedigree - selection of *C. avellana*.

PI 617195. *Corylus avellana* L.
Cultivar. F6-P200. Developed in Italy. Pedigree - Tonda Romana x Tonda di Giffoni.

PI 617196. *Corylus avellana* L.
Cultivar. "Tonda Romana 45". Developed in Italy. Pedigree - selection of *C. avellana*.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 01/28/1993.

PI 617197. *Corylus californica* (A. DC.) Rose
Cultivated. *C. cornuta* var. *californica* 4-6; 4-6. Collected in Oregon, United States. Pedigree - selection of *C. cornuta*.

PI 617198. *Corylus californica* (A. DC.) Rose
Cultivated. *C. cornuta* var. *californica* 13-3; 13-3. Collected in Oregon, United States. Pedigree - selection of *C. cornuta*.

PI 617199. *Corylus californica* (A. DC.) Rose
Cultivated. *C. cornuta* var. *californica* 25-3; 25-3. Collected in Oregon, United States. Pedigree - selection of *C. cornuta*.

PI 617200. *Corylus californica* (A. DC.) Rose
Cultivated. *C. cornuta* var. *californica* 53-6; 53-6. Collected in Oregon, United States. Pedigree - selection of *C. cornuta*.

PI 617201. *Corylus californica* (A. DC.) Rose
Cultivated. *C. cornuta* var. *californica* 66-5; 66-5. Collected in Oregon, United States. Pedigree - selection of *C. cornuta*.

PI 617202. *Corylus californica* (A. DC.) Rose
Cultivated. *C. cornuta* var. *californica* 19-4; 19-4. Collected in Oregon, United States. Pedigree - selection of *C. cornuta*.

PI 617203. *Corylus californica* (A. DC.) Rose
Cultivated. *C. cornuta* var. *californica* 13-5; 13-5. Collected in Oregon, United States. Pedigree - selection of *C. cornuta*.

The following were developed by Weijian Liang, Economic Forestry Research Institute, 252 Yulin St., Ganjingzi District, Dalian, Liaoning 116031, China. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/20/1993.

PI 617204. *Corylus chinensis* Franch.
Cultivated. *C. chinensis* OSU 91502; OSU 91502. Pedigree - selection of *C. chinensis*.

The following were donated by C. Ferris Miller, Chollipo Arboretum, 344-16 Yonhui-dong, Sodaemun-kuSosan Gun, Seoul, Seoul 120-113, Korea, South. Received 05/25/1993.

PI 617205. *Corylus heterophylla* Fisch. ex Trautv.
Cultivated. *C. heterophylla*. Collected in Korea, South. Pedigree - selection of *C. heterophylla* from South Korea.

The following were developed by D. S. Rathore, Director, NBPGR, New Delhi Airport, Pusa Campus, New Delhi, Delhi 110012, India. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/20/1993.

PI 617206. *Corylus jacquemontii* Decne.
Cultivated. *C. jacquemontii* OSU 88501; OSU 88501. Pedigree - selection of *C. jacquemontii* from Pakistan.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuveli, Agricultural University of Tirana, Dept. of Agronomy, Rr. "Myslym Shyri", Tirana, Albania. Donated by Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/01/1996.

PI 617207. *Corylus avellana* L.
Wild. Al 055; *C. avellana*; CCOR 625. Collected 08/26/1996 in Albania. Latitude 40° 12' 10" N. Longitude 20° 9' 30" E. Elevation 1260 m. Approx. 1 km further along road returning to Gjirokaster from the Pastures of Cajup. Growing along a west facing rocky hillside. Pedigree - selection of *C. avellana*. Tree 4m tall, 3-4m wide. Numerous.

PI 617208. *Corylus avellana* L.
Wild. Al 080; *C. sp.*; CCOR 626. Collected 08/28/1996 in Albania. Latitude 40° 37' 11" N. Longitude 20° 46' 56" E. Elevation 320 m. Korce, market. Collected in surrounding mountains presumably from wild populations. Pedigree - selection.

The following were collected by Hakan Schuberg, Gluntens Vag 9-807, Umea, Vasterbotten 903 31, Sweden. Received 11/04/1996.

PI 617209. *Corylus avellana* L.
Wild. *C. avellana* - Schuberg; CCOR 627. Collected 09/19/1996 in Gotland, Sweden. Latitude 57° 20' N. Longitude 18° 40' E. Elevation 10 m. Southeastern Gotland, close to and 2 km along coast south of the stream Naarsaan, 20 km south of Ljugarn. Coastal deep sandyloam high in calcium over chalc rock. Former pasture for cattle, sheep and horse. Associated with *Quercus robur*, *Betula pendula*, *Fraxinus exelsior* and *Ulmus carpinifolia*. Pedigree - Selection of wild *C. avellana*. Plants were removed from the wild and placed in the garden of Hakan Schuberg's parents. The seeds were collected from the plants in the garden.

The following were developed by Oregon State University, Department of Horticulture, Lewis-Brown Farm, Corvallis, Oregon 97331, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/24/1997.

PI 617210. *Corylus avellana* L.

Cultivar. "Lewis"; OSU 243.002; CCOR 633. Pedigree - OSU 17.028 (Barcelona x Tombul Ghiaghli) x Willamette. 'Lewis' is precocious, and it is more productive and has a smaller tree size than 'Barcelona.' Harvest is earlier than 'Barcelona,' and the nuts have fewer defects. Tree growth habit: 'Lewis' is a 'grower-friendly' tree, with a good balance between vegetative and reproductive growth and can be managed much like a 'Barcelona.' Tree size is 75% of 'Barcelona' as measured by the trunk cross sectional area. Flowering characteristics: Female flowers bloom at the same time as 'Barcelona.' The incompatibility alleles are S3 S8. The recommended pollinizers are 'Tonda di Giffoni' and 'Hall's Giant.' Yield and yield efficiency: 'Lewis' has out-yielded 'Barcelona' in the first 4 bearing years and yields were similar in 1997. 'Lewis' is a more efficient nut producer than 'Barcelona' (i.e. yields are greater and tree size is smaller). More of the tree's resources are used to produce nuts and less to develop leaves and wood. Harvest time: Nut clusters contain 3-4 nuts. Nuts are freehusking and ready to harvest 5-7 days earlier than 'Barcelona.' Nut and kernel quality: 'Lewis' nuts are smaller than 'Barcelona.' Only 17% of the nuts had defects in 1997, compared to 28 percent for 'Barcelona.' Most defects in 'Lewis' are shriveled, poorly filled, or moldy nuts. In 1997, only 1% of the nuts were blanks, 'Barcelona' had 8%. Kernel is 4-5% greater than 'Barcelona.' Raw kernels have very little fiber. Kernels blanch slightly better than 'Barcelona' and have good flavor and texture. Propagation: 'Lewis' is easy to propagate by the 'tie-off' method. Layers are well rooted and vigorous. Pest tolerance: A major strength is its tolerance to eastern filbert blight. Its tolerance to the pathogen is better than 'Willamette' and 'Hall' Giant.' Big bud mite tolerance is comparable to 'Casina.'

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/24/1997.

PI 617211. *Corylus avellana* L.

Cultivar. OSU 244.001; CCOR 634. Pedigree - OSU 17.028 (Barcelona x Tombul Ghiaghli) x Willamette.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States. Received 12/29/1997.

PI 617212. *Corylus sieboldiana* var. *mandshurica* (Maxim.) C. K. Schneid.

Wild. *C. sieboldiana* v. *mandshurica*; CCOR 636; NA 68873. Collected 09/04/1997 in Jilin, China. Pedigree - Collected from the wild in China.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 12/20/1994.

- PI 617213. *Corylus colurna* L.**
Cultivated. *C. colurna*; CCOR 637. Pedigree - Embryonic Axis extracted from *C. colurna* seed.
- PI 617214. *Corylus americana* Marshall**
Cultivated. *C. americana*; CCOR 638. Pedigree - Embryonic Axis extracted from *C. americana* seed.
- PI 617215. *Corylus heterophylla* Fisch. ex Trautv.**
Cultivated. CCOR 643.
- PI 617216. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 648. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617217. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 649. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617218. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 650. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617219. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 651. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617220. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 652. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617221. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 653. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617222. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 654. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617223. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 655. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617224. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 656. Pedigree - *C. heterophylla* x *C. avellana*.
- PI 617225. *Corylus* hybrid**
Breeding. *C. heterophylla* x *C. avellana*; CCOR 657. Pedigree - *C. heterophylla* x *C. avellana*.

The following were donated by David C. Smith, Oregon State Universtiy, Department of Horticulture, 4017 Ag and Life Sciences Bldg., Corvallis, Oregon 97331, United States. Received 05/06/1998.

- PI 617226. Corylus hybrid**
Cultivar. "Acorn Hazelnut"; CCOR 658. Pedigree - cultivated selection from Poland.
- PI 617227. Corylus hybrid**
Cultivar. "Frango 2"; CCOR 659. Pedigree - cultivated selection from Poland.
- PI 617228. Corylus hybrid**
Cultivar. "Frango 4"; CCOR 660. Pedigree - cultivated selection from Poland.
- PI 617229. Corylus hybrid**
Cultivar. "Frango 5"; CCOR 661. Pedigree - cultivated selection from Poland.
- PI 617230. Corylus hybrid**
Cultivar. "Goc"; CCOR 662. Pedigree - cultivated selection from Poland.
- PI 617231. Corylus hybrid**
Cultivar. "Karol"; CCOR 663. Pedigree - cultivated selection from Poland.
- PI 617232. Corylus hybrid**
Cultivar. "Lech"; CCOR 664. Pedigree - cultivated selection from Poland.
- PI 617233. Corylus hybrid**
Cultivar. "Lenka 3"; CCOR 665. Pedigree - cultivated selection from Poland.
- PI 617234. Corylus hybrid**
Cultivar. "Lenka 4"; CCOR 666. Pedigree - cultivated selection from Poland.
- PI 617235. Corylus hybrid**
Cultivar. "Little Poland"; CCOR 667. Pedigree - cultivated selection from Poland.
- PI 617236. Corylus hybrid**
Cultivar. "Maria"; CCOR 668. Pedigree - cultivated selection from Poland.
- PI 617237. Corylus hybrid**
Cultivar. "Syrena"; CCOR 669. Pedigree - cultivated selection from Poland.
- PI 617238. Corylus hybrid**
Cultivar. "Volski"; CCOR 670. Pedigree - cultivated selection from Poland.
- PI 617239. Corylus hybrid**
Cultivar. "Tapparona di S. Colombano Cortemoli"; CCOR 671. Pedigree - cultivated selection from Poland.

PI 617240. *Corylus hybrid*

Cultivar. "Dal Rossa"; CCOR 672. Pedigree - cultivated selection from Poland.

PI 617241. *Corylus hybrid*

Cultivar. "Barrettona"; CCOR 673. Pedigree - cultivated selection from Poland.

The following were collected by Dennis Peterson, 6340 Peterson Road, East Dubuque, Illinois 61025, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617242. *Corylus americana* Marshall

Cultivated. 88317; CCOR 675. Collected 1988 in Illinois, United States. Pedigree - Open Pollinated seed from the wild.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617243. *Corylus americana* Marshall

Cultivated. 88323; CCOR 676. Pedigree - Open Pollinated seed from the wild.

The following were collected by Gary D. Stegmiller, 621 South 14th Street, Bismark, North Dakota 58504, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617244. *Corylus americana* Marshall

Cultivated. 88325; CCOR 677. Collected 1988 in North Dakota, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by Glenn C. Evans, R.D. 1 Box 505, Brookville, Pennsylvania 15825, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617245. *Corylus americana* Marshall

Cultivated. 88302; CCOR 678. Collected 1988 in Pennsylvania, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by Doy E. Bruni, 1313 Mud River Road, Milton, West Virginia 25541, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617246. *Corylus americana* Marshall

Cultivated. 88306; CCOR 679. Collected 1988 in West Virginia, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by O. Howard Jones, R.R. 3 Box 251A, Ferrum, West Virginia 24088, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617247. *Corylus americana* Marshall

Cultivated. 88307; CCOR 680. Collected 1988 in West Virginia, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by F. Dillingham. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617248. *Corylus americana* Marshall

Cultivated. 88311; CCOR 681. Collected 1988 in Kentucky, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by Paul Sorensen, Northern Illinois University, Dept. of Biological Sciences, Dekalb, Illinois 60115-2861, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617249. *Corylus americana* Marshall

Cultivated. 88316; CCOR 682. Collected 1988 in Michigan, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by Albert B. Ferguson, 802 20th Ave., Coralville, Iowa 52241, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617250. *Corylus americana* Marshall

Cultivated. 89306; CCOR 683. Collected 1989 in Indiana, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by Dennis Peterson, 6340 Peterson Road, East Dubuque, Illinois 61025, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617251. *Corylus americana* Marshall

Cultivated. 88317; CCOR 684. Collected 1988 in Indiana, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by Edward C. Olejniczak, Route 2, River Road, Greenleaf, Wisconsin 54126, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617252. *Corylus americana* Marshall

Cultivated. 88324; CCOR 685. Collected 1988 in Wisconsin, United States.
Pedigree - Open Pollinated seed from the wild.

The following were collected by Glenn C. Evans, R.D. 1 Box 505, Brookville, Pennsylvania 15825, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617253. *Corylus americana* Marshall

Cultivated. 88301; CCOR 686. Collected 1988 in Pennsylvania, United States. Pedigree - Open Pollinated seed from the wild.

The following were collected by Jean Tierny, Patuxent River Park, 1600 Croom Airport Road, Upper Marlboro, Maryland 20772, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617254. *Corylus americana* Marshall

Cultivated. 88303; CCOR 687. Collected 1988 in Maryland, United States.
Pedigree - Open Pollinated seed from the wild.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Hyeon-Mo Cho, Horticultural Experiment Sta., O.R.D., Suweon, Kyonggi, Korea, South. Received 02/1998.

PI 617255. *Corylus heterophylla* Fisch. ex Trautv.

Cultivated. 86025; CCOR 688. Pedigree - Open Pollinated seed from cultivated plants.

PI 617256. *Corylus heterophylla* Fisch. ex Trautv.

Cultivated. 86026; CCOR 689. Pedigree - Open Pollinated seed from cultivated plants.

PI 617257. *Corylus heterophylla* Fisch. ex Trautv.

Cultivated. 86027; CCOR 690. Pedigree - Open Pollinated seed from cultivated plants.

The following were collected by Cyril Bish, 4020 Folsom, Lincoln, Nebraska 68522, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617258. *Corylus heterophylla* Fisch. ex Trautv.

Cultivated. 87172; CCOR 691. Collected 1987 in Nebraska, United States.
Pedigree - Open Pollinated seed from cultivated plants.

PI 617259. *Corylus heterophylla* Fisch. ex Trautv.

Cultivated. 87176; CCOR 692. Collected 1987 in Nebraska, United States.
Pedigree - Open Pollinated seed from cultivated plants.

The following were collected by Anna Voordeckers, Rutgers Fruit Research Center, 283 Route 539, Cream Ridge, New Jersey 08514, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617260. *Corylus americana* Marshall

Cultivated. 86033; CCOR 693. Collected 1986 in New Jersey, United States. Pedigree - Open Pollinated seed from the wild.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617261. *Corylus americana* Marshall

Cultivated. 87141; CCOR 694. Pedigree - Open Pollinated seed from the wild.

PI 617262. *Corylus americana* Marshall

Cultivated. 87142; CCOR 695. Pedigree - Open Pollinated seed from the wild.

The following were collected by A.V. Lukasheff. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 02/1998.

PI 617263. *Corylus americana* Marshall

Cultivated. 87143; CCOR 696. Collected 1987 in Michigan, United States. Pedigree - Open Pollinated seed from the wild.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 07/26/1999.

PI 617264. *Corylus heterophylla* Fisch. ex Trautv.

Cultivated. CCOR 700. Pedigree - selection of *C. heterophylla* from Liaoning, China.

PI 617265. *Corylus hybrid*

Cultivated. CCOR 701. Pedigree - *C. americana* x *C. avellana*.

PI 617266. *Corylus avellana* L.

Cultivated. 408.040; CCOR 702. Pedigree - selection of northern European Hazelnut with EFB resistance.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/04/1999.

PI 617267. *Corylus avellana* L.

Cultivated. Fryer Pioneer Hazelnut; CCOR 704. Collected 06/04/1999 in Oregon, United States. Latitude 43° 40' N. Longitude 123° 48' W. Elevation 10 m. Fryer Homestead in Scottsburg, Oregon. Umqua river valley at tidewaters upper reach. Pedigree - Collected from pioneer

home site in Scottsburg, Oregon. Layer taken from one of the oldest cultivated hazelnut in Oregon.

The following were developed by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Luigi Meneghelli, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States; Luigi Meneghelli, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/05/2000.

PI 617268. *Corylus avellana* L.

Cultivar. "Clark"; 276.142; CCOR 705. Pedigree - Tombul Ghiaghli x Willamette. Release of 'Clark' Hazelnut. The Oregon Agricultural Experiment Station announces the release of a new hazelnut (*Corylus avellana* L.) cultivar. 'Clark' has smaller trees, higher yield efficiency, higher percent kernel, and kernels that are more easily blanched than the standard 'Barcelona'. The nuts fall free of the husk at maturity and can be mechanically harvested about 8 days earlier than 'Barcelona'. 'Clark', tested as OSU 276.142, resulted from a cross of 'Tombul Ghiaghli' from Greece with 'Willamette' made in 1982. Light roasting and rubbing removes most of the pellicle of 'Clark' kernels, making them suitable for sale on the blanched kernel market. 'Clark' has a higher frequency of moldy kernels than 'Barcelona' but fewer than 'Willamette'. 'Clark' has a high level of quantitative resistance to eastern filbert blight caused by *Anisogramma anomala* (Peck) E. Muller, as determined by measuring the cankers which developed after exposure of potted trees under structures topped with diseased wood. Although not immune to eastern filbert blight, growers should be able to manage orchards of 'Clark' in the presence of the disease. Resistance to big bud mite (primarily *Phytoptus avellanae* Nal.) is also good. 'Clark' has incompatibility alleles S3 and S8. Both alleles are expressed in the stigmas and pollen. Female anthesis is very late, even later than 'Ennis'. Therefore, very late-shedding pollinizers are needed. 'Hall's Giant' is recommended for the earliest females to emerge. Very late-shedding OSU selections are recommended as pollinizers for the peak of female anthesis. 'Clark' is being released as a public variety and may be propagated without restriction. A list of nurseries propagating trees of 'Clark' may be obtained from the industry web site (www.oregonhazelnuts.org) or S. A. Mehlenbacher, Dept. of Horticulture, 4017 Agricultural & Life Sciences Bldg., Corvallis, OR 97331-7304.

The following were collected by Shinji Kawai, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Developed by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/05/2000.

PI 617269. *Corylus avellana* L.

Cultivar. 556.27; CCOR 706. Collected 1990 in Istanbul, Turkey. Pedigree - Seeds purchased at a market in Istanbul.

PI 617270. *Corylus avellana* L.

Cultivar. 556.11; CCOR 707. Collected 1990 in Istanbul, Turkey.
Pedigree - Seeds purchased at a market in Istanbul.

The following were developed by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 04/05/2000.

PI 617271. *Corylus avellana* L.

Cultivar. 622.30; CCOR 708. Pedigree - Seeds purchased in a market somewhere in Turkey.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 05/03/2000.

PI 617272. *Corylus americana* Marshall

Cultivated. CCOR 709. Pedigree - selection of *C. americana* from Wilson State Nursery in Wis.

PI 617273. *Corylus americana* Marshall

Cultivated. CCOR 710. Pedigree - selection of *C. americana* from Wilson State Nursery in Wis.

PI 617274. *Corylus americana* Marshall

Cultivated. CCOR 711. Pedigree - selection of *C. americana* from Wilson State Nursery in Wis.

PI 617275. *Corylus americana* Marshall

Cultivated. CCOR 712. Pedigree - selection of *C. americana* from Franklin, Massachusetts.

PI 617276. *Corylus americana* Marshall

Cultivated. CCOR 713. Pedigree - selection of *C. americana* from Madison, Wisconsin.

PI 617277. *Corylus americana* Marshall

Cultivated. CCOR 714. Pedigree - selection of *C. americana* from Southhampton, Massachusetts.

PI 617278. *Corylus americana* Marshall

Cultivated. CCOR 715. Pedigree - selection of *C. americana* from Fowlerville, Michigan.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 03/10/2000.

PI 617279. *Corylus avellana* L.

Cultivated. L. Smith Pioneer Hazelnut; CCOR 716. Collected 03/08/2000 in Oregon, United States. Latitude 43° 39' 15" N. Longitude 123° 48' 56" W. Elevation 14 m. Scottsburg, Oregon. Pedigree - selection of European Hazelnut grown in mid-1850s from the L. Smith Property in Scottsburg, Oregon.

The following were donated by Shawn A. Mehlenbacher, Oregon State University, Department of Horticulture, Corvallis, Oregon 97331, United States. Received 12/13/2000.

PI 617280. *Corylus avellana* L.

Cultivar. "C. avellana 99037"; 99037; CCOR 717. Pedigree - OSU 665.010 (OSU 183.060 [Montebello x OSU 14.084 (Barcelona x Daviana)] x Sivri Ghiaghli) x Closca Molla.

The following were developed by F. Osvald. Donated by Alfred Haunold, USDA, ARS, Oregon State University, Department of Crop Sciences, Corvallis, Oregon 97333, United States. Received 03/12/1992.

PI 617281. *Humulus lupulus* L.

Breeding. USDA 21535; Osvald Saazer Clone 72Y. Pedigree - Unknown, prob. a landrace in Czech. since the Middle Ages. Pleasant (noble) aroma suitable for production of super premium beers, mild bitterness, esp. suited for Pilsner.

The following were donated by Alfred Haunold, USDA, ARS, Oregon State University, Department of Crop Sciences, Corvallis, Oregon 97333, United States. Received 03/27/1992.

PI 617282. *Humulus lupulus* L.

Cultivar. "Pacific Gem"; USDA 21609. Developed in United States. Pedigree - Uncertain.

The following were collected by Elizabeth Dickson, NYS Agricultural Experiment Station, Horticultural Sciences, Hedrick Hall, Geneva, New York 14456-0462, United States; Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States; Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 10/05/1993.

PI 617283. *Humulus* sp.

KAZ 93-05-02. Collected 09/10/1993 in Kazakhstan. Latitude 45° 24' 25" N. Longitude 80° 24' 30" E. Elevation 1260 m. Sakand, Village of Topolevka, Forestry Camp #16, Taldy- Kurgan region, Soldier's Gorge, Dzhungarsky Alatau. Open meadow, humus soil, slight slope, 750-800mm rainfall. Associated with *Malus sieversii*.

PI 617284. *Humulus* sp.

KAZ 93-12-05. Collected 09/11/1993 in Kazakhstan. Latitude 45° 24' 20" N. Longitude 80° 25' 40" E. Elevation 1365 m. Sakand, Village of Topolevka, Forestry Camp #16, Taldy- Kurgan region, Soldier's Gorge, Dzhungarsky Alatau. Bottom of valley, humus soil, south facing slope, 750-800mm rainfall, popsize 50+. Associated with *Malus sieversii*.

The following were developed by Alfred Haunold, USDA, ARS, Oregon State University, Department of Crop Sciences, Corvallis, Oregon 97333, United States. Received 04/24/1995.

PI 617285. *Humulus lupulus* L.
Cultivar.

PI 617286. *Humulus lupulus* L.
Cultivar.

The following were donated by Alfred Haunold, USDA, ARS, Oregon State University, Department of Crop Sciences, Corvallis, Oregon 97333, United States. Received 01/17/1996.

PI 617287. *Humulus lupulus* L.
Cultivar. CHUM 815. Pedigree - Galena (USDA 21182) x German (male) 75/5/3. New high-alpha hop, low CoH; male parent about 50 percent Hall. m.f., diploid 2n=20; alpha 12-17, beta 5-6, CoH 28; susceptible to powdery mildew, resistant to vert. wilt and downy mildew.

PI 617288. *Humulus lupulus* L.
Cultivar. CHUM 816. Pedigree - (76/18/80 x 71/16/07). New aroma hop of interest to Anh. Busch; released 1989; resistant to vert. wilt and downy mildew; alpha 4-6, beta 3-4, CoH 23; exceptionally fine aroma; medium to medium late; diploid 2n=20.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuveli, Agricultural University of Tirana, Dept. of Agronomy, Rr."Myslym Shyri", Tirana, Albania. Donated by Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/01/1996.

PI 617289. *Humulus lupulus* L. var. *lupulus*
Wild. AL 117; Al 117; CHUM 817. Collected 08/31/1996 in Albania. Latitude 41° 44' 16" N. Longitude 20° 18' 23" E. Elevation 360 m. Village Arras, along road between Peskopi and Rreshen. Growing in fence row on Salix, Rubus. Rambling deciduous vine. Bracts 2-4cm long, 1-2cm wide.

PI 617290. *Humulus lupulus* L. var. *lupulus*
Wild. Al 134; CHUM 818. Collected 09/02/1996 in Albania. Latitude 41° 50' 53" N. Longitude 19° 22' 45" E. Elevation 1 m. Further up beach on the Island of Frans Joseph. Marshy area on sand. Vine growing on Rubus near Al 133.

Unknown source. Received 1997.

PI 617291. *Humulus lupulus* L.
Cultivar. "Hallertauer Gold". Developed in Germany. Pedigree - 50/1/392 x 61/28/6.

Unknown source. Received 1997.

PI 617292. *Humulus lupulus* L.

Cultivar. "Hallertauer Tradition." Developed in Germany. Pedigree - Hallertauer Gold x 75/15/106.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617293. *Humulus lupulus* L.

Cultivar. CHUM 821. Pedigree - 19113 x OP.

PI 617294. *Humulus lupulus* L.

Cultivar. CHUM 822. Pedigree - 19005 x 19046M.

PI 617295. *Humulus lupulus* L.

Cultivar. CHUM 823. Pedigree - 65009 x 63015M.

PI 617296. *Humulus lupulus* L.

Cultivar. CHUM 824. Pedigree - Ha x OP.

PI 617297. *Humulus lupulus* L.

Cultivar. CHUM 825. Pedigree - 21255 x 21328M.

PI 617298. *Humulus lupulus* L.

Cultivar. CHUM 826. Pedigree - 21255 x 21335M.

PI 617299. *Humulus lupulus* L.

Cultivar. CHUM 827. Pedigree - 62013 x 21109M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617300. *Humulus lupulus* L.

Cultivar. CHUM 828.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617301. *Humulus lupulus* L.

Cultivar. CHUM 829.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617302. *Humulus lupulus* L.
Cultivar. CHUM 830.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617303. *Humulus lupulus* L.
Cultivar. CHUM 831.

PI 617304. *Humulus lupulus* L.
Cultivar. CHUM 832. Pedigree - 21153 x 21153M.

PI 617305. *Humulus lupulus* L.
Cultivar. CHUM 833. Pedigree - 21153 x 21153M.

PI 617306. *Humulus lupulus* L.
Cultivar. CHUM 834. Pedigree - 21153 x 21153M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617307. *Humulus lupulus* L.
Cultivar. CHUM 835. Pedigree - 65009 x 19046M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617308. *Humulus lupulus* L.
Cultivar. CHUM 836. Pedigree - 64100 x 64035M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617309. *Humulus lupulus* L.
Cultivar. CHUM 837. Pedigree - 21254 x 21328M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617310. *Humulus lupulus* L.
Cultivar. CHUM 838. Pedigree - 21254 x 21328M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617311. *Humulus lupulus* L.
Cultivar. CHUM 839. Pedigree - 21255 x 21335M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617312. *Humulus lupulus* L.
Cultivar. CHUM 840. Pedigree - 21255 x 21335M.

PI 617313. *Humulus lupulus* L.
Cultivar. CHUM 841. Pedigree - 21255 x 21335M.

PI 617314. *Humulus lupulus* L.
Cultivar. CHUM 842. Pedigree - 56013 x 19005M.

PI 617315. *Humulus lupulus* L.
Cultivar. CHUM 843. Pedigree - 56013 x 19008M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617316. *Humulus lupulus* L.
Cultivar. CHUM 844. Pedigree - 56013 x 19009M.

PI 617317. *Humulus lupulus* L.
Cultivar. CHUM 845. Pedigree - 56013 x 19010M.

PI 617318. *Humulus lupulus* L.
Cultivar. CHUM 846. Pedigree - 56013 x 19037M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617319. *Humulus lupulus* L.
Cultivar. CHUM 847. Pedigree - 56013 x 19058M.

PI 617320. *Humulus lupulus* L.
Cultivar. CHUM 848. Pedigree - 56013 x 21060M.

PI 617321. *Humulus lupulus* L.
Cultivar. CHUM 849. Pedigree - 56013 x 21087M.

PI 617322. *Humulus lupulus* L.

Cultivar. CHUM 850. Pedigree - 56013 x 21087M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617323. *Humulus lupulus* L.

Cultivar. CHUM 851. Pedigree - 56013 x 60023M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617324. *Humulus lupulus* L.

Cultivar. CHUM 852. Pedigree - 56013 x 60026M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617325. *Humulus lupulus* L.

Cultivar. CHUM 853. Pedigree - 48209 x OP.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617326. *Humulus lupulus* L.

Cultivar. CHUM 854. Pedigree - 48209 x OP.

PI 617327. *Humulus lupulus* L.

Cultivar. CHUM 855. Pedigree - 56013 x 19058M.

PI 617328. *Humulus lupulus* L.

Cultivar. CHUM 856. Pedigree - Fu x OP.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617329. *Humulus lupulus* L.

Cultivar. CHUM 857. Pedigree - 62013 x 21109M.

PI 617330. *Humulus lupulus* L.

Cultivar. CHUM 858. Pedigree - 64107 x 21070M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617331. *Humulus lupulus* L.

Cultivar. CHUM 859. Pedigree - 21055 x 2111M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617332. *Humulus lupulus* L.

Cultivar. CHUM 860. Pedigree - Cas x 21136M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617333. *Humulus lupulus* L.

Cultivar. CHUM 861. Pedigree - Cas x 21136M.

PI 617334. *Humulus lupulus* L.

Cultivar. CHUM 862. Pedigree - Fu x OP.

PI 617335. *Humulus lupulus* L.

Cultivar. CHUM 863. Pedigree - 64107 x 21111M.

PI 617336. *Humulus lupulus* L.

Cultivar. USDA 21452; CHUM 864. Pedigree - 21055 x 21108M.

PI 617337. *Humulus lupulus* L.

Cultivar. CHUM 865. Pedigree - 21055 x 21111M.

PI 617338. *Humulus lupulus* L.

Cultivar. CHUM 866. Pedigree - 64100 x 64035M.

PI 617339. *Humulus lupulus* L.

Cultivar. CHUM 867. Pedigree - 21397 x 64035M.

PI 617340. *Humulus lupulus* L.

Cultivar. CHUM 868. Pedigree - PrRi x [(GCL-XS) x XS].

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617341. *Humulus lupulus* L.

Cultivar. CHUM 869. Pedigree - 21255 x 21328M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617342. *Humulus lupulus* L.
Cultivar. CHUM 870. Pedigree - 56013 x 19009M.

PI 617343. *Humulus lupulus* L.
Cultivar. CHUM 871. Pedigree - 56013 x 21087M.

PI 617344. *Humulus lupulus* L.
Cultivar. CHUM 872. Pedigree - 48209 x OP.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617345. *Humulus lupulus* L.
Cultivar. CHUM 873. Pedigree - 62013 x 21108M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617346. *Humulus lupulus* L.
Cultivar. CHUM 874. Pedigree - 62013 x 21109M.

PI 617347. *Humulus lupulus* L.
Cultivar. CHUM 875. Pedigree - 62013 x 21109M.

PI 617348. *Humulus lupulus* L.
Cultivar. CHUM 876. Pedigree - 56013 x 19062M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617349. *Humulus lupulus* L.
Cultivar. CHUM 877. Pedigree - Cas x 21136M.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

PI 617350. *Humulus lupulus* L.
Cultivar. CHUM 878. Pedigree - 21254 x 21335M.

- PI 617351. *Humulus lupulus* L.**
Cultivar. CHUM 879. Pedigree - 65009 x 64035M.
- PI 617352. *Humulus lupulus* var. *lupuloides* E. Small**
Wild. CHUM 880; Montana 08 (Wild American). Pedigree - selection from the wild in Montana.
- PI 617353. *Humulus lupulus* var. *lupuloides* E. Small**
Wild. CHUM 881; Montana 19 (Wild American). Pedigree - selection from the wild in Montana.
- PI 617354. *Humulus lupulus* L.**
Cultivar. CHUM 882. Pedigree - 56013 x 19008M.
- PI 617355. *Humulus lupulus* L.**
Cultivar. CHUM 883. Pedigree - 56013 x 60026M.
- PI 617356. *Humulus lupulus* var. *lupuloides* E. Small**
Wild. CHUM 884; Minnesota-1 (Thief River).

The following were donated by Stephen T. Kenny, Washington State University, IAREC, 24106 N. Bunn Road, Prosser, Washington 99350-8694, United States; John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

- PI 617357. *Humulus lupulus* L.**
Cultivar. CHUM 885.

The following were donated by John A. Henning, USDA, ARS, NFSPRC, Oregon State University, Crop Science Building, Corvallis, Oregon 97331, United States. Received 11/14/1997.

- PI 617358. *Humulus lupulus* L.**
Cultivar. CHUM 886.
- PI 617359. *Humulus lupulus* var. *lupuloides* E. Small**
Wild. North Dakota 9; CHUM 887.
- PI 617360. *Humulus lupulus* L.**
CHUM 888.
- PI 617361. *Humulus lupulus* L.**
CHUM 889.
- PI 617362. *Humulus lupulus* L.**
CHUM 890.
- PI 617363. *Humulus lupulus* L.**
CHUM 891.
- PI 617364. *Humulus lupulus* L.**
"Cicero"; CHUM 892.
- PI 617365. *Humulus lupulus* L.**
Cultivar. CHUM 893. Pedigree - 62013 x 21110M.

- PI 617366. *Humulus lupulus* L.**
Cultivar. USDA 21617M; CHUM 894. Pedigree - 21397 x 21381M.
- PI 617367. *Humulus lupulus* L.**
Cultivar. CHUM 895. Pedigree - 21397 x 21381M.
- PI 617368. *Humulus lupulus* L.**
Cultivar. CHUM 896. Pedigree - 21397 x 21381M.
- PI 617369. *Humulus lupulus* L.**
Cultivar. CHUM 897. Pedigree - 64007 x 21337M.
- PI 617370. *Humulus lupulus* L.**
Cultivar. CHUM 898. Pedigree - 64007 x 21337M.
- PI 617371. *Humulus lupulus* L.**
Cultivar. CHUM 899. Pedigree - 64007 x 21337M.
- PI 617372. *Humulus lupulus* L.**
Cultivar. CHUM 900. Pedigree - 64007 x 21337M.
- PI 617373. *Humulus lupulus* L.**
Cultivar. CHUM 901. Pedigree - 64007 x 21337M.
- PI 617374. *Humulus lupulus* L.**
Cultivar. CHUM 902. Pedigree - 64007 x 21337M.
- PI 617375. *Humulus lupulus* L.**
Cultivar. CHUM 903. Pedigree - 64007 x 21337M.
- PI 617376. *Humulus lupulus* L.**
Cultivar. CHUM 904. Pedigree - 64007 x 21337M.
- PI 617377. *Humulus lupulus* L.**
Cultivar. CHUM 905. Pedigree - 64007 x 21337M.
- PI 617378. *Humulus lupulus* L.**
Cultivar. CHUM 906. Pedigree - 64007 x 21337M.
- PI 617379. *Humulus lupulus* L.**
Cultivar. CHUM 907. Pedigree - 64007 x 21337M.
- PI 617380. *Humulus lupulus* L.**
CHUM 908.
- PI 617381. *Humulus lupulus* L.**
CHUM 909.
- PI 617382. *Humulus lupulus* L.**
CHUM 910.
- PI 617383. *Humulus lupulus* L.**
CHUM 911.
- PI 617384. *Humulus lupulus* L.**
CHUM 912.

- PI 617385. *Humulus lupulus* L.
CHUM 913.
- PI 617386. *Humulus lupulus* L.
CHUM 914.
- PI 617387. *Humulus lupulus* L.
CHUM 915.
- PI 617388. *Humulus lupulus* L.
CHUM 916.
- PI 617389. *Humulus lupulus* L.
CHUM 917.
- PI 617390. *Humulus lupulus* L.
CHUM 918.
- PI 617391. *Humulus lupulus* L.
CHUM 919.
- PI 617392. *Humulus lupulus* L.
CHUM 920.
- PI 617393. *Humulus lupulus* L.
Cultivar. CHUM 921. Pedigree - 21120 x 21119M.
- PI 617394. *Humulus lupulus* L.
Cultivar. CHUM 922. Pedigree - 21121 x 21119M.
- PI 617395. *Humulus lupulus* L.
Cultivar. CHUM 923. Pedigree - 21120 x 19046M.
- PI 617396. *Humulus lupulus* L.
Cultivar. CHUM 924. Pedigree - 21120 x 21119M.
- PI 617397. *Humulus lupulus* L.
Cultivar. CHUM 925. Pedigree - 21120 x 21119M.
- PI 617398. *Humulus lupulus* L.
Cultivar. CHUM 926. Pedigree - 21120 x 21119M.
- PI 617399. *Humulus lupulus* L.
Cultivar. CHUM 927. Pedigree - 21120 x 21119M.
- PI 617400. *Humulus lupulus* L.
CHUM 928.
- PI 617401. *Humulus lupulus* L.
CHUM 929.
- PI 617402. *Humulus lupulus* L.
CHUM 930.
- PI 617403. *Humulus lupulus* L.
CHUM 931.

- PI 617404. *Humulus lupulus* L.
CHUM 932.
- PI 617405. *Humulus lupulus* L.
CHUM 933. Pedigree - 21534 x 21088M.
- PI 617406. *Humulus lupulus* L.
CHUM 934. Pedigree - 21534 x 21361M.
- PI 617407. *Humulus lupulus* L.
CHUM 935. Pedigree - 21534 x 21429M.
- PI 617408. *Humulus lupulus* L.
CHUM 936. Pedigree - 21534 x 21618M.
- PI 617409. *Humulus lupulus* L.
CHUM 937.
- PI 617410. *Humulus lupulus* L.
CHUM 938.
- PI 617411. *Humulus lupulus* var. *lupuloides* E. Small
Wild. Oxbow S-02; CHUM 939.
- PI 617412. *Humulus lupulus* var. *lupuloides* E. Small
Wild. Oxbow S-02; CHUM 940.
- PI 617413. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 21713; Souris-25; CHUM 941.
- PI 617414. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. CHUM 942.
- PI 617415. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. CHUM 943.
- PI 617416. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. CHUM 944.
- PI 617417. *Humulus lupulus* L.
Cultivar. CHUM 945.
- PI 617418. *Humulus lupulus* L.
Cultivar. CHUM 946.
- PI 617419. *Humulus lupulus* L.
Cultivar. CHUM 947.
- PI 617420. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Oxbow A-01; CHUM 948.
- PI 617421. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Oxbow A-10; CHUM 949.
- PI 617422. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Oxbow D-10; CHUM 950.

- PI 617423. *Humulus lupulus* L.
Cultivar. Indian Head C-2; CHUM 951.
- PI 617424. *Humulus lupulus* L.
Cultivar. CHUM 952.
- PI 617425. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Minot E-4S; CHUM 953.
- PI 617426. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Minot E-4S; CHUM 954.
- PI 617427. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Minot W-1; CHUM 955.
- PI 617428. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Minot W-2; CHUM 956.
- PI 617429. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 21729; White Earth S-3; CHUM 957.
- PI 617430. *Humulus lupulus* L.
Cultivar. CHUM 958.
- PI 617431. *Humulus lupulus* L.
CHUM 959.
- PI 617432. *Humulus lupulus* L.
Cultivar. CHUM 960. Pedigree - Ba x Ut526-4.
- PI 617433. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-02; Souris-02; CHUM 961.
- PI 617434. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-16; Souris-16; CHUM 962.
- PI 617435. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-22; Souris-22; CHUM 963.
- PI 617436. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-34; Souris-34; CHUM 964.
- PI 617437. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-48; Souris-48; CHUM 965.
- PI 617438. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-59M; Souris-59; CHUM 966.
- PI 617439. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-73M; Souris-73; CHUM 967.
- PI 617440. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. 8901-81M; Souris-81; CHUM 968.
- PI 617441. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. CHUM 969.

- PI 617442. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. CHUM 970.
- PI 617443. *Humulus lupulus* L.
Cultivar. CHUM 971.
- PI 617444. *Humulus lupulus* L.
Cultivar. CHUM 972.
- PI 617445. *Humulus lupulus* L.
Cultivar. CHUM 973.
- PI 617446. *Humulus lupulus* L.
Cultivar. CHUM 974.
- PI 617447. *Humulus lupulus* L.
Cultivar. CHUM 975.
- PI 617448. *Humulus lupulus* L.
Cultivar. CHUM 976.
- PI 617449. *Humulus lupulus* L.
Cultivar. CHUM 977.
- PI 617450. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Oxbow A-15; CHUM 978.
- PI 617451. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Oxbow B-05; CHUM 979.
- PI 617452. *Humulus lupulus* var. *lupuloides* E. Small
Cultivar. Oxbow B-07; CHUM 980.
- PI 617453. *Humulus lupulus* L.
Cultivar. CHUM 981.
- PI 617454. *Humulus lupulus* L.
Cultivar. CHUM 982. Pedigree - 21521 x 64035M.
- PI 617455. *Humulus lupulus* L.
Cultivar. CHUM 983. Pedigree - 21521 x 64035M.
- PI 617456. *Humulus lupulus* L.
Cultivar. CHUM 984. Pedigree - 21521 x 64035M.
- PI 617457. *Humulus lupulus* L.
Cultivar. CHUM 985. Pedigree - 21521 x 64035M.
- PI 617458. *Humulus lupulus* L.
Cultivar. CHUM 986. Pedigree - 51522 x 21361M.
- PI 617459. *Humulus lupulus* L.
Cultivar. CHUM 987. Pedigree - 51522 x 21361M.
- PI 617460. *Humulus lupulus* L.
Cultivar. CHUM 988. Pedigree - 21522 x 21429M.

- PI 617461. *Humulus lupulus* L.**
Cultivar. CHUM 989. Pedigree - 21522 x 21429M.
- PI 617462. *Humulus lupulus* L.**
Cultivar. CHUM 990. Pedigree - 21522 x 21429M.
- PI 617463. *Humulus lupulus* L.**
Cultivar. CHUM 991. Pedigree - 21522 x 21617M.
- PI 617464. *Humulus lupulus* L.**
Cultivar. CHUM 992. Pedigree - 21522 x 21617M.
- PI 617465. *Humulus lupulus* L.**
Cultivar. CHUM 993. Pedigree - 21500 x 21617M.
- PI 617466. *Humulus lupulus* L.**
Cultivar. CHUM 994. Pedigree - 21522 x 21617M.
- PI 617467. *Humulus lupulus* L.**
Cultivar. CHUM 995. Pedigree - 21522 x 21618M.
- PI 617468. *Humulus lupulus* L.**
Cultivar. CHUM 996. Pedigree - 21522 x 21618M.
- PI 617469. *Humulus lupulus* L.**
Cultivar. CHUM 997. Pedigree - 21522 x 21618M.
- PI 617470. *Humulus lupulus* L.**
Cultivar. CHUM 998. Pedigree - 21522 x 21618M.

The following were collected by Richard O. Hampton, 2170 Bonnie Dr., Payette, Idaho 83661, United States. Donated by Richard O. Hampton, 2170 Bonnie Dr., Payette, Idaho 83661, United States; Jodi Smith-Jackson, USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 01/13/2000.

- PI 617471. *Humulus lupulus* var. *pubescens* E. Small**
Wild. Rulo-E; CHUM 1019. Collected 11/1999 in Missouri, United States. Latitude 40° 3' 39" N. Longitude 95° 23' 33" W. Elevation 260 m. Along the lower Missouri River. Pedigree - Collected from the wild in Missouri. Certainly the premier population of this lower Missouri River region; includes plants that arguably produce the highest ratio of cones per unit-plant-mass in North America, with some of the most favorable cone/plant-type attributes. All cone samples yielded seeds; the fewest (18) produced by plant #8 and the most by plants #1 (~1,000) and #9 (~2,000).

The following were collected by Richard O. Hampton, 2170 Bonnie Dr., Payette, Idaho 83661, United States. Received 01/13/2000.

- PI 617472. *Humulus japonicus* Siebold & Zucc.**
Wild. Indian Cave; CHUM 1022. Collected in Nebraska, United States. Latitude 40° 14' 47" N. Longitude 95° 31' 2" W. Elevation 280 m. Along the lower Missouri River. Collected 11/1999 in Nebraska, United

States. Latitude 40° 14' 47" N. Longitude 95° 31' 2" W.
Elevation 280 m. Along the lower Missouri River. Pedigree - Collected from the wild in Nebraska. The Craig-SW and Indian Cave sites contain populations that appear to have 100% *H. japonicus* (i.e. NOT a sub-species of *H. lupulus*, as the binomial indicates). Compatibility of this species with conventional breeding-program objectives is problematic. Collection purpose: to test progenies for possible resistance to *Sphaerotheca humuli* DC. (Burr.); reconsideration of its value as a genetic resource, pending the outcome of resistance screen.

The following were developed by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/20/2000.

PI 617473. *Humulus japonicus* Siebold & Zucc.

Cultivated. *H. japonicus* OP (579/580); CHUM 1023. Pedigree - OP *H. japonicus* x *H. japonicus*. Seed increase of species *H. japonicus* using accessions PI 559274 and PI 559275.

The following were collected by M.J. Murray, Unknown. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/17/1989.

PI 617474. *Mentha x dalmatica* Tausch

Wild. Collected in Georgia. Latitude 43° 1' N. Longitude 41° 2' E. Sukhumi, inland from the Black Sea beach. Pedigree - Collected from the wild in the USSR. Hairy and male sterile *M. arvensis* L. from Tucker who obtained it from Dr. R. M. Harley, originally from county of Cornwall, England. (MJM - Axillary flowers, *arvensis* odor).

The following were collected by Isao Shimura, Tokyo University of Agriculture & Technology, Faculty of Agriculture, Tokyo, Tokyo 183, Japan. Developed by Medical Plant Garden, Science University of Tokyo, 2641 Yamazaki, Noda City, Chiba 278, Japan. Received 04/07/1983.

PI 617475. *Mentha japonica* (Miq.) Makino

Cultivated. Pedigree - Open pollinated from botanical collection.

The following were developed by Australia Dept. Agriculture, Ovens Research Station, PO Box 235, Myrtleford, Victoria 3737, Australia. Donated by Fred Bienvenu, Dept. Agriculture and Rural Affairs, Ovens Res. Sta., Ovens Highway PO Box 235, Myrtleford, Victoria 3737, Australia. Received 02/03/1992.

PI 617476. *Mentha australis* R. Br.

Uncertain. Collected in Victoria, Australia. Pedigree - Uncertain, possibly collected wild?. Additional information forthcoming.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 01/31/1992.

PI 617477. *Mentha pulegium* L.

Wild. W6-9520; Poleo. Collected 03/31/1991 in Cordoba, Spain. Latitude 37° N. Longitude 4° W. Elevation 700 m. Mountains near Zagrilla Alta in Southwestern Cordoba Prov. Pedigree - Collected from the wild in Spain. Andalucians make a tea from the plant.

The following were donated by Leonid A. Burmistrov, N.I. Vavilov Research Institute of Plant Industry, Department of Introduction, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 01/27/1992.

PI 617478. *Mentha kopetdaghensis* Boriss.

Wild. Kara Kala (?). Collected in Turkmenistan. Latitude 56° 18' N. Longitude 38° 29' E. Elevation 900 m. Kopetdag Mountains, near the border with Iran. Pedigree - Collected from the wild in Turkmenia. This in one of a set of five collections which differ only by their elevation.

PI 617479. *Mentha kopetdaghensis* Boriss.

Wild. Kara Kala (?). Collected in Turkmenistan. Latitude 56° 18' N. Longitude 38° 29' E. Elevation 1200 m. Kopetdag Mountains, near the border with Iran. Pedigree - Collected from the wild in Turkmenistan. This in one of a set of five collections which differ only by their elevation.

The following were developed by Arthur O. Tucker, Delaware State University, Department of Agriculture & Natural Resources, 1200 North Dupont Highway, Dover, Delaware 19901-2277, United States. Received 02/28/1992.

PI 617480. *Mentha hybrid*

Breeding. Pedigree - Selection of *M. arvensis* x *M. longifolia* (23-39).

The following were collected by Colin Ogle. Donated by Jeff E. Miller, AgResearch, Grasslands Research Centre, Fritzhert West, Private Bag 11008, Palmerston North, North Island, New Zealand. Received 04/27/1992.

PI 617481. *Mentha cunninghamii* Benth.

Wild. Collected 01/27/1992 in North Island, New Zealand. Latitude 39° 40' S. Longitude 175° 45' E. Rangitikei Dist., Waimahora Swamp in the Santoft Forest. Lat/lon accurate to Rangitikei District. Pedigree - Collected from the wild in New Zealand.

The following were collected by John W. Wrigley, PO Box 1639, Coffs Harbour, New South Wales 2450, Australia. Received 04/29/1992.

PI 617482. *Mentha diemenica* Spreng.

Wild. Collected 1992 in New South Wales, Australia. Latitude 20° 47' S. Longitude 153° 2' E. 3km along Woolli Rd. adjacent to a creek in eucalypt woodland. Pedigree - Collected from the wild in Australia. Post-entry permit no. 37-71362.

The following were developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/29/1992.

- PI 617483. *Mentha canadensis* L.**
Breeding. Pedigree - Increased seed from CMEN 572.
- PI 617484. *Mentha hybrid***
Breeding. Pedigree - Increased seed of CMEN 607.
- PI 617485. *Mentha hybrid***
Breeding. Pedigree - Increased seed from CMEN 608.

The following were collected by Thomas A. Lumpkin, Washington State University, Department of Crop and Soil Science, 261 Johnson Hall, Pullman, Washington 99164-6420, United States. Received 08/05/1992.

- PI 617486. *Mentha x verticillata* L.**
Cultivated. 14. Collected 07/30/1992 in Sakhalin, Russian Federation. Latitude 47° 2' N. Longitude 142° 12' E. Elevation 500 m. Pyatirechye, Sakhalin Island - dacha area e. from Kholmsk. Pedigree - Unknown.
- PI 617487. *Mentha spicata* L.**
Cultivated. 14. Collected 07/30/1992 in Sakhalin, Russian Federation. Latitude 47° 2' N. Longitude 142° 12' E. Elevation 500 m. Pyatirechye, Sakhalin Island - dacha area e. from Kholmsk. Pedigree - Unknown.
- PI 617488. *Mentha x piperita nothosubsp. citrata* (Ehrh.) Briq.**
Cultivated. 14. Collected 07/30/1992 in Sakhalin, Russian Federation. Latitude 47° 2' N. Longitude 142° 12' E. Elevation 500 m. Pyatirechye, Sakhalin Island - dacha area e. from Kholmsk. Pedigree - Unknown.
- PI 617489. *Mentha hybrid***
Cultivated. 14. Collected 07/30/1992 in Sakhalin, Russian Federation. Latitude 47° 2' N. Longitude 142° 12' E. Elevation 500 m. Pyatirechye, Sakhalin Island - dacha area e. from Kholmsk. Pedigree - *M. aquatica* x *spicata* var. *crispa*.
- PI 617490. *Mentha spicata* L.**
Cultivar. 24; mint = myata. Collected 07/24/1992 in Primorye, Russian Federation. Latitude 43° 10' N. Longitude 131° 53' E. Elevation 100 m. Vladivostok, Primor'ye - dacha garden NE on city edge. Pedigree - Unknown. Glabrous dark green.
- PI 617491. *Mentha longifolia* (L.) Huds.**
Cultivar. 25; "Velvet"; mint = myata. Collected 07/24/1992 in Primorye, Russian Federation. Latitude 43° 10' N. Longitude 131° 53' E. Elevation 100 m. Vladivostok, Primor'ye - dacha garden NE on city edge. Pedigree - Unknown.
- PI 617492. *Mentha x villosa* Huds.**
Cultivar. 26; mint = myata. Collected 07/24/1992 in Primorye, Russian Federation. Latitude 43° 10' N. Longitude 131° 53' E. Elevation

100 m. Vladivostok, Primor'ye - dacha garden NE on city edge. Pedigree - Unknown. Pubescent round leaves.

PI 617493. *Mentha x gracilis* Sole

Wild. 28; mint = myata. Collected 07/24/1992 in Primorye, Russian Federation. Latitude 43° 58' N. Longitude 132° E. Elevation 100 m. Primor'ye near Ussuriysk. Pedigree - Collected from the wild in Russia. ID?: Identity needs to be verified.

PI 617494. *Mentha* sp.

Cultivated. 27; mint = myata. Collected 07/24/1992 in Primorye, Russian Federation. Latitude 43° 10' N. Longitude 131° 53' E. Elevation 100 m. Vladivostok, Primor'ye - dacha garden NE on city edge. Pedigree - Unknown.

The following were developed by Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu, China. Received 10/09/1992.

PI 617495. *Mentha haplocalyx* Briq.

Uncertain. Collected in Jiangsu, China. Pedigree - Uncertain. Donor info sheet by H L Chambers.

The following were developed by Dennis A. Johnson, Washington State University, Rt 2 Box 2953A, Prosser, Washington 99350-9687, United States. Received 10/09/1992.

PI 617496. *Mentha x gracilis* Sole

Breeding. Scotch sel. 227. Pedigree - Selection of irradiated Scotch.

PI 617497. *Mentha x gracilis* Sole

Breeding. Scotch sel. 770. Pedigree - Selection of irradiated Scotch.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Developed by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/16/1992.

PI 617498. *Mentha australis* R. Br.

Cultivated. Pedigree - Seedling selected from seed.

The following were donated by James McFerson, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456, United States. Received 08/13/1993.

PI 617499. *Mentha spicata* L.

Cultivated. *M. spicata* OP. Collected in Guatemala. Developed in United States. Pedigree - Open-pollinated composite collected in Pennsylvania. Reference PI 294099, G-11215.

The following were collected by R.G. Coveny. Donated by Peter Cuneo, Royal Botanical Gardens Sydney, Mount Annan Botanic Garden, Mount Annan Drive, Mount Annan, New South Wales 2567, Australia. Received 01/13/1995.

PI 617500. *Mentha satureioides* R. Br.

Cultivated. Collected 08/22/1987 in New South Wales, Australia. Latitude 29° 16' S. Longitude 150° 6' E. Elevation 0 m. 13.2 km E of North Star turnoff on Newell Hwy en back route to Yetman via Yallaroi. Growing with *Ixiolaena* sp. RGC 12677, *Eucalyptus populnea*, *Eremophila mitchellii*, *Geijera parviflora*, *Alectryon oleifolius*, etc. Roadside ditch. Clayey soil. Abundant. Herb to 15 cm high. Very aromatic leaves (pepermint).

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/07/1995.

PI 617501. *Mentha spicata* L.

Wild. Collected 09/04/1995 in Oregon, United States.

The following were donated by Paul Fridlund, Washington State University, IAREC, Prosser, Washington 99350, United States. Received 08/17/1981.

PI 617502. *Pyrus communis* L.

Cultivar. "Anjou"; CPYR 63; IRP 73-1. Pedigree - Unknown. Clone from IR-2, Prosser, Washington. Prosser obtained from C&O Nursery (Washington) in 1975. The name and origin of Beurre d'Anjou are somewhat confused. American and British authors refer to this pear as Anjou or Beurre d'Anjou, but other continental European writers recognize the variety as Nec Plus Meuris and do not approve of Anjou as being a proper synonym. Apparently the name Anjou or Beurre d'Anjou was erroneously applied to the variety when introduced to America and England. American pomologists have generally attributed the origin of this variety to France, although they cite no specific data as to time or locality. Leroy, on the other hand, states as a fact that the variety originated with Van Mons at Louvain Belgium in 1819 under the name of Nec Plus Meuris. It is interesting to note that the tree labeled Nec Plus Meuris in the variety collection obtained from France in 1913 turned out to be identical with Beurre d'Anjou as the variety is known in the Pacific Northwest. Fruit medium or larger in size, generally globular in shape, sometimes pyriform. Skin usually creamy-yellow in color but variable, clear when grown in dry climates but inclined to russet in wet climates. Quite attractive when properly grown. Flesh fairly fine, buttery, juicy, some grit cells at center. Aromatic, spicy, sweet flavor when at its best. Inclined to become mealy and dry in texture if kept too long in storage. Susceptible to Anjou scald and Botrytis rot. Tree vigorous, upright, spreading, somewhat temperamental as to production. Moderately susceptible to fire blight. The leading late pear in the Pacific Northwest. -- H. Hartman, Oregon Ag. Experiment Station, 1957. Anjou. Origin France. Imported in 1844 by Col. M.P. Wilder in 1844. Synonyms: Beurre d'Anjou, Beurre Niell, Butter of Anjou, Colniac Bosc. D'Anjou, Fondante du Bois, Nec Plus Meuris, Ne Plus Meuris (of the French), Poire Niell. - W.H. Ragan, Nomenclature of the Pear, 1908 <P><.

The following were developed by M. Tourasse. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/21/1987.

PI 617503. *Pyrus communis* L.

Cultivar. "Directeur Hardy". Pedigree - Seedling selection. From the seed beds of M. Fourasse and introduced by M. Baltet of Troyes, France, about 1894. Fruit resembles that of Beurre Hardy in size, form and coloration but it is obviously a distinct variety. Flesh moderately fine, buttery and juicy but firmer in texture than Beurre Hardy. Sweet, pleasing flavor but lacks dessert quality. Midseason. Tree of medium vigor, productive, true dwarf on quince. Moderately susceptible to fire blight. - H. Hartman, Oregon Ag. Experiment Station, 1957.

The following were developed by Frederic (Frank) C. Reimer, Oregon State University, Southern Oregon Experiment Station, Talent, Oregon, United States. Donated by Porter Lombard, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon 97331, United States. Received 02/21/1981.

PI 617504. *Pyrus communis* L.

Cultivar. "Reimer Red". 2054. Pedigree - Comice x Max Red Bartlett. Reimer Red (PI 617504).-Originated in Medford, Oregon, by Frank C. Reimer. Plant patent 2054; issued 25 Apr. 1961 to Frank C. Reimer. Named and introduced by Stark Brothers Nurseries, Comice x Max-Red Bartlett. Fruit: large; skin yellow ground color, overspread with red; flesh white, fine-grained; resembles Max-Red Bartlett ripening about 3 weeks later. Tree medium to large; vigor moderate. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by Paul Fridlund, Washington State University, IAREC, Prosser, Washington 99350, United States. Received 01/16/1984.

PI 617505. *Pyrus calleryana* Decne.

Uncertain. Developed in Uncertain. Pedigree - Uncertain.

The following were collected by B. Thibault, Station de Recherches, D'Arboriculture Fruitiere, Beaucouze, Angers, Maine-et-Loire 49000, France. Developed by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617506. *Pyrus cordata* Desv.

Breeding lot C R1-A. Collected in France. Pedigree - Seedling selection from seed collected wild in France. Original seedlot collected by B. Thibault.

The following were developed by Nancy W. Callan, Montana State University, Western Agricultural Research Center, 580 Quast Lane, Corvallis, Montana 59828-9721, United States. Received 03/24/1982.

PI 617507. *Pyrus fauriei* C. K. Schneid.

Breeding. Pedigree - Seedling selection from seedlot collected in Korea.
Selected by Callan for cold hardiness in Montana.

The following were developed by Frederic (Frank) C. Reimer, Oregon State University, Southern Oregon Experiment Station, Talent, Oregon, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617508. *Pyrus hondoensis* Nakai & Kikuchi

Breeding. Pedigree - Seedling selection from seed collected wild in Japan. Original seedlot received by Reimer from Japan in 1917.

The following were developed by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617509. *Pyrus hondoensis* Nakai & Kikuchi

Breeding. Pedigree - Seedling selection from seed originally collected in Japan.

PI 617510. *Pyrus betulifolia* Bunge

Breeding. Pedigree - Seedling selection from seedlot collected in Asia.

The following were developed by University of North Dakota, Dept. Horticulture, Fargo, North Dakota, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617511. *Pyrus* hybrid

Breeding. Pedigree - Uncertain.

The following were developed by Oregon State University, Oregon Agr. Experiment Station, Medford, Oregon, United States. Donated by Porter Lombard, Oregon State University, Department of Horticulture, Cordley Hall 2042, Corvallis, Oregon 97331, United States. Received 02/21/1981.

PI 617512. *Pyrus* hybrid

Breeding. Pedigree - Seedling selection from seedlot collected in Asia. Drought resistant.

The following were developed by Dan Millikan, University of Missouri, Dept. Plant Pathology, Columbia, Missouri 65211, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617513. *Pyrus calleryana* Decne.

Breeding. Ornamental Pear. Pedigree - Seedling selection. Atypical, selected in Montana for non-thorniness and cold-hardiness.

PI 617514. *Pyrus calleryana* Decne.

Breeding. Pedigree - Seedling selection.

PI 617515. *Pyrus calleryana* Decne.
Breeding. Pedigree - Seedling selection.

The following were donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States; The Morton Arboretum, Route 53, Lisle, Illinois 60532, United States. Received 04/08/1983.

PI 617516. *Pyrus fauriei* C. K. Schneid.
Cultivated. *P. fauriei* #107432. Collected in Korea, South. Developed in United States. Pedigree - Uncertain, possibly collected wild.

The following were developed by Frederic (Frank) C. Reimer, Oregon State University, Southern Oregon Experiment Station, Talent, Oregon, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617517. *Pyrus pyrifolia* (Burm. f.) Nakai
Breeding. Pedigree - Seedling selection from OP seed collected in Arboretum. Original seedlot collected by Wilson.

The following were developed by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617518. *Pyrus calleryana* Decne.
Breeding. Ornamental Pear. Pedigree - Seedling selection from Asian seedlot. Long-chilling seed (selected for cold-hardiness), shows no evidence of winter damage.

The following were developed by Frederic (Frank) C. Reimer, Oregon State University, Southern Oregon Experiment Station, Talent, Oregon, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617519. *Pyrus communis* L.
Breeding. Rootstock Pear; OPR 5. Pedigree - Bartlett x (Old Home x Farmingdale).

The following were developed by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617520. *Pyrus calleryana* Decne.
Breeding. Rootstock Pear; OPR 168. Pedigree - Seedling selection. Rootstock sprout.

The following were collected by Olez. Developed by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617521. *Pyrus communis* L.

Breeding. Olez 3. Collected in Turkey. Latitude 40° 43' 48" N. Longitude 30° 9' 0" E. Elevation 0 m. Derbent, Izmit - western Turkey. Pedigree - Seedling selection B from seed collected in Turkey. 'Olez 3' - Seed collected in Turkey by Hayati lez in November, 1963 and sent to Mel Westwood in Oregon. Collected at Derbent, Izmit. Low elevation, trees abundant. Fruit small, globular, symmetrical. Stem short and thick. Cavity shallow, smooth. Leaves orbicular in shape, rounded at base, with crenate margins and acuminate tips. Branches thorny. -- letter from lez to Westwood, 18 November, 1963. Fruit larger than wild type, may be hybrid with domestic variety.

PI 617522. *Pyrus elaeagrifolia* Pall.

Breeding. Olez 2 - glabrous. Collected in Turkey. Latitude 41° 48' 0" N. Longitude 33° 43' 1" E. Elevation 1000 m. Pedigree - Seedling selection C from seed collected in Turkey. 'Olez 2' - Seed sent to Mel Westwood from Turkey by Hayati lez in November, 1963. 'Pyrus elaeagrifolia (Ahlat). Seeds can be a mixture of different types within this species. Trees are abundant and elevation is high, about 1000 m. Origin: K re, Kastamonu; north central part of Turkey, close to Black Sea' -- letter from lez to Westwood, 18 November, 1963. This seedling is a glabrous form of *P. elaeagrifolia*.

PI 617523. *Pyrus elaeagrifolia* Pall.

Breeding. Olez 2 - glabrous. Collected in Turkey. Latitude 41° 48' 0" N. Longitude 33° 43' 1" E. Elevation 1000 m. near K re. Pedigree - Seedling selection D from seed collected in Turkey. 'Olez 2' - Seed sent to Mel Westwood from Turkey by Hayati lez in November, 1963. 'Pyrus elaeagrifolia (Ahlat). Seeds can be a mixture of different types within this species. Trees are abundant and elevation is high, about 1000 m. Origin: K re, Kastamonu; north central part of Turkey, close to Black Sea' -- letter from lez to Westwood, 18 November, 1963.

The following were developed by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/08/1983.

PI 617524. *Pyrus pashia* Buch.-Ham. ex D. Don

Breeding. Pedigree - Seedling selection B from seed collected in W. Pakistan. Low-chilling type. Original seedlot collected by C.N. Ali in the Murree Hills.

PI 617525. *Pyrus elaeagrifolia* Pall.

Breeding. Pedigree - Seedling selection from seed collected in Turkey. Original seedlot collected by H. Olez.

PI 617526. *Pyrus* hybrid

Breeding. Rootstock Pear. Pedigree - *P. betulaefolia*-2 x *P. calleryana*-2 Possibly a good rootstock clone.

The following were donated by Larry L. McGraw, Sheep Rock Nursery, Kimberly, Oregon 97848, United States. Received 01/05/1989.

PI 617527. *Pyrus communis* L.

Cultivar. "Jiugnos". Developed in Italy. Pedigree - Uncertain. I have been watching a very unique miniature fruited, June ripening pear for three years, and have been wondering whether it might have value, because of its earliness, for fruit breeding, or simply as a dessert fruit for the table, or as a tidbit for restaurants. The tree I have observed has a quince rootstock, and a Bartlett interstem worked high with the variety which is the subject of this article. It is 55-65 years old, has a trunk diameter of 10 inches, and a height of 25 feet. The variety was brought from Italy to California, and from there to Oregon before 1900. Its general place of origin is Termini Imerese-Province, near Palermo, Sicily. It has been called the 'Jiugnos' (June) pear, apparently a miniature pear native to Sicily, getting its name from the fact that it ripens in Sicily in June. The fruit ripens on the tree in late June or July in Oregon. It has a delicious, delicate, honey-like flavor. The tree blooms profusely, yields copiously, and bears annually an at an early age. It appears to be resistant to scab and fire blight. I am not certain as to whether it needs a pollinating variety. It blooms with Bartlett. The Bartlett interstem overgrows the quince rootstock, and the Jiugnos overgrows the Bartlett to some degree. The tree I have observed is on the property of Mary and Augusta Amato, in Portland. Their father (deceased), Giuseppe G. Amato, was born in Italy in 1878, and came to the United States in the early 1900's. He was a fruit and vegetable distributor in Sicily, and continued in the same work in this country, in the city of Portland. He must have loved to grow fruits, because I find trees of pear, peach, cherry, apple and quince on the property of his surviving daughters. The quince tree is top-worked to a collection of medlars from Italy. Augusta Amato informs me that little Jiugno pears can be canned whole or put down in liquors for special delicacies. --Larry L. McGraw. 1968. Fruit Varieties & Horticultural Digest 22(4):76.

The following were developed by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 01/19/1989.

PI 617528. *Pyrus* hybrid

Breeding. Pedigree - 20th Century x D'Anjou. Growth habit: natural vertical cordon covered with spurs.

The following were developed by Bill MacKently, St. Lawrence Nurseries, 325 State Highway 345, RD 2, Potsdam, New York 13676, United States. Received 11/27/1989.

PI 617529. *Pyrus communis* L.

Cultivar. "Stacey". Pedigree - Chance seedling. Introduced by St. Lawrence Nurseries, Potsdam, New York. Fruit small but sweet, ripe mid-August. The original tree, growing near Staceyville, Maine is at least 250 years old and 108 inches in circumference. Fruit should be picked in mid-August before fully ripe and allowed to ripen in a cool storage space. Brought to the attention of St. Lawrence Nurseries by Clarke Nattress. -- St. Lawrence Nurseries Catalog, 2005. The Stacey Pear Tree is a very old and remarkably healthy tree, tree on an old farm near a much younger apple orchard. As its name implies, it is in Stacyville, a neighboring township to the northwest of Benedicta. Most, if not all, of the local residents knew about the tree long before

Pete Grabber, Lou Riccadelli, and myself 'discovered' the tree in the early 1980s while foraging for cider apples. Of the three of us, I was the only one interested enough in the tree to promote it, sending boxes of the fruit to several nurseries including Stark Brothers. Since they sell mostly commercial varieties to temperate zone orchards around the world, an extremely hardy, self-fruitful, and disease-free pear tree was not on their radar screen. Probably if it had fruit larger than Bartlett or Anjou they would have responded. Finally, a friend of mine gave me a catalog from St. Lawrence Nurseries in upstate New York. Bill MacKentley, who I have since developed a friendship with, was very enthusiastic about the tree, and was the first to ever offer the tree for sale in the early 1980s. From measurements taken by myself and Jack Kertesz, Bill estimated the tree to be upwards of 250 years old (meaning closer to 300 as the years have passed). He said that he had seen pears 300+ in Massachusetts that the ages were confirmed by rings in the wood, but that none of them were in as good shape as the Stacey. In fact, some had only a few remaining framework branches.
http://www.benedicta-maine.com/Stacey_Pear_Tree/stacey_pear_tree.html -- accessed December, 200.

The following were donated by Bill MacKentley, St. Lawrence Nurseries, 325 State Highway 345, RD 2, Potsdam, New York 13676, United States. Received 11/27/1989.

PI 617530. *Pyrus communis* L.

Cultivar. "Waterville". Developed in United States. Pedigree - Uncertain. Originated in Waterville, Vermont. Fruit large with coarse, sweet flesh, ripens in September, keeps well. Tree vigorous, cold hardy to -50 F. Brought to the attention of St. Lawrence Nurseries, Potsdam, New York by David Fried. -- Fruit, Berry & Nut Inventory, Seed Savers Exchange, 2001.

The following were developed by USDA, ARS, U.S. National Arboretum, Woody Landscape Plant Germplasm Repository, Glenn Dale, Maryland 20769, United States. Donated by Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 11/24/1989.

PI 617531. *Pyrus fauriei* C. K. Schneid.

Breeding. *P. fauriei* - Korea. Pedigree - Seedling selection from seed collected wild in Korea. Small multi-stemmed irreg. decid. shrub ca 1.3m tall.

The following were developed by M.E. Dreyer. Donated by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 01/08/1990.

PI 617532. *Pyrus communis* L.

Cultivar. "Colette". 1401. Pedigree - Parentage unknown. Colette (PI 617532). -Originated in Freeport, Illinois, by Marie E. Dreyer. Introduced in 1953. Plant patent 1401; 28 June 1955; assigned to Henry Field Seed & Nursery Co., Shenandoah, Iowa. Parentage unknown; discovered in 1941. Fruit: resembles Bartlett; flavor fine; matures over

a long period of time; suitable for canning. Tree: flowers bloom over a long period of time. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by Carlton Nursery, 14301 SE Wallace Rd., PO Box 398, Dayton, Oregon 97114-9988, United States. Received 01/10/1990.

PI 617533. *Pyrus calleryana* Decne.

Cultivar. "Cleveland Select"; Ornamental Pear. Developed in United States. Pedigree - Probably a selection from a street tree in Cleveland, OH. Ornamental *P. calleryana* cultivar. Named for the city of Cleveland, Ohio, where it presumably originated. Probably derived from a street tree in Cleveland, Ohio. May be synonymous with Chanticleer. Tree is evenly branched with a conical crown shape and has very glossy summer foliage, and nice reddish fall color. Along with 'Aristocrat' it is considered one of the hardiest *P. calleryana* cultivars.

The following were donated by William Howell, Washington State University, Irrigated Agr. Research & Extension Cntr, 24106 North Bunn Road, Prosser, Washington 99350, United States. Received 01/08/1990.

PI 617534. *Pyrus communis* L.

Cultivar. "Fame". Developed in Uncertain. Pedigree - Uncertain. Virus-free clone from IRP.

The following were developed by Frederic (Frank) C. Reimer, Oregon State University, Southern Oregon Experiment Station, Talent, Oregon, United States. Donated by David Sugar, Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon 97502, United States. Received 01/22/1990.

PI 617535. *Pyrus communis* L.

Breeding. French Resistant. Pedigree - Seedling selection. Shows resistance to blight.

The following were developed by Oregon State University, Oregon Agr. Experiment Station, Medford, Oregon, United States. Donated by David Sugar, Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon 97502, United States. Received 01/22/1990.

PI 617536. *Pyrus communis* L.

Breeding. Bartlett French Compatible. Pedigree - Seedling selection.

The following were donated by David Sugar, Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon 97502, United States. Received 01/22/1990.

PI 617537. *Pyrus ussuriensis* Maxim.

Cultivar. "Chien Li". Developed in China. Pedigree - Uncertain.

PI 617538. *Pyrus communis* L.

Cultivar. "Poite Berringer". Developed in Uncertain. Pedigree - Uncertain.

PI 617539. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. "Mikado". Developed in Uncertain. Pedigree - Unknown. First imported into Holland by Freiherr V. Siebold during the early part of the nineteenth century. Introduced into France in 1873. Fruit fairly large for the type, roundish in form. Skin granular, pale yellow in color, numerous gray dots. Flesh white, gritty, potato-like in texture. Perfumed, quince-like flavor. Poor in dessert quality. Early midseason. -- H. Hartman 1957. Among the most successful importers of oriental plants was Freiherr V. Siebold who maintained a nursery garden in Leyden, Holland, during the first half of the nineteenth century. Of the pears imported by him, Mikado was one. This was procured from Von Siebold's nursery in 1873 by Messrs. Simon-Loius, Metz, Lorraine. Fruit rather large, globular-ovoid; skin rough to the touch, yellowish-olive, dotted with gray specks; flesh white, fine, breaking, rather juicy, perfumed, with a pronounced quince flavor, subacid; poor, uneatable raw; end of September. -- U.P. Hedrick, The Pears of New York, 1921.

The following were donated by Bear Creek Nursery, Northport, Washington, United States. Received 01/31/1990.

PI 617540. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. "Singo". Developed in Korea, South. Pedigree - Uncertain. Asian cultivar, no additional information provided.

The following were developed by A.S. Tuz, N.I. Vavilov Institute, Maikop Experiment Station, Maikop, Adygea, Russian Federation. Donated by Leonid A. Burmistrov, N.I. Vavilov Research Institute of Plant Industry, Department of Introduction, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 02/02/1990.

PI 617541. *Pyrus communis* subsp. *caucasica* (Fed.) Browicz

Breeding. Pedigree - Uncertain, selection from the wild?.

PI 617542. *Pyrus* hybrid

Breeding. Pedigree - *P. communis* var. *caucasica* x *P. salicifolia*.

The following were developed by Jay Goodwin, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 04/09/1992.

PI 617543. *Pyrus communis* L.

Breeding. Pedigree - OP seedling selection from seedlot CPYR 2346.

The following were donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617544. *Pyrus communis* L.

Cultivar. "Doina". Developed in Uncertain. Pedigree - Uncertain. No additional information provided upon receipt.

The following were developed by Nicolae Braniste, Institutul de Cercetare si, Productie Pentry Pomicultura, Pitesti-Maricineni, Arges 0300, Romania. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617545. *Pyrus communis* L.

Cultivar. "Aromata di Bistrita". Pedigree - Uncertain. No additional information provided upon receipt.

The following were donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617546. *Pyrus communis* L.

Cultivar. "Republica". Developed in Romania. Pedigree - Uncertain. No additional information provided upon receipt.

The following were developed by R. Blake, USDA, Lakewood, Ohio, United States. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617547. *Pyrus communis* L.

Cultivar. "Lakewood". Pedigree - Uncertain. No additional information provided upon receipt.

The following were developed by J.W. Daniell; W.A. Chandler, Unknown; Ron Lane, University of Georgia, Georgia Agr. Exp. Sta., Department of Horticulture, Griffin, Georgia 30223, United States; Gerard Krewer, University of Georgia, Georgia Agr. Exp. Station, Coastal Plain Exp. Sta., Tifton, Georgia 31793, United States. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617548. *Pyrus hybrid*

Cultivar. "Spalding". Pedigree - Unknown, although one parent is probably cv 'Pineapple'. Spalding (PI 617548).-Originated in Spalding County, California, by JW. Daniell, R.P. Lane, W.A. Chandler, and Gerard Krewer, University of Georgia, Experiment. Introduced in 1982. Probably Pineapple x unknown. Selected in 1957. Fruit: resembles that of Magness; large; round-pyriform; flesh creamy-white, fine texture, not buttery, juicy with grit cells only around the core; flavor good, subacid, light aroma; skin yellow, lightly russet with brown dots, no blush, smooth. Tree: size similar to that of Magness; flowers self-fertile; productive; resistant to fire blight. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by Brooks D. Drain; L.M. Safley. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617549. *Pyrus communis* L.

Cultivar. "Morgan". Pedigree - Bartlett x Late Faulkner. Morgan (PI 324134).-Originated in Knoxville, Tennessee, by Brooks D. Drain and Lawson M. Safley, Tennessee Agriculture Experiment Station. Introduced in 1957. Bartlett x Late Faulkner. Fruit: medium to large, 2 3 / 4 inches in diam.; round oblong & slightly pyriform; calyx open, large; skin tough, thick, light yellow, russeted, slight blush; dots many, large, russeted; core large, closed; flesh white, tinged with yellow moderately juicy, tender, melting & flavor sweet-subacid sprightly, quality good; ripens in late August. Tree: large, upright, vigorous; under favorable conditions produces good annual crops; blooms later than selections of similar maturity period; considered resistant to fire blight. Named in honor of Harcourt A. Morgan, President, University of Tennessee, from 1919 to 1933. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by E.L. Miller, Nacogdoches, Texas, United States. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617550. *Pyrus communis* L.

Cultivar. "Miller's Seedling"; "Flower Mountain Pear". Latitude 31° 30' N. Longitude 94° 45' W. Elevation 0 m. Pedigree - Uncertain. No additional information provided upon receipt.

The following were donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 02/02/1990.

PI 617551. *Pyrus communis* L.

Cultivar. "Hall 20". Developed in United States. Pedigree - Uncertain. No additional information provided upon receipt.

The following were developed by USDA/ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 02/02/1990.

PI 617552. *Pyrus communis* L.

Breeding. Cedar Lane Farm 1. Pedigree - Uncertain. No additional information provided upon receipt.

PI 617553. *Pyrus communis* L.

Breeding. Cedar Lane Farm 3. Pedigree - Uncertain. No additional information provided upon receipt.

The following were developed by University of Minnesota, Minnesota Agr. Exp. Sta., St. Paul, Minnesota 55108, United States. Donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States. Received 02/14/1990.

PI 617554. *Pyrus communis* L.

Cultivar. "Bantam". Pedigree - Unknown partneage - seedling selection. Bantam (PI 617554). -Originated in Excelsior, Minnesota, by University of Minnesota Fruit Breeding Farm. Introduced in 1940. Parentage unknown; seed planted 1914; tested as Minnesota 3. Fruit: small; ovate; skin green, blushed red; flesh tender, melting, juicy, sweet, quality good; ripens in early September. Tree: very hardy; resistant to fire blight; upright-spreading; productive. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States. Received 02/14/1990.

PI 617555. *Pyrus communis* L.

Cultivar. "Bileu". Developed in Uncertain. Pedigree - Uncertain.

PI 617556. *Pyrus communis* L.

Cultivar. "Gaspard". Developed in United States. Pedigree - Uncertain.

PI 617557. *Pyrus communis* L.

Cultivar. "Placer". Developed in Uncertain. Pedigree - Uncertain.

The following were developed by Eugene C. Euwer, 8469 Cooper Spur Road, Parkdale, Oregon 97041, United States. Donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States. Received 02/14/1990.

PI 617558. *Pyrus communis* L.

Cultivar. "Columbia Red d'Anjou"; "Anjou - Columbia Red"; "Anjou - Euwer"; CANADA PYR152; Plant Patent 6194. Plant Patent 6194; 6194. Pedigree - Bud mutation of cultivar Anjou. Columbia Red Anjou (PI 617558).-A long-storing red sport of Anjou. Originated near Hood River, Oregon, in 1976 by Eugene C. Euwer. Plant patent 6194; issued 7 June 1988 to Eugene C. Euwer. Discovered as a sport in the top of a 60-year-old Beurre d'Anjou tree. Fruit: similar to standard Anjou except skin is overall bright red; lower rate of respiration and ethylene production result in longer storage and shelf life than standard Anjou; higher titratable acids and soluble solids than standard Anjou and Gebhard Red Anjou. Tree: size, shape, and growth characteristics same as parent; leaves, bark, and flower petals darker than parent Anjou. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by Larry L. McGraw, Sheep Rock Nursery, Kimberly, Oregon 97848, United States. Received 03/07/1990.

PI 617559. *Pyrus salicifolia* Pall.

Breeding. Pedigree - Seedling selection from seedlot from USSR. *P. salicifolia* hybrid, has pear blister mite resistance.

The following were donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 02/27/1990.

PI 617560. *Pyrus pashia* Buch.-Ham. ex D. Don

Wild. Collected in Nepal. Pedigree - Collected from the wild in Nepal. PIO has passport data.

The following were donated by Bill Schulz, 2446 Cardwell Hill Dr., Philomath, Oregon 97370, United States. Received 02/27/1990.

PI 617561. *Pyrus communis* L.

Cultivar. "Pineapple". Developed in Uncertain. Pedigree - Unknown seedling may have been brought from China in the 1850s. Named Pineapple by Georgia Exp. Station. Brief description in Proceedings of APS, 1922. Fruit of no consequence. Tree highly resistant to blight but somewhat susceptible to winter injury in southern Oregon. -- H. Hartman 1957. The Georgia Experiment Station received scions in 1910. The scions were taken from a very large tree growing on the plantation of Mrs. B.N. Stuckey, near Nesmith, South Carolina... It's chief and most interesting characteristic is that it is highly resistant, almost to the extent of immunity, to pear blight. The trees... have been subjected to the most rigid trials for infection to fire blight... the variety is so highly resistant that the orchardist may plant the trees without fear of blight. The exact history is unknown. Its botanical characteristics indicate that it is a hybrid between *P. serotina* and *P. communis*. Its exact parentage and time of origin, however, will probably never be known... Mr. George D. Lowe, investigating this subject, says in part, 'In the winter of 1888, Dr. C.C. Daniel, a prominent Liberty county, Georgia, physician, drove up to the gate of the John W. DeLoach plantation, some 40 miles south of the LeConte place, and now in Long county, Georgia. He handed Mr. DeLoach a pear switch with the remark that he had cut it from the finest pear tree he had ever seen in his life down on the island (near Brunswick, Georgia) advising Mr. DeLoach to set it immediately, which he did. It was placed in a small orchard of blighting Le Contes and Kieffers and grew off rapidly, as the pear always does in south Georgia... It appears that the original Pineapple pear was given to a planter in South Carolina by a relative who was an officer in Commodore Perry's fleet which visited China and Japan in the midl fifties, and brought the rooted pear from China when he returned. The tree now stands still vigorous and in bearing, nine feet in circumference just above the ground and with a tremendous spread of limbs... a few trees of this pear... have been located in.

The following were developed by David Hunter, Agriculture Canada, Research Station, Harrow, Ontario NOR 1G0, Canada; Harvey Quamme, Agriculture Canada, Research Station, Summerland, British Columbia V0H 1Z0, Canada. Donated by David Hunter, Agriculture Canada, Research Station, Harrow, Ontario NOR 1G0, Canada. Received 03/01/1990.

PI 617562. *Pyrus communis* L.

Cultivar. "Harrow Sweet"; CANADA PYR141. Pedigree - Bartlett x (Old Home x Early Sweet). Harrow Sweet (PI 617562). -A high quality late-season pear for the fresh market, selected for precocity, productivity, cold hardiness, and fireblight resistance. Originated at Agriculture Canada Research Station, Harrow, Ontario by D.M. Hunter, P. Pinsonneault, F. Kappel, H.A. Quamme, W.G. Bonn and R.E.C. Layne in 1992. Cross of Bartlett x Purdue 80-51 made in 1965 by R.E.C. Layne, selected by H.A. Quamme in 1980 and tested as HW-609. Fruit: medium to large, pyriform, yellow with red blush; visible lenticels, some russetting, appearance resembles Bartlett; Flesh white, sweet, juicy, flavorful; stores 10 weeks at 10C. Tree: medium size, upright to spreading, productive. Fireblight resistance similar to Harrow Delight. Pollen cross-compatible with Bartlett; graft compatible with quince. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by A. David Crowe, Agriculture Canada, Research Station, Kentville, Nova Scotia B4N 1J5, Canada. Received 04/05/1990.

PI 617563. *Pyrus communis* L.

Cultivar. "Earlibrite". Developed in Uncertain. Pedigree - Uncertain. EARLIBRITE is a medium size, attractive, good quality very early ripening pear from Nova Scotia, Canada. A cross of Clapp Favourite x Russet Bartlett made by L.E. Aalders in 1954, selected, named and described by A.D. Crowe and released in 1975. Fruit: fairly uniform, medium size, short pyriform, skin medium greenish yellow when ripe, 75% overload with rich orange red blush, smooth, very attractive. Flesh medium firm, buttery, juicy, soft when ripe, relatively free of grit cells, white to light cream. Stores and ripens well for its season without excessive core breakdown. Flavor mildly aromatic, moderately rich, very good. Stalk medium length and size, often curved, inserted in small cavity. Season very early, about with Lawson. Tree: moderately vigorous, good spur development, upright spreading. The fruit is Earlibrite has outstanding appearance, size and quality for its season. Blight resistance is unknown.

The following were developed by A. David Crowe, Agriculture Canada, Research Station, Kentville, Nova Scotia B4N 1J5, Canada. Received 04/05/1990.

PI 617564. *Pyrus communis* L.

Cultivar. "Dave's Delight". Pedigree - Beierschmidt x Bartlett. Daves's Delight (PI 617564). -An early season, attractive, very high quality pear, which stores well for its season and is relatively free of core breakdown. Originated at Kentville, Nova Scotia, by A.D. Crowe, Agriculture Canada Research Station. Beierschmidt x Bartlett. Released in 1986. Fruit: medium to below medium; pyriform, slightly irregular to ribbed; stem fairly long, inserted at a slight angle; basin small, shallow, calyx closed; skin yellow (#11A, R.H.S. 1986 ed.), up to 50% washed with attractive bright red (#40B, R.H.S. 1986 ed.); many inconspicuous lenticels, light russet near stem; core medium-small, closed;; flesh light cream, very fine and buttery, nearly free of grit cells; flavor aromatic, equal to or better than Bartlett. Early maturing, with Buerre Giffard; holds well on or off tree with good resistance to core breakdown. Tree: vigor moderate; appears cold hardy; relatively

precocious and productive. Released as a dessert pear; processing qualities not known. Not tested for processing but should equal Bartlett quality. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by Mark B. Fulford, Fulford Bros. Nursery, RR1 Box 3000, Robbins Farm Road, Monroe, Maine 04951, United States. Received 05/07/1990.

PI 617565. *Pyrus communis* L.

Cultivar. "Hermit". Developed in Uncertain. Pedigree - Uncertain. According to Fulford, this cultivar is immune or resistant to pear blister mite.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/29/1990.

PI 617566. *Pyrus koehnei* C. K. Schneid.

Cultivated. Collected 07/01/1990 in California, United States. Pedigree - Uncertain. This may be the same clone as PI 541832 (CPYR 818) from the W. Gibbs Nursery.

The following were developed by N.I. Vavilov Research Institute of Plant Industry, 44, B. Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Donated by Leonid A. Burmistrov, N.I. Vavilov Research Institute of Plant Industry, Department of Introduction, 44 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 01/07/1991.

PI 617567. *Pyrus elaeagrifolia* Pall.

Uncertain. Pedigree - Uncertain.

PI 617568. *Pyrus salicifolia* Pall.

Uncertain. Pedigree - Uncertain.

The following were developed by Frederic (Frank) C. Reimer, Oregon State University, Southern Oregon Experiment Station, Talent, Oregon, United States. Donated by Melvin N. Westwood, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 11/1985.

PI 617569. *Pyrus betulifolia* Bunge

Breeding. Pedigree - Open pollinated from seedling selections. Seed mix from four clones found by Reimer to be blight resistant.

PI 617570. *Pyrus betulifolia* Bunge

Breeding. Pedigree - Open pollinated from seedling selections. Seed from seedlings of Reimer's *P. betulifolia* from the Medford orchard.

The following were developed by D.S. Blair; L.P.S. Spangelo, Agriculture Canada, Research Station, Box 29, Beaverlodge, Alberta T0H 0C0, Canada; W.R. Phillips, Agriculture Canada, Canada. Donated by Raymond L. Granger, Agriculture Canada, Research Station, 430 Gouin Blvd. St.-Jean-sur-Richlieu, Saint-Jean, Quebec J3B 3E6, Canada. Received 09/04/1991.

PI 617571. *Pyrus communis* L.

Cultivar. "Enie"; CANADA PYR148. Pedigree - Zuckerbirne x Clapp Favorite. Enie (PI 617571).-Originated in Ottawa, Ontario, Canada, by Canada Dept. Agriculture Research Station. Introduced in 1948. Zuckerbirne x Clapp Favorite; selected in 1930. Fruit: size medium; quality good. Tree: vigorous; hardy at Ottawa. Recommended for home gardens in eastern Ontario and Quebec. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by Agriculture Canada, Agricultural Research Station, Regina, Saskatchewan, Canada. Donated by Raymond L. Granger, Agriculture Canada, Research Station, 430 Gouin Blvd. St.-Jean-sur-Richlieu, Saint-Jean, Quebec J3B 3E6, Canada. Received 09/04/1991.

PI 617572. *Pyrus communis* L.

Cultivar. "Miney"; CANADA PYR147. Pedigree - Zuckerbirne x Clapp Favorite. Fruit large, good quality, pleasant flavor. Resistant to fireblight. Recommended for home gardens in Eastern Canada.

The following were developed by Brooks D. Drain; L.M. Safley. Donated by James Lawson, Lawson Nursery, Rt. 1 Box 473, Yellow Creek Road, Ball Ground, Georgia 30107, United States. Received 09/09/1991.

PI 617573. *Pyrus communis* L.

Cultivar. "Carrick". Pedigree - Seckel x Garber. Carrick (PI 617573). -Originated in Knoxville, Tennessee, by Brooks D. Drain and Lawson M. Safley, Tennessee Agriculture Experiment Station. Introduced in 1957. Seckel x Garber; cross made in 1934. Fruit: medium to large, 2 3/4 inches in diam.; oblong pyriform; calyx open, large; skin thickness medium, tender, yellow, very russeted, slightly blushed; dots many, russeted; core small; flesh white, tinged with yellow, firm, tender, juicy, crisp; flavor sweet-subacid, sprightly, good; ripens in September. Tree: large; vigorous; spreading; some resistance to fire blight. Named in honor of the Reverend Samuel Carrick, President of the University of Tennessee, 1794 to 1809. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by Philip Ritz. Donated by Larry L. McGraw, Sheep Rock Nursery, Kimberly, Oregon 97848, United States. Received 12/09/1991.

PI 617574. *Pyrus communis* L.

Cultivar. "Walla Walla Seedling". Pedigree - Chance seedling. Very cold hardy, late summer to early fall cropper in the Walla Walla area. Fruits yellow, med. sized, well-flavored.

The following were donated by Robert Skirvin, University of Illinois, Dept of Horticulture, 258 Plant and Animal Biotech. Lab., Urbana, Illinois 61801, United States. Received 02/01/1992.

PI 617575. *Pyrus communis* L.

Cultivar. "Louise Bonne d'Avranches Panachee". Developed in France. Pedigree - Bud sport of Louise Bonne de Jersey. A variegated form of Louise Bonne de Jersey, the wood and fruit being marked with golden stripes. It originated as a bud sport. -- Hedrick 1921

Used by R. Skirvin, at University of Illinois in the mid-1980s, to study chimeral develo.

The following were developed by Private Breeder, Stacyville, Maine, United States. Donated by Will Bonsall, Scatterseed Project, 39 Bailey Road, Industry, Maine 04938, United States. Received 03/23/1992.

PI 617576. *Pyrus ussuriensis* Maxim.

Cultivar. "Stacyville". Pedigree - Believed to be a cross of *P. ussuriensis*. The Stacey Pear Tree is a very old and remarkably healthy tree, the only pear tree on an old farm near a much younger apple orchard. As its name implies, it is in Stacyville, a neighboring township to the northwest of Benedicta. Most, if not all, of the local residents knew about the tree long before Pete Grabber, Lou Riccadelli, and myself 'discovered' the tree in the early 1980s while foraging for cider apples. Of the three of us, I was the only one interested enough in the tree, sending boxes of the fruit to several nurseries including Stark Brothers. Since they sell mostly commercial varieties to temperate zone orchards around the world, an extremely hardy, self-fruitful, and disease free pear tree was not on their radar screen. Probably if it had fruit larger than Bartlett or Anjou they would have responded. Finally, a friend of mine gave me a catalog from St. Lawrence Nurseries in upstate New York. Bill MacKentley, who I have since developed a friendship with, was very enthusiastic about the tree, and was the first to ever offer the tree for sale in the early 1980s. From measurements taken by myself and Jack Kertesz, Bill estimated the tree to be upwards of 250 years old (meaning closer to 300 as the years have passed). He said that he had seen pears 300+ in Massachusetts that the ages were confirmed by rings in the wood, but that none of them were in as good shape as the Stacey. In fact, some had only a few remaining framework branches. http://www.benedicta-maine.com/Stacey_Pear_Tree/stacey_pear_tree.html -- accessed December, 2006.

The following were donated by Joe McCummins, Dept of Parks and Recreation, La Purisima Mission District, 2295 Purisima Road ., Lompoc, California 93436, United States. Received 09/17/1992.

PI 617577. *Pyrus communis* L.

Cultivar. "La Purisima Pear 18-H"; Mission La Purisima Pear 18-H. Pedigree - Uncertain. Mission pears are being researched for historical info.

PI 617578. *Pyrus communis* L.

Cultivar. "La Purisima Pear 17-E"; Mission La Purisima Pear 17-E. Pedigree - Uncertain. Mission pears are being researched for historical info.

PI 617579. *Pyrus communis* L.

Cultivar. "La Purisima Pear 1-A"; Mission La Purisima Pear 1-A. Pedigree - Uncertain. Mission pears are being researched for historical info.

PI 617580. *Pyrus communis* L.

Cultivar. "La Purisima Pear 2-A"; Mission La Purisima Pear 2-A. Pedigree - Uncertain. Mission pears are being researched for historical info.

PI 617581. *Pyrus communis* L.

Cultivar. "La Purisima Pear 17-G"; Mission La Purisima Pear 17-G. Pedigree - Uncertain. Mission pears are being researched for historical info.

PI 617582. *Pyrus communis* L.

Cultivar. "La Purisima Pear 1-C"; Mission La Purisima Pear 1-C. Pedigree - Uncertain. Mission pears are being researched for historical info.

PI 617583. *Pyrus communis* L.

Cultivar. "La Purisima Pear 18-E"; Mission La Purisima Pear 18-E. Pedigree - Uncertain. Mission pears are being researched for historical info.

The following were donated by Clarenie H. Barker, 475 Boyd Lane, Monmouth, Oregon 97361, United States. Received 10/05/1992.

PI 617584. *Pyrus communis* L.

Cultivar. "Joey's Red Flesh Pear". Developed in Uncertain. Pedigree - Probably Blutbirne. Scions received in 1992 from Clarence Barker, then of Albany, Oregon. Mr. Barker had obtained this cultivar from his nephew Joey. The original tree was in a 100 year old orchard on Joeys Farm in McGraw, New York. The fruit ripens in the fall, unlike other NCGR red flesh pears which all ripen in the summer. This may be the old German 'Blutbirne'.

The following were collected by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 01/27/1993.

PI 617585. *Pyrus communis* L.

Cultivar. "Premices de Maria Lesueur". Developed in Uncertain. A small, unattractive, roundish pear with green color and heavy overlay of russet. Flesh fairly fine but gritty at the center, melting, and very juicy. Sweet vinous flavor similar to that of Louis Pasteur. Rates rather high in dessert quality. Late keeper, inclined to wilt in storage. Tree reasonably vigorous, good foliage, fairly productive, true dwarf on quince. Moderately susceptible to blight. Synonym listed by Ragan: Maria Lesueur. -- H. Hartman, 1957.

The following were developed by National Agricultural Research Institute, Hiratsuka, Kanagawa, Japan. Donated by William Howell, Washington State University, Irrigated Agr. Research & Extension Cntr, 24106 North Bunn Road, Prosser, Washington 99350, United States. Received 03/10/1993.

PI 617586. *Pyrus pyrifolia* (Burm. f.) Nakai
Cultivar. "Doitsu". Pedigree - Unknown. Originally cultured in the Kanto Area sometime following the Meiji Restoration. Kikuchi (1948) reported that Doitsu originated in the Kanagawa Prefecture, Japan, but gave no date. Doitsu was a chance seedling which originated in the area of Kanagawa Prefecture or in the Niigata Prefecture according to Dr. Minoru Kajiura, Director, Horticultural Research Station, Hiratsuka, Kanagawa, Japan (personal correspondence May 1965) -- W.H. Griggs & B.T. Awakiri. 1977. Asian Pear Varieties in California.

The following were donated by David J. Burkhart, Oregon State University, Mid-Columbia Exp. Sta., 3005 Experiment Station Dr, Hood River, Oregon 97031, United States. Received 03/23/1993.

PI 617587. *Pyrus communis* L.
Cultivar. "Blanquilla". Developed in Spain. Pedigree - Unknown. Blanquilla. --A very old pear from Spain. Origin: Has been grown in Spain since before the seventeenth century; most common cultivar in Spain and fourth most common in the European Union after Conference, Bartlett and Abate Fetel. Fruit: medium to small, often misshapen; skin smooth, green-yellow; ripe in September in western Oregon, about 1 week after Bartlett, stores for several months in common storage. Tree: Susceptible to fireblight.

The following were collected by Elizabeth Dickson, NYS Agricultural Experiment Station, Horticultural Sciences, Hedrick Hall, Geneva, New York 14456-0462, United States; Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States; Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 10/05/1993.

PI 617588. *Pyrus regelii* Rehder
Uncertain. KAZ 93-45-02. Developed in Kazakhstan. Collected 09/1993 in Kazakhstan. Latitude 41° 16' 43" N. Longitude 72° 52' 49" E. Elevation 1550 m. near Dzhala-abad, Koumhama village, west of village. 700-1700mm (1190 mm average) precipitation.

PI 617589. *Pyrus regelii* Rehder
Wild. KAZ 93-41-09. Collected 09/1993 in Kazakhstan. Latitude 42° 52' N. Longitude 69° 56' E. Elevation 0 m. near Chimkent, Boralday Forestry region, southwestern direction not far from forestry camp. 350mm average rainfall, with *Pistacia vera*, *Malus kirghisorum*, *Malus sieversii*.

PI 617590. *Pyrus regelii* Rehder
Wild. KAZ 93-46-02. Developed in Kazakhstan. Collected 09/1993 in Kazakhstan. Latitude 41° 17' 17" N. Longitude 72° 50' 2" E. Elevation 1550 m. near Dzhala-abad, Koumhama village, further west of village. 700-1700mm (1190 mm average) precipitation, slight southwest facing slope.

The following were collected by James Matuska. Donated by Robert A. Purvis, North American Fruit Explorers, 641 Hoffman Road, Selah, Washington 98942, United States. Received 02/03/1994.

PI 617591. *Pyrus* sp.

Clone. "Helmer". Latitude 47° 0' N. Longitude 116° 30' W. Elevation 914 m. Helmer, Idaho: a town between Deary and Elk River. The Helmer pear was discovered growing at an old homestead in west-central Idaho, near the small community of Helmer in the foothills of the Rocky Mountains. The tree is noteworthy on several counts: the fruit is of good size and quality, even when grown under non-irrigated conditions; furthermore, the tree appears to be self-fertile. It was producing good crops of pears without another pear anywhere nearby. It is not a Bartlett. Jim Matuska, the former chair of the NAFEX Cherries interest group, was the one who found it and shared it with me at his home on October 1, 1989. (Jim lives in Deary, ID, about 10 miles W of Helmer and about 30 miles from the border with Washington State.) Although the tree undoubtedly survived -30F or worse in its location and was about 80 years old when Jim discovered it. Sadly, the mother tree was cut down not long after he propagated it. The Helmer pear would be worthy of trial locations with cold winter temperatures, but it is not hardy at -40F and probably not at -35F based on Bernie Nikolais experience with it in Edmonton, Alberta. The fruit was smaller at my location in Selah than it was in Helmer or Deary; possibly it does better where the summers are cool. Jim thought that the Helmer pear was possibly 'Duchess de Montfort', but more likely it is just a seedling. -- Robert Purvis, December 2005.

The following were developed by Herb C. Barrett, USDA, ARS, US Horticultural Research Laboratory, 2120 Camden Road, Orlando, Florida 32803, United States. Donated by William Barr, Rt. 2 Box 231, Port Gibson, Mississippi 39150, United States. Received 01/25/1994.

PI 617592. *Pyrus* hybrid

Breeding. ILL 7W-91. Transmits blight resistance, fruit size and quality to progeny. Incompatible with quince rootstock.

The following were developed by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 01/05/1994.

PI 617593. *Pyrus communis* L.

Clone. Rombough Mite Resistant Pear #1. Never has blister mite, even when the leaves of other trees next to it are full of gall in the spring. It is extremely vigorous. Many shoots grow 5 feet in one year.

The following were developed by USDA/ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 03/04/1994.

PI 617594. *Pyrus communis* L.

Clone. "Potomac". Superior resistance to fire blight with fruit of good quality.

The following were developed by E.V. Shear, USDA, Beltsville Agriculture Research Center, Beltsville, Maryland, United States. Donated by Richard L. Bell, USDA, ARS, Appalachian Fruit Research Station, 45 Wiltshire Road, Kearneysville, West Virginia 25430, United States. Received 03/04/1994.

PI 617595. *Pyrus communis* L.
Clone. US 309.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 10/07/1994.

PI 617596. *Pyrus korshinskyi* Litv.
Wild. Collected 09/27/1994 in Jalal-Abad, Kyrgyzstan. Latitude 41° 15' N. Longitude 72° 50' E. Elevation 1600 m. Ak-Terek - Experimental Station of Biosphere Institute in Jalalabad; 37 km N and 14 km W of Jalalabad. Growing on experimental station grounds with apple, pear, walnut, etc. on south slopes of Ferghana mountain range. This species used for pear rootstock in Kyrgystan, Uzbekistan, Tajikstan, and Kazakstan. Said to be more drought tolerant, more disease resistant than *P. regelii*. Very productive and many good seeds.

PI 617597. *Pyrus korshinskyi* Litv.
Wild. Collected 09/27/1994 in Jalal-Abad, Kyrgyzstan. Latitude 41° 15' N. Longitude 72° 50' E. Elevation 1600 m. Ak-Terek - Experimental Station of Biosphere Institute in Jalalabad; 37 km N and 14 km W of Jalalabad. Growing on experimental station grounds with apple, pear, walnut, etc. on south slopes of Ferghana mountain range. This species is the major pear rootstock in all central Asian countries. Said to be more drought tolerant and disease resistant than *P. regelii*. Very productive and many good seeds.

PI 617598. *Pyrus korshinskyi* Litv.
Wild. Collected 09/27/1994 in Jalal-Abad, Kyrgyzstan. Latitude 41° 15' N. Longitude 72° 50' E. Elevation 1600 m. Ak-Terek - Experimental Station of Biosphere Institute in Jalalabad; 37 km N and 14 km W of Jalalabad. Growing on experimental station grounds with apple, pear, walnut, etc. on south slopes of Ferghana mountain range. This species is the major pear rootstock in all central Asian countries. Said to be more drought tolerant and disease resistant than *P. regelii*. Very productive and many good seeds.

The following were developed by Charles Harris. Donated by Ethan A. Natelson, 8707 Wateke Drive, Houston, Texas 77074, United States. Received 12/01/1994.

PI 617599. *Pyrus* hybrid
Cultivar. "Charles Harris". Pedigree - Selected seedling of Chinese origin. A very large, slightly oval Asian developed as a selected seedling by Mr. Charles Harris and reported in Pomona (Vol 24, No 3, pg 8, 1991). Vigorous tree on calleryana - appears to be about 400 - 450 chill hours.

The following were donated by Ethan A. Natelson, 8707 Wateke Drive, Houston, Texas 77074, United States. Received 12/01/1994.

PI 617600. *Pyrus hybrid*

Cultivar. "Leona". Developed in United States. Originated in Converse, Louisiana about 1930. Legend has it that this was an unclaimed, mail order tree planted by a postal worker and named for his wife. It has been widely propagated in Louisiana and Texas and we all agree that it is a very sweet, high quality, dessert pear. The large, apple shaped fruit has a distinct 'shoulder'. It takes a few years to come into full bearing on calleryana. Probably about 400 - 450 chill units.

PI 617601. *Pyrus hybrid*

Cultivar. "Tenn". Developed in United States. Excellent quality, medium sized dessert pear. Reportedly came out of the Tennessee breeding program with Ayres. Apparently there is more than one cultivar propagated as Tenn in the South. This is the good one. It has a slightly pyriform shape, fairly uniform, and has a nice red blush on one side. About 350 - 400 chill hours (commonly sets two crops in Houston). Tree is very large and spreading on calleryana.

PI 617602. *Pyrus hybrid*

Cultivar. "Biscamp". Developed in United States. Probably originated in Louisiana. Grown primarily for its low chill requirement (about 200 - 250 hours). A large, firm, pyriform fruit - fair quality. Tends to defoliate with the intense heat in Houston, does better in Louisiana.

PI 617603. *Pyrus communis* L.

Cultivar. Bartlett - Southern. Developed in United States. Bartlett sport found in Abbeville, Louisiana about 1969. Very productive and disease resistant there and in other sites. Clearly low chill but not fully evaluated in south Texas to determine how low. It does grow fairly well directly on calleryana but seems more vigorous with a comice interstem.

The following were developed by W.J. Strong, 1210 Polk St., Mansfield, Louisiana 71052, United States. Donated by Ethan A. Natelson, 8707 Wateke Drive, Houston, Texas 77074, United States. Received 12/01/1994.

PI 617604. *Pyrus communis* L.

Cultivar. Bartlett - Blakeley's. Found in Mansfield, Louisiana by a Dr. Strong (now deceased) who was a well-known fruit collector. Large, good quality and seems to be about 300 - 350 chill hours. Very productive. Grows well with comice interstem - does not grow at all if grafted on Turnbull so may not do well if grafted directly on calleryana or Asian rootstock.

The following were developed by South Africa Pear Research Station, South Africa. Donated by Herbert K. Durand, RR #6 Box 862A, Huntsville, Texas 77340, United States; Ethan A. Natelson, 8707 Wateke Drive, Houston, Texas 77074, United States. Received 12/01/1994.

PI 617605. *Pyrus communis* L.

Cultivar. Bartlett - Low Chill from South Africa. Discovered as a sport of Williams Bon Chretien in an orchard in the western Cape Region of

South Africa. Possibly near the Ceres growing region. Lower chilling requirement and earlier ripening than standard Bartlett. Also known as Early Bon Chretien or EBC in South Africa. -- Taaibos Human, personal communication at 9th International Pear Symposium, Stellenbosch, South Africa, February, 2004. High quality medium sized pear imported from South Africa's Pear Research Station to TeDurant (local blueberry hybridizer) in early 1980s. Lower chill (about 550 - 600 hours) than standard Bartlett and less blight sensitive for humid climates. Bears well in Houston where standard Bartlett fails.

The following were donated by Ethan A. Natelson, 8707 Wateke Drive, Houston, Texas 77074, United States. Received 12/01/1994.

PI 617606. Pyrus hybrid

Cultivar. "Spalding". Developed in United States. Georgia pear - listed as blight sensitive in Dr. van der Zwet's book but has been blight resistant in Houston and in Louisiana. Very pretty, vigorous tree with spreading habit. Comes into production very early and makes large, nice looking pyriform fruits. Probably about 350 - 400 chill hours. Would be an ideal Southern pear except for one problem - no taste. It has good texture but not much sweetness. Probably would be useful in a breeding program since it has so many good traits. - Received misspelled as 'Spaulding' - should be 'Spalding'.

The following were developed by Herb C. Barrett, USDA, ARS, US Horticultural Research Laboratory, 2120 Camden Road, Orlando, Florida 32803, United States. Donated by William Barr, Rt. 2 Box 231, Port Gibson, Mississippi 39150, United States. Received 02/01/1995.

PI 617607. Pyrus communis L.

Breeding. Ill 80E-1. Pedigree - Seedling selection - seed from Russia. 80E-1 is a wild type of *P. communis* with a curious history and some valuable traits. In the 1920's the Horticulture Dept of the University of Illinois received a shipment of apple seeds from the St. Petersburg Botanic Garden of the USSR. Seedlings from these seeds were planted at the Horticulture Farm. In the early 1950's while a graduate student, Barrett noted a few pear seedlings growing among these apple seedlings. Barrett selected this seedling because of its good fireblight resistance and right angle limbs. During the 1956 bloom with temperatures around 22-23 degrees F, Barrett observed none of the blossoms were frozen, although every pear in the collection of about 200 flowering at the time had unfrozen blossoms or fruit that year. The fruit is poor quality, small and worthless per se, but the above mentioned traits should make it worth keeping. - Herb Barrett.

The following were developed by Institut za Vovcarstov, Cacak, Serbia. Donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 05/04/1995.

PI 617608. Pyrus communis L.

Cultivar. IV 12. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

The following were donated by N.I. Vavilov Research Institute of Plant Industry, 44, B. Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 05/04/1995.

PI 617609. *Pyrus communis* L.

Cultivar. "Lida". Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

PI 617610. *Pyrus communis* L.

Cultivar. "Orlovskaja Zolotistaja". Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

PI 617611. *Pyrus communis* L.

Cultivar. "Nadezda". Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

PI 617612. *Pyrus communis* L.

Cultivar. "Oranzhevaja"; Q 26676. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

The following were collected by Tom Van der Zwet, Appalachian Fruit Research Station, USDA-REE-ARS-NAA-AFR LAB-IFPI&P, Room 335, Kearneysville, West Virginia 25430-9425, United States. Donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 05/04/1995.

PI 617613. *Pyrus* sp.

Cultivar. Karamanlika Y190; Y190; T22093F; Q22093. Collected in Former Serbia and Montenegro. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

PI 617614. *Pyrus* sp.

Cultivar. Y-193; "Vodenjaca"; T22096F; Q22096. Collected 1980 in Former Serbia and Montenegro. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

PI 617615. *Pyrus* sp.

Cultivar. Y195; "Jeribasma"; Vodenjac; Vodenjak; Vodenka; Vodenjaca; Vodenik; Q 22098; T22098 K; Q22098; T22098K. Collected 1980 in Former Serbia and Montenegro. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

The following were donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350,

United States; A. Carraut, Echole Superieure, Dept. Horticulture, Chott-Mariem, Sousse, Tunisia. Received 05/04/1995.

PI 617616. *Pyrus communis* L.

Cultivar. Moknine No. 4. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

PI 617617. *Pyrus communis* L.

Cultivar. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

PI 617618. *Pyrus communis* L.

Cultivar. "Turki". Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

The following were donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 05/04/1995.

PI 617619. *Pyrus* sp.

Cultivar. "Changpa-Li". Developed in China. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

The following were donated by M. Nikolic, Institut za Vovcarstov, Cacak, Serbia; Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 05/04/1995.

PI 617620. *Pyrus communis* L.

Cultivar. "Junsko Zlato". Developed in Serbia. Released from quarantine in Beltsville. Plants received in this group with 'T' numbers are heat-treated sub clones of the original introductions.

The following were collected by Bill McNamera, Quarryhill Botanical Garden, Box 232, Glen Ellen, California 95442, United States; Lord Howick. Donated by Bill McNamera, Quarryhill Botanical Garden, Box 232, Glen Ellen, California 95442, United States. Received 07/17/1995.

PI 617621. *Pyrus* hybrid

Wild. H&M 1888. Collected 10/19/1993 in India.

The following were collected by David J. Burkhart, Oregon State University, Mid-Columbia Exp. Sta., 3005 Experiment Station Dr, Hood River, Oregon 97031, United States. Received 08/30/1995.

PI 617622. *Pyrus communis* L.

Cultivar. Collected in Oregon, United States. May be mutant selection of Anjou or pathogen infected. Trees have deformed 'fluted' fruit with

longitudinal ridges. Foliage different than Anjous in orchard. Fruit seems to be seedless - may be parthenocarpic fruit on sterile tree.

The following were collected by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Donated by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States. Received 09/25/1995.

PI 617623. *Pyrus* hybrid

Wild. Collected 08/29/1995 in Kazakhstan. Latitude 47° 14' 39" N. Longitude 81° 34' 14" E. Elevation 870 m. Kazakhstan, Semipalitansk Region, Tarbagatai Mt. Range, 4 km NE of Alekseyevka, 20 km N of Urdzhar, collected in S end of west valley. Site 05, Collection no. 04. Gravely loam; stony; good drainage; flat; open environment; near stream. Associated w/ *Populus*, *Crataegus*, *Rosa*, *Viburnum*.

PI 617624. *Pyrus* hybrid

Wild. Collected 09/01/1995 in Kazakhstan. Latitude 47° 15' 52" N. Longitude 81° 35' 5" E. Elevation 1000 m. Kazakhstan, Semipalitansk Region, Tarbagatai Mt. Range, 20 km NE of Alekseyevka, 20 km N of Urdzhar, collected in middle and south valleys. Site 10, Collection no. 08L. 5 deg slope to the SW; open environment; next to small wetland; full light.

PI 617625. *Pyrus* hybrid

Wild. Collected 09/01/1995 in Kazakhstan. Latitude 47° 15' 52" N. Longitude 81° 35' 5" E. Elevation 1000 m. Kazakhstan, Semipalitansk Region, Tarbagatai Mt. Range, 20 km NE of Alekseyevka, 20 km N of Urdzhar, collected in middle and south valleys. Site 10, Collection no. 11F. 3 deg slope to the S; open environment.

PI 617626. *Pyrus regelii* Rehder

Wild. Collected 09/10/1995 in Kazakhstan. Latitude 42° 53' 18" N. Longitude 69° 52' 52" E. Elevation 900 m. Kazakhstan, Karataw, Boraldy River Forest area, 5 km N of Boraldy Forest camp which is 80 km N of Chimkent. Site 18, Collection no. 16. 5 deg slope to the W; open environment; very xerophytic site. Should be very cold hardy, down to minus 40 deg celcius in mountains.

The following were developed by C.F. Patterson. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617627. *Pyrus* hybrid

Cultivar. "Andrew"; CANADA PYR137; CPYR 2556. Andrew (PI 617627).-Originated in Saskatoon, Saskatchewan, Canada, by C.F. Patterson, University of Saskatchewan. Introduced in 1960 for home gardens. *Pyrus ussuriensis* Maxim. x Bartlett; selected in 1958; tested as Sask. PR 1. Fruit: 2 inches long by 2 inches in diam. under non-irrigated field conditions at Saskatoon; skin thin; flesh quality fair to good, but breaks down quickly; ripens in early September. Tree: hardy. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617628. *Pyrus* sp.

Cultivar. "Fedorovski"; CANADA PYR135; CPYR 2557. Developed in Uncertain.

The following were developed by C.F. Patterson. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617629. *Pyrus* hybrid

Cultivar. "John"; CANADA PYR106; CANADA PYR100; CPYR 2558. John (PI 617629).-Originated in Saskatoon, Saskatchewan, Canada, by C.F. Patterson, University of Saskatchewan, Introduced in 1960 for home gardens. *Pyrus ussuriensis* x Aspa; selected in 1958; tested as Sask. PR 15. Fruit: up to 3 inches long and 2 1/2 inches in diam. under non-irrigated field conditions at Saskatoon; skin thin, yellowing well before flesh becomes soft; quality good; ripens in late September. Tree: hardy. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by Agriculture Canada, Agricultural Research Station, Regina, Saskatchewan, Canada. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617630. *Pyrus communis* L.

Clone. O-291; Ottawa-291; CANADA PYR130; CPYR 2560. O-291 - The parentage is Winter Nelis x Bartlett. The fruit is medium sized, heavily russeted, of fine texture with no large stone cells, and of very good quality. It keeps well in cold storage until nearly Christmas. Although the tree has shown slight winter injury here, it has borne a heavy crop each year. -- Research Station, Ottawa, Ontario, Research Report for 1967. The most promising of the recent (written in 1940s) Ottawa seedlings. This pear is very late in maturing and in size, but it has excellent texture and good quality. It will keep at 32F for several weeks. The tree is not fully hardy at Ottawa. -- Spangello, Phillips & Blair (in old Canadian bulletin, possibly from the 1940s) Duplicate of PI.

The following were developed by C.F. Patterson. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617631. *Pyrus* hybrid

Cultivar. "Peter"; CANADA PYR102; CPYR 2561. Pedigree - *Pyrus ussuriensis* x Aspa. Peter (PI 617631).-Originated in Saskatoon, Saskatchewan, Canada, by C.F. Patterson, University of Saskatchewan. Introduced in 1960 for home gardens. *Pyrus ussuriensis* x Aspa; selected in 1958; tested as Sask. PR 6. Fruit: 2 1 / 8 inches long and 2 inches in diam. under nortirrigated field conditions at Saskatoon; skin

moderately thin; quality very fair; ripens the last 2 weeks in September. Tree: hardy. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617632. Pyrus sp.

Cultivar. "Petrovski"; CANADA PYR134; CPYR 2562. Developed in Uncertain.

The following were developed by C.F. Patterson. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617633. Pyrus hybrid

Cultivar. "Simon"; CANADA PYR133; CPYR 2563. Orig. in Saskatoon, Saskatchewan, Canada, by C.F. Patterson, Univ. of Saskatchewan. Introduced in 1960 for home gardens. *Pyrus ussuriensis* x Aspa; selected in 1958; tested as Sask. PR 9. Fruit: 2 1/2 inches long and 1 7/8 inches in diam. under non-irrigated field conditions at Saskatoon; skin moderately thin; quality fair; ripe during the last 2 weeks of September. Tree: hardy. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by David Tait, Cartertown, Ontario, Canada. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617634. Pyrus communis L.

Cultivar. "Tait Dropmore"; CANADA PYR107; CPYR 2564. Tait-Dropmore (PI 617634)-Originated in Cartertown, Ontario, Canada, by David Tait. Introduced in 1928 by Skinner's Nursery, Dropmore, Manitoba, Canada. Open-pollinated seedling of Patten; discovered about 1935. Fruit: small, up to 2 inches in diam.; pyriform; irregular; skin greenish-yellow, blushed dull carmine, thick; flesh dull yellow, coarse, gritty; flavor sweet, pleasant as dessert fruit, fair as sauce; season early to mid-September. Tree: upright-spreading; vigorous; very hardy; partially resistant to fire blight; productive. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were developed by C.F. Patterson. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 02/07/1996.

PI 617635. Pyrus hybrid

Cultivar. "Thomas"; CANADA PYR155; CPYR 2565. Thomas (PI 617635).-Originated in Saskatoon, Saskatchewan, Canada, by C.F. Patterson, University of Saskatchewan. Introduced in 1960 for home gardens, *Pyrus ussuriensis* Maxim. x Bartlett; selected in 1959; tested as Sask. PR 17. Fruit: 2 1 / 4 inches long and 2 1 / 4 inches in diam. under nonirrigated field conditions at Saskatoon; flesh very firm,

quality fair; keeps well in cold storage; ripens during late September to early October. Tree: hardy. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 03/06/1996.

PI 617636. *Pyrus communis* L.

Cultivar. "Pertusati"; CPYR 2566.

PI 617637. *Pyrus communis* L.

Cultivar. "Souvenir du Congress"; CPYR 2567. Raised in 1852 by M. Morel at Lyon-Vaise, France and first fruited in 1863. Similar to Williams Bon Chretien, but generally not as good quality. Tree compact, crops heavily, better resistance to scab than Williams. -- J. Arbury 1997.

PI 617638. *Pyrus communis* L.

Cultivar. "La France"; CPYR 2569.

PI 617639. *Pyrus communis* L.

Cultivar. "Mirandino Rosso"; CPYR 2570. Developed in Italy. Origin about 1700 in Moglia, Italy. Fruit small-medium, pyriform to subconic; Skin yellow with wide red spots and dots; Flesh white, firm, sweet and perfumed. Moderate resistance to core breakdown. Bloom mid-season; Ripens early, late June in Florence and about 44 days before Bartlett. Earliest pear sufficiently resistant to core breakdown to have commercial potential. Self unfruitful. Good pollinators include Passe Crassane, Conference, Grand Champion. -- Catalog of the Pear Pomological Exhibition, 2nd International Symposium on Pear Growing, Firenze, Italy, October, 1976, Volume 1.

PI 617640. *Pyrus communis* L.

Cultivar. "Soldat Laboureur"; CPYR 2571.

PI 617641. *Pyrus communis* L.

Cultivar. "Brignoles"; CPYR 2572. Pedigree - Unknown. Brignoles. December to March. Turbinate, skin thick, dull and rough, Indian or olive yellow in the shade, and tinted with bright brownish red in the sun, strewn with dots of fawn, and intermixed with patches of the same colour, with a brownish shade about the stalk; stalk long, and obliquely in continuation of the fruit; eye set level, and surrounded with slight knobs; flesh whitish and somewhat spotted, dry, sugary, and with but little perfume. This rough-looking Pear is much grown in the south of France, near Brignoles, where it has become an article of commerce with Paris, in the shape of what is called Poires Tapees, that is, something like Norfolk Beaufin Apples, dried and flattened in an oven. From the thickness of its skin it can be roasted in the ashes, like a potato, when its flesh becomes soft, sugary, and very agreeable. -- John Scott, Scotts Orchardist, -1875.

PI 617642. *Pyrus hybrid*

Cultivar. "Turnball Giant"; CPYR 2573.

PI 617643. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. "Tarusa Crimson"; CPYR 2574.

PI 617644. *Pyrus communis* L.

Cultivar. CPYR 2575.

PI 617645. *Pyrus communis* L.

Cultivar. "Martin Sec"; CPYR 2576. Martin Sec. Hogg (1884) tells us that this and the Martin Sire are among the earliest varieties known to have been grown in England, for they are mentioned among the fruits delivered into the Treasury by the fruiterer of Edward I in 1292. In 1530, Charles Estienne of Paris wrote of it as being cultivated in France and affirmed the Pears of Saint Martin were so named because their time of ripening coincided with the Festival of that Saint. Again in 1675 Merlet in his *Abrege des bons fruits* spoke of the Martin-Sec of Provins or of Champagne. Fruit medium or above, long-pyriform-obtuse, regular in form, yellowish and russeted, dotted with gray points and extensively washed with carmine on the face exposed to the sun; flesh whitish, semi-fine, very breaking, rather dry, but sweet and perfumed, very gritty when grafted on quince; third; mid-Nov to Feb. -- Hedrick, *The Pears of New York*, 1921 Sec. Synonyms: Dry Martin, Martin Sec, Martin Sec de Champagne, Martin Sec d'Hiver, de Provence, Rousselet d'Hyber, Rousselette d'Hiver, Troken Martin, Winter Rousselet, Winter Rousselette. -- W.H. Ragan, *Nomenclature of the Pear*, 1908. Martin Sec. This is a pear of moderate size, of a long pyramidal form, the color a clear red next the Sun, dotted with small white points, the flesh breaking, sometimes a little stony, surary, slightly perfumed, and of a pleasant taste - the stalk is long and bent, the eye small, but little sunk; it ripens in November and December. -- W. Coxe, *A view of the cultivation of fruit trees*, 1817.

The following were developed by W.E. Whitehouse, Bureau of Plant Industry, Washington, District of Columbia, United States; G.A. Seaton; John Creech, North Carolina Arboretum, 14 Legendary Road, Hendersonville, North Carolina 28739, United States. Donated by William Howell, Washington State University, Irrigated Agr. Research & Extension Cntr, 24106 North Bunn Road, Prosser, Washington 99350, United States. Received 01/26/1996.

PI 617646. *Pyrus calleryana* Decne.

Cultivar. "Bradford"; CPYR 2577. Pedigree - Seedling selection from seedlot PI 47261. Attractive in early spring when it blooms, easily trained, good autumn foliage color, very adaptable to range of conds. This virus free accession replaces virus infected CPYR 2184.

The following were developed by Unknown, not known. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/06/1996.

PI 617647. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. CPYR 2586; Vietnam Asian Pear. Pedigree - selection of *Pyrus pyrifolia*.

The following were collected by Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States;

Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/24/1996.

PI 617648. *Pyrus calleryana* Decne.

Wild. *P. calleryana* 96107; 96107; CPYR 2588. Collected 1995 in Liaoning, China. Pedigree - collected from the wild in Liaoning.

The following were collected by Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Received 10/24/1996.

PI 617649. *Pyrus betulifolia* Bunge

Wild. *P. betulifolia* 96123; CPYR 2589. Collected 1995 in Heilongjiang, China. Pedigree - collected from the wild in Heilongjiang, China.

The following were collected by Charles Tubesing, The Holden Arboretum, 9500 Sperry Road, Kirtland, Ohio 44094-5172, United States; Rick J. Lewandowski, Morris Arboretum, The University of Pennsylvania, 9414 Meadowbrook Road, Philadelphia, Pennsylvania 19118, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Kris Bachtell, The Morton Arboretum, 4100 Illinois Route 53, Lisle, Illinois 60532-1293, United States. Received 01/30/1997.

PI 617650. *Pyrus xerophila* T. T. Yu

Wild. QLG 227; NA 67858; *P. xerophila* - Gansu, China. Collected 10/04/1996 in Gansu, China. Latitude 34° 18' 15" N. Longitude 106° 12' 27" E. Elevation 1630 m. Tian Shui City District, Xiao Long Shan Forest Bureau, Dang Chuan Forest Station, Mia Chao Gou. Growing in an open grassy area in full sun; with *Anemone hupehensis*, *Fraxinus* sp., *Fragaria* sp., ferns and numerous herbaceous species. Level clay-loam soil.

The following were developed by Arnold Tschanz, USDA, APHIS, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 04/02/1997.

PI 617651. *Pyrus communis* L.

Cultivated. CPYR 2592. Pedigree - Selection of *Pyrus communis*.

Unknown source. Received 09/10/1997.

PI 617652. *Pyrus communis* L.

Cultivated. CPYR 2593.

Unknown source. Received 09/10/1997.

PI 617653. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivated. "Zao Su Li"; CPYR 2594. Zao Su Li - A new (in 1977) cultivar bred by the cross of Pingguo Li x Shenbu Zhi at the Research Institute

of Pomology, Chinese Academy of Agricultural Sciences. Fruit: large, average 250 g., obovate. Skin yellow-green. Flesh white, tender, crisp, thin, stone cells scarce, very juicy, sweet. Harvested in mid August. Keeping quality 15-20 days at house temperature; good for canning. Widely adapted, high yield, early bearing, drought resistant, resistant to pear scab and leaf spot. -- Pear Main Cultivars by Research Institute of Pomology, Shaanxi Province, 1977. Translated by Yuexiu Feng 1996. C. Fang, F. Pu & X. Chen (1994. Acta Horticulture 367) give Pingguo Li x Mishiruzu as the pedigree.

The following were developed by Helmut Jacob, Research Station Geisenheim, Geisenheim, Rhineland-Palatinate, Germany. Donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States; Michael D. Remmick, North American Plants, P.O. Box 743, Lafayette, Oregon 97127, United States; Michael D. Remmick, North American Plants, P.O. Box 743, Lafayette, Oregon 97127, United States. Received 03/20/1998.

PI 617654. *Pyrus communis* L.

Cultivar. "Pyrodwarf"; BU 5/18; Rhenus 1; CPYR 2598. Pedigree - Old Home x Bonne Luise d' Avranches. Rhenus 1 (Pyrodwarf) (PI 617654) --A precocious, dwarfing rootstock from Germany. Origin: Cross of Old Home x Bonne Louise made by Helmut Jacob at Geisenheim, Germany in 1980. North American propagation rights assigned to Tree Connection, Dundee, Oregon. US Plant Patent 11,041 issued 24 August, 1999 to Helmut B. Jacob, Geisenheim, Germany. Tree: Non-suckering, good compatibility, produces a tree intermediate to Quince A and Quince C, about 40% the size of a tree on pear seedling rootstock; moderate resistance to fire blight. Found to induce high yield efficiency with Bartlett scions, and to have good anchorage and winter cold hardiness in German trials. - Brooks and Olmo Register of Fruit and Nut Varieties.

The following were donated by The Hebrew University of Jerusalem, Mount Scopus Botanical Garden, Jerusalem, Jerusalem, Israel. Received 01/15/1996.

PI 617655. *Pyrus spinosa* Forssk.

Wild. *P. amygdaliformis*; 453; CPYR 2599; *P. amygdaliformis* - Israel. Pedigree - Collected from the wild in Israel.

The following were donated by Paul A. Domoto, Iowa State University, College of Agriculture, Department of Horticulture, Ames, Iowa 50011-1100, United States; She Zhang Feng, Shijiazhuang Institute of Fruit Trees, Hebei Academy of Agriculture and Forestry, No.3 Wuqi Road, Shijiazhuang City, Hebei 050051, China. Received 03/11/1996.

PI 617656. *Pyrus betulifolia* Bunge

Cultivated. *P. betulifolia*; CPYR 2600. Pretreatment of seeds of rootstock before sowing. The seeds of the rootstock will germinate only after the treatment of cold stratification. The stratification method is as following: 1) Stratification time: in late January. 2) Treatment: seeds are soaked in water for twelve hours. After seeds are saturated with water, seeds are mixed with fine sand in the proportion of 1:4-6. The moisture content of sand shall be appropriate when sand can be held together in the hand but with no free water flowing out. The container

used for storage can be a wooden box or a chinaware. Cover the sides and bottom inside the container with a layer (approximately two centimeters thick) of moist sand; then place the mixture of seeds and sand inside the container; fill the top of the container with a five centimeter depth of moist sand; at last, seal the top with a layer of white plastic film (0.05 to 0.10 mm thick). The container should be placed at an open and cool place (such as outside the northern side of the house). The optimum storage temperature is between two to six degrees Celsius. Be sure to check the moisture inside the container occasionally. In spring when temperature rises, the seeds are ready to be sown.

The following were donated by Ethan A. Natelson, 8707 Wateke Drive, Houston, Texas 77074, United States. Received 01/06/1999.

PI 617657. Pyrus sp.

Cultivar. "Higdon"; CPYR 2602.

PI 617658. Pyrus sp.

Cultivar. "Fan-Stil"; CPYR 2603. Developed in United States. Pedigree - Unknown - possibly selection from Mexico. Cuttings of a fireblight resistant tree in Mexico were collected by a Dr. Stills in the early 1960's. Eddie Fanick developed clones on various rootstock and selected one that was named 'Fanstill'. As told by M. Fanick, grandson of E. Fanick, March 8, 1999. Another source claims that Fan-Stil came from Mexico about 1900 and was named and marketed by the Fannick's nursery, but not developed by them. - Ethan Natelson, March 23, 1999.

PI 617659. Pyrus sp.

Cultivar. "Broussard"; CPYR 2604.

PI 617660. Pyrus sp.

Cultivar. "Honey Dew"; CPYR 2605. Vaughn and Honey Dew came from Mr. Alfred Harper, from trees in Ocilla, Georgia. Some insist Vaughn is identical with a pear called Savannah. Vaughn is small and pyriform, only fair quality. Honey Dew is larger than Vaughn and of slightly better quality. Both are somewhat susceptible to fireblight. -- Ethan Natelson, March 14, 1999. Honey Dew originated by Mr. Raabe of Illinois and introduced by Stark Brothers in 1921. Fruit large, roundish, golden-yellow, almost covered with ricesh tender, crisp, very juicy, sweet; early fall. -- U.P. Hedrick, 1921.

PI 617661. Pyrus sp.

Cultivar. "Thanksgiving"; CPYR 2606.

PI 617662. Pyrus sp.

Cultivar. "Oakhill"; CPYR 2607.

PI 617663. Pyrus sp.

Cultivar. "Shin Li"; CPYR 2608. PP6076. Shin Li (12-43) (PI 617663).--A fine textured, slightly pear-shaped Asian pear developed in California. Orig. at UC Davis, by Ben Iwakiri and evaluated as selection 12-43 near Winters, California. Plant Patent 6076 issued in 1988 to the University of California. A cross between the Japanese cultivar Kikusui and the Chinese cultivar Tse Li (Tsu Li). Fruit: medium to large, round-oblate, slightly flatter than Daisui Li. Skin is thick, smooth, light green to yellow-green at maturity. Flesh is firm, tender, crisp,

juicy and sweet with finer texture than Daisui Li. Ripe early September in Davis, California. Stores 5-6 months at 0 C. Tree: vigorous, large to medium, upright to slightly spreading, open, and hardy. Leaves: large, wide and leathery. Blooms early, with Chojuro and slightly later than Ya Li and Tse Li. Fruit must be thinned. Resistant to fire blight. - Brooks and Olmo Register of Fruit and Nut Varieties.

PI 617664. *Pyrus* sp.

Cultivar. "Henderson"; CPYR 2609. 'Henderson' is a contribution of Mr. Hartwell Cook of Hattiesburg, Mississippi. He found it in his area. It very closely resembles Housi but is larger and seems to have a thicker skin. It is of good quality. Ethan Natelson, March 14, 1999. Could this be the same as 'Henderson Special' an open pollinated seedling of Bartlett which was introduced by E.M. Henderson, Henderson's Nursery, Athens Texas, in 1927? See Brooks & Olmo Register of Fruit and Nut Varieties.

PI 617665. *Pyrus* sp.

Cultivar. "Rising Star"; CPYR 2610.

PI 617666. *Pyrus* sp.

Cultivar. "Florida 58-45"; CPYR 2611.

PI 617667. *Pyrus* sp.

Cultivar. "Vaughn"; CPYR 2612. 'Vaughn' and 'Honey Dew' came from Mr. Alfred Harper, from trees in Ocilla, Georgia. Some insist Vaughn is identical with a pear called Savannah. Vaughn is small and pyriform, only fair quality. 'Honey Dew' is larger than 'Vaughn' and of slightly better quality. Both are somewhat susceptible to fireblight. -- Ethan Natelson, March 14, 1999.

PI 617668. *Pyrus* sp.

Cultivar. "Emancipation"; CPYR 2613. Pedigree - Probably a chance seedling.

PI 617669. *Pyrus* sp.

Cultivar. "Baldwin"; CPYR 2614. Pedigree - Origin unknown. Baldwin. Its origin is unknown. The variety has medium to large (220-240g) oblong fruit. Fruit are attractive, having a light-green skin color overlaid with a light russet. Baldwin is buttery textured with few stone cells and a mild pear flavor when eaten fresh or processed. Fruit ripens in late August and into September. Trees are moderately resistant to fire blight but are not recommended because of high susceptibility to leaf spot. -- Low Chilling Pears by W.B. Sherman and T.E. Crocker, Fruit Crops Dept., Univ. of Florida. Tom Van Der Zwet mentions Baldwin in his book on fire blight as being known before 1920. It and Hood have been widely grown in Texas as low-chill pears for many years. Baldwin is said to have a little 11 hour requirement. It is a large pear, very productive and not bad if it is fully ripened to soften it a bit. It also has been called the 'Yankee Pear' in the South. -- Ethan Natelson, March 23, 1999. Baldwin. Origin unknown, presumably originated in Baldwin County, Alabama. Fruit size medium, oval to obovate, pyriform, occasionally diamond shaped, obscure neck. Skin greenish-yellow, dull, roughened skin, somewhat similar to Kieffer. Flesh yellow, soft, juicy, tender, subacid; stone cells at core, not objectionable. Flavor fair to good. Harvest first week in October. Keeping quality relatively short for an Oriental type. Appears to be an

Oriental hybrid with flavor somewhat superior to most varieties of similar inheritance. Reported outstandingly blight resistant and very productive in Georgia. -- F.S. Howlett, Ohio Ag. Experiment Station, 1957.

PI 617670. *Pyrus* sp.

Cultivar. "Pope [Bonner]"; CPYR 2615. 'Pope' has taken a long journey. My scions came from Mr. Nick Botner of Yoncalla, OR. He claims his material came from George Washington's home at Mt. Vernon and that this is an heirloom pear. Perhaps you have it under a French or Italian name, but Mr. Botner claims it has always been known as 'Pope'. -- Ethan Natelson, March 23, 1999. Ragan (Nomenclature of the Pear, 1908) lists 'Pope' as a synonym for 'Bonners'. He also distinguishes it from 'Pope's Quaker', 'Pope's Russet' and 'Pope's Major' which are distinct cultivars. Hedrick (Pears of New York) does not list 'Pope' in the index, but in his description of 'Bonners' that follows he lists 'Pope' as a synonym: 'Originated in Hancock County, Ga., and was known in 1869 in Washington County of that state, as the Pope pear. Fruit has a peculiar almond flavor; very good; Sept.' Hedrick cites the American Pomological Society Reports from 1869 and 1873 and he uses an accent mark over the 'e' in 'Pope'. -- J. Postman, April 16, 1999.

PI 617671. *Pyrus* sp.

Cultivar. "Brown's Bartlett"; "Bartlett - Brown's"; CPYR 2616. From Mr. Hartwell Cook of Hattiesburg, Miss., a local seedling which I think is only of fair quality, but it is low chill. Ethan Natelson, March 14, 1999.

PI 617672. *Pyrus* sp.

Cultivar. "Quave"; CPYR 2617.

The following were donated by Suzanne Hurtt, USDA, ARS, Plant Germplasm Quarantine Office, Building 580, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 02/24/1999.

PI 617673. *Pyrus* sp.

Cultivated. "Bou Tsu Li"; "Buo Tsu Li"; Q25055; CPYR 2618.

PI 617674. *Pyrus* sp.

Cultivated. "Ooharabeni"; CPYR 2619; Q25801. Pedigree - Originally thought to be hybrid of Okusankichi and Max Red Bartlett. Originated at the National Institute of Fruit Tree Science, Tsukuba, Ibaraki, Japan. Thought to be derived from 'Okusankichi' x 'Max Red Bartlett' but DNA microsatellite analysis in Japan suggests that 'Okusankichi' is not a parent. -- T. Saito, 2004.

PI 617675. *Pyrus communis* L.

Cultivated. "Beurre Six"; "Buerre Six"; Q26191; CPYR 2620. Pedigree - Seedling selection. Rather curious that this fine pear, raised 60 years ago, is yet so little appreciated in this country. As a December fruit to follow Comice there is nothing better and it has advantage over Glou Morceau, ripening at the same season, in doing excellently in the open. On cordons here on a sandy loam fruits are annually produced of the very finest quality. Shape distinct, quite pyriform but tapering very sharply to the stem and eye making the shape resemble an ace of diamonds. Colour quite green even when ripe, the usual yellow change being hardly

perceptible. The flesh is most deliciously melting, quite as much as Doyenne du Comice and the flavour very good indeed. Raised in 1845 by M. Six, a gardener at Courtrai and first described by Bivort in Annales de Pomologie Vol. III, fig. 53, and also by Decaisne, in Jardin Fruitier, Vol VI, plate 23 under name Six. Growth rather slow in first few years but it makes a good pyramid when established and can be very confidently recommended to all lovers of good pears. -- Edward A. Bunyard, Fruit Notes. Journal Pomol. I:2:140-143, 1919. Beurre Six was raised from seed about 1845 by a gardener named Six at Courtrai in Blegium. Fruit large, pyriform, smooth, pea-green changing to h greenish-white, fine, melting, firm, buttery, very juicy; first; Oct. to Dec. -- U.P. Hedrick, The Pears of New York, 1921 Scionwood of Beurre Six was received at USDA Bureau of Plant Industry from Lepage et Cie., Angers, France o 39 and assigned PI 131842. This may be the same clone. -- USDA Plant Inventory Number 138.

PI 617676. *Pyrus* sp.

Cultivated. "Oseniaja Jakovleva"; CPYR 2621; Q26661.

The following were donated by David Sugar, Oregon State University, Southern Oregon Experiment Station, 569 Hanley Road, Medford, Oregon 97502, United States. Received 02/22/1999.

PI 617677. *Pyrus communis* L.

Cultivar. "Yungen"; CPYR 2622.

The following were donated by John Ireland, Fowler Nurseries, Inc, 525 Fowler Road, Newcastle, California 95658, United States. Received 02/24/1999.

PI 617678. *Pyrus pyrifolia* (Burm. f.) Nakai

Cultivar. "Olympic"; Korean Giant; Arirang; Dan Bae; CPYR 2623.

The following were developed by Helmut Jacob, Research Station Geisenheim, Geisenheim, Rhineland-Palatinate, Germany. Donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States. Received 05/05/1999.

PI 617679. *Pyrus communis* L.

Cultivar. "Pyrodwarf 2"; BU 2/33; PY 2/33; CPYR 2699. Pedigree - Old Home x Bonne Luise d'Avranches. Rootstock selection.

The following were developed by Horticulture Research International, East Malling / West Malling, Kent, England ME19 6BJ, United Kingdom. Donated by Eugene Mielke, Oregon State University, Mid-Columbia Experiment Station, 3005 Experiment Station Drive, Hood River, Oregon 97031, United States; Michael D. Remmick, North American Plants, P.O. Box 743, Lafayette, Oregon 97127, United States. Received 05/05/1999.

PI 617680. *Pyrus communis* L.

Cultivar. QR 708-2; 708-2; CPYR 2703. Pedigree - *Pyrus communis* 'BP-1' x 'Old Home'.

The following were developed by University of Bologna, Istituto di Coltivazioni Arboree, Via Filippo RE 6-40126, Bologna, Emilia-Romagna, Italy. Donated by Michael D. Remmick, North American Plants, P.O. Box 743, Lafayette, Oregon 97127, United States. Received 08/20/1999.

PI 617681. *Pyrus communis* L.

Cultivar. "Fox 11"; A 28; CPYR 2707. Pedigree - *Pyrus communis* 'Mora' x 'Volpina' (open pollinated).

PI 617682. *Pyrus communis* L.

Cultivar. "Fox 16"; B 21; CPYR 2708. Pedigree - *Pyrus communis* 'Mora' x 'Volpina' (open pollinated).

The following were donated by Thomas Brown, 200 Fourth Street #E, Petaluma, California 94952, United States. Received 03/16/2000.

PI 617683. *Pyrus communis* L.

Cultivated. Mission San Juan Bautista Pear; CPYR 2711. Pedigree - *Pyrus communis* brought to and planted at Mission San Juan Bautista, California prior to 1836. Are they Spanish? Hard to say, but I suspect the times militate against it being so. Safer to say they are Mexican, for California was Mexican after 1820, and I am being conservative in assigning times to these trees. They may have been chance hybrids from Baja, or even brought up from Sinaloa or Chihuahua. There are still two very large old trees from about 1820 at Fort Ross on the coast. The Russians almost certainly obtained them from Monterey or San Francisco, and possibly as seeds rather than scions. Someone I questioned about them had tried to identify them 20 or so years ago, but with no success. Those I just sent are all from single trunks, not multiples or basal shoots. I think the usual European practice was to graft them onto Quince stock (*Cydonia*) and there is no sign of any quinces around, although there is one at the Indians resort, 15 miles from Mission San Antonio where I got some mission grape cuttings and mission fig cuttings. We just call them Mission Figs if they are smallish and black. The quince at the Indians is atypical in that the trunks exhibit none of the verrucose usually found on *Cydonia*. I do hope it will be possible to run some genetic tests on these after they have fruited and you have a better handle on identifying the varieties. Thanks for your good work. There are still 4 trees at Monterey left from the mission orchard, and as the property has changed hands, I may be able to get cuttings next year. Tom Brown 03/18/2000.

PI 617684. *Pyrus communis* L.

Cultivated. Dunn Adobe Pear; CPYR 2712. Pedigree - *Pyrus communis* planted about 1840 and still growing (March 2000) at Dunn Adobe, California. Dunn Adobe is between King City and Jolon, on the Jolon Road, a couple of miles below the Jolon Grade. Are they Spanish? Hard to say, but I suspect the times militate against it being so. Safer to say they are Mexican, for California was Mexican after 1820, and I am being conservative in assigning times to these trees. They may have been chance hybrids from Baja, or even brought up from Sinaloa or Chihuahua. There are still two very large old trees from about 1820 at Fort Ross on the coast. The Russians almost certainly obtained them from Monterey or San Francisco, and possibly as seeds rather than scions. Someone I questioned about them had tried to identify them 20 or so years ago, but

with no success. Those I just sent are all from single trunks, not multiples or basal shoots. There are still 4 trees at Monterey left from the mission orchard. -- Tom Brown, 03/18/2000.

The following were collected by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 01/21/2000.

PI 617685. *Pyrus communis* L.

Breeding. *Pyrus communis* 'Albany 238'; CPYR 2713. Collected in Oregon, United States. Latitude 44° 39' 29" N. Longitude 123° 3' 33" W. Elevation 100 m. The tree is directly west of the sign for exit 230 (the first Jefferson exit, just north of Albany) on Interstate 5. Near mile post 238. Roadside with grass. Collected 01/21/2000 in Oregon, United States. Latitude 44° 39' 29" N. Longitude 123° 3' 33" W. Elevation 100 m. The tree is directly west of the sign for exit 230 (the first Jefferson exit, just north of Albany) on Interstate 5. Near mile post 238. Roadside with grass. Pedigree - Collected from the wild in Oregon. Lon Rombough describes it as a very sweet, honey flavored pear with almost the shape of a Bartlett. This pear would be excellent for juice. The texture needs to be improved to compete with present cultivars but this pear would be good for breeding material.

The following were collected by Wayne Huffstutter, 9525 S.W. 12th Drive, Portland, Oregon 97219, United States. Received 03/30/2000.

PI 617686. *Pyrus communis* L.

Cultivated. Hager Grove Pioneer Pear; CPYR 2714. Collected 1980 in Oregon, United States. Traffic whirls past the historic Hager Grove pear tree in Salem without a clue to the stories buried in the rings of its 150-plus-year-old trunk. The fact that it even stands is a miracle, at least in the mind of Maynard C. Drawson, tree lover, history buff and member of the Oregon Heritage Tree Committee. 'It had no right to remain any more than the others.' he says of the tree that flourished in the fertile valley before freeways, Home Depots and traffic lights took over. The orchard, planted by Benjamin Franklin Munkre in the mid-1800s, bordered a park and campground, where earlier in this century Salem families congregated for all sorts of social events. 'It used to be a big deal to have Sunday school gatherings, baptisms and picnics here,' recalls Drawson. 'There used to be a covered bridge right upstream,' he adds a bit wistfully. The Hager Grove pear 'is the biggest pear tree in the state of Oregon' says Drawson, who also lists it as the oldest. 'It's so healthy and s big, people think it's an oak.'
--The Oregonian Newspaper, Homes and Gardens section, 14 October 1999.

The following were developed by M.C. Smith, Unknown. Donated by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 1981.

PI 617687. *Ribes uva-crispa* L.

Cultivar. "Friedl"; CANADA RIB0164. Pedigree - Chance seedling, apparantly a natural hybrid.

The following were collected by Otto L. Jahn, 33740 Terra Ln., Corvallis, Oregon 97330, United States. Received 09/16/1986.

PI 617688. *Ribes triste* Pall.

Wild. Swamp Red Currant. Collected 08/31/1986 in Alaska, United States. Latitude 64° 50' N. Longitude 146° 30' W. Elevation 270 m. Chena River State Rec. Area along Granite Tors Trail. Pedigree - Collected from the wild in Alaska. Fruit gone except 2, thornless deciduous shrub.

The following were donated by National Fruit Collection, Brogdale Horticultural Trust, Brogdale Road, Kent, England ME13 8XZ, United Kingdom. Received 11/08/1989.

PI 617689. *Ribes rubrum* L.

Cultivar. Developed in United Kingdom. Pedigree - white mutant of red currant. This cultivar has the largest cluster and berry of all white currants.

The following were developed by William Saunders, Canada Department of Agriculture, Central Experiment Farm, Ottawa, Ontario, Canada. Donated by Sherwood Miller, Ohio, United States. Received 04/23/1991.

PI 617690. *Ribes nigrum* L.

Cultivar. CANADA RIB0123. Pedigree - Black Naples x self. Plant vigorous, very productive, clusters of medium size, berries large, skin thick, subacid, good, midseason. - SFNY. 1925.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/30/1991.

PI 617691. *Ribes fasciculatum* Siebold & Zucc.

Wild. Collected 08/21/1991 in Jiangsu, China. Pedigree - collected from the wild in Jiangsu, China.

The following were collected by Jim Chandler, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received 09/27/1991.

PI 617692. *Ribes aureum* Pursh var. *aureum*

Wild. Golden Currant. Collected 09/24/1991 in Oregon, United States. Latitude 42° 25' N. Longitude 118° 50' W. Elevation 1650 m. Steens Mtn., Blitzen Crossing at Donner und Blitzen River. Pedigree - Collected from the wild in Oregon. OP fruit from wild population. Orange fruit from 2 plants. Alkaline creek bottom, sagebrush the dominant species.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/26/1991.

PI 617693. *Ribes* sp.

Wild. Collected 09/07/1991 in Oregon, United States. Latitude 44° N. Longitude 122° 30' W. Iron Mountain. Pedigree - selected from the wild in Oregon.

The following were collected by He Shan An, Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu 21004, China. Received 11/15/1991.

PI 617694. *Ribes fasciculatum* var. *chinense* Maxim.

Cultivated. Collected in Jiangsu, China. Pedigree - Uncertain, from botanical collection. No additional information provided.

The following were donated by Byron T. Johnson, 7934 State Road, Cincinnati, Ohio 45255, United States. Received 02/04/1992.

PI 617695. *Ribes sanguineum* Pursh

Wild. Red Flowering Currant, Blood Currant. Collected in Washington, United States. Pedigree - selection of wild species from Washington (?). Received listed as a 'native' *Ribes*. Dark red flowers, considered by Johnson to be an exceptional specimen.

The following were donated by Robert Kleiman, USDA, ARS, National Center for Agric., Utilization Research, Peoria, Illinois 61604, United States. Received 01/31/1992.

PI 617696. *Ribes cereum* var. *inebrians* (Lindl.) C. L. Hitchc.

Uncertain. Wax Currant, White-flowered Currant. Collected in Utah, United States. Pedigree - collection from the wild in Utah. Original seedlot collected by A.T. Bleak, Ephraim Canyon.

PI 617697. *Ribes montigenum* McClatchie

Uncertain. Spiny Currant. Collected in Utah, United States. Pedigree - collected from the wild in Utah. Original seedlot collected by A.T. Bleak, Ephraim Canyon.

PI 617698. *Ribes alpinum* L.

Wild. Collected in Former Serbia and Montenegro. Pedigree - collected from the wild in Yugoslavia. Improvement status unspecified.

The following were collected by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 617699. *Ribes magellanicum* Poir.

Wild. 2 CON 1A. Collected 02/1992 in Chile. Pedigree - collected from the wild from Chile. Collection information is forthcoming.

PI 617700. *Ribes magellanicum* Poir.

Breeding. 2 MAL 1B. Collected 02/1992 in Chile. Pedigree - collected from the wild from Chile. Collection information is forthcoming.

PI 617701. *Ribes magellanicum* Poir.

Breeding. 2 VEN 1A. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/31/1992.

PI 617702. *Ribes velutinum* Greene var. *velutinum*

Wild. Collected 08/21/1991 in Oregon, United States. Latitude 42° 40' N. Longitude 121° W. Lakeview to Bryant Mtn, above Capt. Jack Lake. Pedigree Collected from the wild in Oregon. Individuals had already lost most of their leaves for the season.

PI 617703. *Ribes binominatum* A. Heller

Wild. Ground Currant, Siskyou Currant. Collected 08/23/1991 in Oregon, United States. Latitude 42° 10' N. Longitude 122° 15' W. Hershberger Mtn. near Acker Divide/Rogue-Umpqua Divide trail. Pedigree - Collected from the wild in Oregon. Rooted cuttings and pressings taken.

The following were donated by A.T. Whittmore, Missouri Botanical Garden, Biology Department, P.O. Box 299, St. Louis, Missouri 63166-0299, United States. Received 04/29/1992.

PI 617704. *Ribes aureum* Pursh var. *aureum*

Cultivated. Collected in Missouri, United States. Pedigree - Open pollinated from botanical collection.

PI 617705. *Ribes alpinum* L.

Cultivated. Collected in Missouri, United States. Pedigree - Open pollinated from botanical collection.

The following were collected by Bill Russel. Donated by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 06/17/1992.

PI 617706. *Ribes americanum* Mill.

Wild. Collected in Pennsylvania, United States. Latitude 40° 51' N. Longitude 77° 41' W. Centre Hall. Pedigree - Collected from the wild in Pennsylvania.

PI 617707. *Ribes rotundifolium* Michx.

Wild. Collected in Pennsylvania, United States. Latitude 40° 51' N. Longitude 77° 41' W. Centre Hall. Pedigree - collected from the wild in Pennsylvania.

The following were collected by Thomas A. Lumpkin, Washington State University, Department of Crop and Soil Science, 261 Johnson Hall, Pullman, Washington 99164-6420, United States. Received 08/05/1992.

PI 617708. *Ribes* sp.

Wild. 15; ribes = smorodina. Collected 07/30/1992 in Russian Federation. Latitude 47° 2' N. Longitude 142° 12' E. Elevation 500 m.

Recently cleared forest brush - garden, southern exposure. Pedigree - Collected from the wild in Russia.

PI 617709. *Ribes hybrid*

Wild. 31; ribes = smorodina. Developed in Russian Federation. Collected 07/24/1992 in Russian Federation. Latitude 43° 10' N. Longitude 131° 53' E. Elevation 100 m. Pedigree - *Ribes nigrum* x *R. pauciflorum*, Fl, var. Ussuri.

PI 617710. *Ribes sp.*

Wild. 33; ribes = smorodina. Collected 07/24/1992 in Russian Federation. Latitude 43° 58' N. Longitude 132° E. Elevation 100 m. Home garden, Ussuriysk, Primor'ye. Pedigree - collected from the wild in Russia.

The following were donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 08/19/1992.

PI 617711. *Ribes petraeum* Wulfen

Uncertain. Collected in Russian Federation. Pedigree - collected from the wild in Russia. Originally collected in Russia. 92nt2968ai01SD.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/17/1992.

PI 617712. *Ribes laxiflorum* Pursh

Wild. Collected 08/12/1992 in Alaska, United States. Latitude 57° 3' N. Longitude 135° 20' W. Sitka, Alaska - Along waterfront near Sheldon Jackson Coll. Pedigree - collected from the wild in Alaska. Fruits blue, glaucous, with small stalked glands. Borne in racemes.

PI 617713. *Ribes bracteosum* Douglas

Wild. Collected 08/15/1992 in Alaska, United States. Latitude 57° 3' N. Longitude 135° 20' W. Sitka, Alaska - Along Saw Mill Creek, Beaver Lake trailhead. Pedigree - collected from the wild in Alaska. Fruits in long racemes, berries large, blue, glaucous.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 09/17/1992.

PI 617714. *Ribes erythrocarpum* Coville & Leiberg

Wild. Crater Lake Currant. Collected in Oregon, United States. Pedigree - Collected from the wild in Oregon.

PI 617715. *Ribes binominatum* A. Heller

Wild. Collected in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were collected by Daniel Campbell, University of California, Botanical Gardens, Centennial Drive, Berkeley, California 94720, United States. Developed by University of California, Botanical Garden, 200

Centennial Drive, Berkeley, California 94270, United States. Received 01/29/1993.

PI 617716. *Ribes speciosum* Pursh

Cultivated. Collected in California, United States. Latitude 37° 9' 31" N. Longitude 121° 35' 47" W. Elevation 503 m. NW slope in considerable shade, E Dunne Ave above Anderson L. Pedigree - Collected from the wild in California.

The following were developed by Jay Goodwin, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 03/16/1993.

PI 617717. *Ribes bracteosum* Douglas

Cultivated. Collected in Washington, United States. East slope Washington Cascades. Pedigree - collected from the wild in Washington germinated at the NCGR-Corvallis.

The following were donated by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 04/08/1993.

PI 617718. *Ribes viscosissimum* Pursh

Cultivated. Collected in Colorado, United States. Pedigree - collected from the wild in Colorado.

PI 617719. *Ribes viscosissimum* Pursh

Cultivated. Collected in Colorado, United States. Pedigree - collected from the wild in Colorado.

PI 617720. *Ribes aureum* Pursh var. *aureum*

Cultivated. Collected in Colorado, United States. Pedigree - collected from the wild in Colorado. Said to be either *R. aureum* or a golden fruited form of *R. odoratum*, lobed leaves. Waiting for further info.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 05/31/1993.

PI 617721. *Ribes niveum* Lindl.

Wild. Collected 05/26/1993 in Oregon, United States. Elevation 1500 m. T36S R44E S28 NW1/4 SW1/4, Malheur County, NW Owyhee Desert. Pedigree - Collected from the wild in Oregon.

PI 617722. *Ribes niveum* Lindl.

Wild. Collected 05/26/1993 in Oregon, United States. Elevation 1350 m. T36S R43E S14 NW1/4 NW1/4, Malheur County, Owyhee Desert. Pedigree - Collected from the wild in Oregon. Voucher: T.N. Kaye 1531 (OSU).

PI 617723. *Ribes niveum* Lindl.

Wild. Collected 05/26/1993 in Oregon, United States. Elevation 1500 m. T36S R44E S28 NW1/4 SW1/4, Malheur County, NW Owyhee Desert. Pedigree - Collected from the wild in Oregon. Voucher: T.N. Kaye 1552 (OSU).

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 07/15/1993.

PI 617724. *Ribes nigrum* L.

Uncertain. Developed in Germany. Pedigree - selection of *R. x nidigrolaria* from Germany.

PI 617725. *Ribes nigrum* L.

Uncertain. Developed in Germany. Pedigree - selection of *R. x nidigrolaria* from Germany.

PI 617726. *Ribes nigrum* L.

Cultivar. "Noir de Bourgogne"; Noir de Bourgogne 2/10; CANADA RIB0152; Q 25907. Developed in France. Pedigree - selection of *R. nigrum* from France.

PI 617727. *Ribes nigrum* L.

Cultivar. "Silvergieters Zwarte"; Q 25908. Developed in Germany. Pedigree - Boskoop Giant open pollinated.

The following were collected by Steven A. McKay, Cornell Univ.-Coop. Ext., Columbia County, 479 Rt. 66, Hudson, New York 12534, United States. Developed by T. Laxton. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 07/15/1993.

PI 617728. *Ribes nigrum* L.

Cultivar. CANADA RIB0192. Pedigree - selection of *R. nigrum*.

The following were collected by Steven A. McKay, Cornell Univ.-Coop. Ext., Columbia County, 479 Rt. 66, Hudson, New York 12534, United States. Developed by J. Maarse, Schellinkout, Netherlands. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 07/15/1993.

PI 617729. *Ribes rubrum* L.

Cultivar. Pedigree - Early-ripening seedling selection of Fay's Prolific.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/27/1993.

PI 617730. *Ribes laxiflorum* Pursh

Wild. Collected 08/04/1993 in Alaska, United States. Latitude 60° 8' N. Longitude 149° 35' W. Elevation 120 m. Resurrection River Trailhead 8 mi on exit glacier rd, NW of Seward. Spruce forest, hillside by old avalanche. Pedigree - Collected from the wild in Alaska. Blue currant - waxy bloom (photo) no glands on leaf? Collector's #: Seward-5.

PI 617731. *Ribes hudsonianum* Richardson

Wild. Collected 08/14/1993 in Alaska, United States. Latitude 63° 45' N. Longitude 148° 50' W. Elevation 550 m. Edge of Horseshoe Lake, Denali National Park. Between marshy lakeside and open spruce

forest. Pedigree - Collected from the wild in Alaska. Northern Black Currant, no bloom on fruit (photo). Collector's #: Horseshoe-1.

PI 617732. *Ribes triste* Pall.

Wild. Seward-6. Collected 08/04/1993 in Alaska, United States. Latitude 60° 8' N. Longitude 149° 35' W. Elevation 120 m. Resurrection River Trailhead, 8 mi on exit glacier rd, NW of Seward. Spruce forest, hillside by old avalanche. Pedigree - Collected from the wild in Alaska.

PI 617733. *Ribes triste* Pall.

Wild. Collected 08/12/1993. Latitude 61° 40' N. Longitude 149° 0' W. Elevation 245 m. About 10 miles NW of Palmer on Glenn Hwy, N side of road by state campground. Mixed forest along Moose Creek. Pedigree - Collected from the wild in Alaska. Large red berries, good flavor. Collector's #: Moose Creek-1.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 09/03/1993.

PI 617734. *Ribes watsonianum* Koehne

Wild. Collected 01/10/1993 in Oregon, United States. Hood River County, Oregon, 3.9 miles SE of Hwy 35 on Forest Service road 48, then 1.1 miles NE on road 540. Pedigree - Collected from the wild in Oregon. Voucher: Messinger 312.

PI 617735. *Ribes* sp.

Wild. Collected 01/10/1993 in Oregon, United States. Hood River County, Oregon, 20 meters from NW corner of "Sno-Park" at junction to Trillium Lake from Hwy 26. Pedigree - Collected from the wild in Oregon. Voucher: Messinger 313.

The following were collected by Elizabeth Dickson, NYS Agricultural Experiment Station, Horticultural Sciences, Hedrick Hall, Geneva, New York 14456-0462, United States; Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States; Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext. Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 10/05/1993.

PI 617736. *Ribes* sp.

Uncertain. KAZ 93-28-03. Collected 09/1993 in Kazakhstan. Pedigree - collected from Kazakhstan.

PI 617737. *Ribes* sp.

Uncertain. KAZ 93-28-01. Collected 09/1993 in Kazakhstan. Pedigree - collected from Kazakhstan.

PI 617738. *Ribes* sp.

Uncertain. KAZ 93-22-01. Collected 09/1993 in Kazakhstan. Pedigree - collected from Kazakhstan.

The following were collected by Joe Voges, Naturecraft Studio, 925 4th Corso, Nebraska City, Nebraska 68410-2864, United States. Received 12/03/1993.

PI 617739. *Ribes hirtellum* Michx.

Wild. Developed in United States. Collected 11/1993 in Nebraska, United States. Latitude 40° 40' N. Longitude 95° 52' W. Elevation 200 m. Otoe County Wildlife Club, 1 1/2 miles west of Nebraska City. Pedigree - Collected from the wild in Nebraska.

The following were collected by Dean Davis. Received 12/15/1993.

PI 617740. *Ribes sanguineum* Pursh

Wild. Collected 12/09/1993 in California, United States. Latitude 41° 52' N. Longitude 120° 30' W. Elevation 1021 m. Happy Camp Ranger District, Klamath National Forest, Siskiyou County, California. Pedigree - Collected from the wild in California. See login notes for additional information.

The following were developed by Hortus Botanicus Principalis, Academiae Scientiarum URSS, ul. Botanicheskaya 4, Moscow, Moscow 127276, Russian Federation. Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 04/28/1994.

PI 617741. *Ribes sanguineum* Pursh

Cultivated. Collected in United States. Pedigree - collected from the wild. Transfer of Ames 4324 to NCGR-Corvallis on order 940367.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Herb Hoover, University of Minnesota, St. Paul, Minnesota, United States; Rick Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/31/1993.

PI 617742. *Ribes lacustre* (Pers.) Poir.

Wild. Collected 08/08/1993 in Washington, United States. Latitude 47° 54' N. Longitude 123° 2' W. Elevation 762 m. T28N R3W Sec. 14 & 15; Olympic Nat'l Forest US 101 to Lord's Lake Loop Rd., and then NW along FR 28. Pedigree - Collected from the wild in Washington. Moist coastal forest. Lots of light along road and adjacent to clear cut. Transect ran along road approx 3.2 km., most of which was along upper edge of clear cut.

PI 617743. *Ribes sanguineum* Pursh

Wild. Collected 08/08/1993 in Washington, United States. Latitude 48° N. Longitude 123° W. Elevation 15 m. T31N R4W Sec. 27 & 33; Dungeness Recreation Area. Along trail on top of sandstone bluffs along St. of Juan de Fuca. Pedigree - Collected from the wild in Washington. Very sandy area, appears to be typical coastal/beach environment.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Ted Mackey, Horticultural Crops Research Laboratory, 3420 Orchard St., Corvallis, Oregon 97330, United States; Herb Hoover, University of Minnesota, St. Paul, Minnesota, United States; Rick Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/31/1993.

PI 617744. *Ribes bracteosum* Douglas

Wild. Collected 08/09/1993 in Washington, United States. Latitude 48° N. Longitude 124° W. Elevation 380 m. T30N R10W Sec. 1 & 12; Olympic National Forest, along FR 3040. Pedigree - Collected from the wild in Washington. Older clear cut on north side of road. Typical coastal forest. Lots of *R. spectabilis* and *G. shallon*.

PI 617745. *Ribes bracteosum* Douglas

Wild. Collected 08/09/1993 in Washington, United States. Latitude 48° 30' N. Longitude 121° 20' W. Elevation 460 m. T38N R9W Sec. 19; Mt. Baker-Snoqualmie Nat'l Forest, in vicinity of Baker Lake. Pedigree - Collected from the wild in Washington. Site approx. 1.6 km long along FR 1130. Slide and clear cut area, steep grade, moist area, vegetation thick.

PI 617746. *Ribes bracteosum* Douglas

Wild. Collected 08/11/1993 in Washington, United States. Latitude 48° 30' N. Longitude 121° W. Elevation 460 m. T34N R12W Sec. 1, T34N R13E Sec 6, T35N R13E Sec 31; Mt. Baker-Snoqualmie Nat'l Forest. Pedigree - Collected from the wild in Washington. Fairly low light and high moisture area. While some *R. ursinus* clones were fruiting well, not an abundant site for fruit.

PI 617747. *Ribes lacustre* (Pers.) Poir.

Wild. Collected 08/12/1993 in Washington, United States. Latitude 48° 30' N. Longitude 120° 30' W. Elevation 0 m. T36N R19W Sec. 29; Okanogan Nat'l Forest, Early Winters creek, along FR 5301300, Klipchuck NFS Campground off WA 20. Pedigree - Collected from the wild in Washington. Typical stream environment, moist.

PI 617748. *Ribes cereum* Douglas

Wild. Collected 08/12/1993 in Washington, United States. Latitude 48° 30' N. Longitude 120° 30' W. Elevation 1020 m. T36N R20E Sec. 20 & 19; Okanogan Nat'l Forest, from FR 52 then west on FR 5225 approx. 1.6 km. Pedigree - Collected from the wild in Washington. Very dry, overgrazed. Found near dry creekbed along with *Cornus* spp.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Herb Hoover, University of Minnesota, St. Paul, Minnesota, United States; Rick Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by

Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/31/1993.

PI 617749. *Ribes* sp.

Wild. Collected 08/13/1993 in Washington, United States. Latitude 47° 40' N. Longitude 121° W. Elevation 1205 m. T27N R14E (Wen. NF)/R13E (Mt. Baker-Snoq.); Wenatchee Nat'l Forest, along FR 6700 near US 2 at base of ridge. Pedigree - Collected from the wild in Washington.

PI 617750. *Ribes lacustre* (Pers.) Poir.

Wild. Collected 08/15/1993 in Washington, United States. Latitude 46° 30' N. Longitude 121° 40' W. Elevation 930 m. T14N R8E Sec. 13; Gifford Pinchot Nat'l Forest, FR 52 to FR 5260 along Johnson Creek. Pedigree - Collected from the wild in Washington. Old clear cut with large amounts of *Vaccinium* spp. In more open areas, esp. around old tree stumps, *R. ursinus* growing well.

PI 617751. *Ribes viscosissimum* Pursh

Wild. Collected 08/16/1993 in Washington, United States. Latitude 46° 30' N. Longitude 121° 30' W. Elevation 1295 m. T14N R11E Sec. 36; Wenatchee Nat'l Forest, from US 12 at Dog Lake NFS campground on trail around south side of lake. Pedigree - collected from the wild in Washington. High elevation, moist, too shady for good fruit production.

PI 617752. *Ribes lacustre* (Pers.) Poir.

Wild. Collected 08/16/1993 in Washington, United States. Latitude 46° 30' N. Longitude 121° 30' W. Elevation 1420 m. T13N R11E Sec. 4 & 9; Gifford Pinchot Nat'l Forest, at and near end of FR 1284 from US 12 just west of White Pass. Pedigree - collected from the wild in Washington.

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617753. *Ribes nigrum* L.

Cultivar. Developed in United Kingdom. Pedigree - selection of *Ribes nigrum*.

PI 617754. *Ribes nigrum* L.

Cultivar. Developed in Finland. Pedigree - selection of *R. nigrum* from Finland possibly land race of black currant cultivated from Kostomuksha region of Russia adjacent to Finland. Hardy and compact, highly self-fertile, early flowering.

The following were developed by G.T. Spinks, University of Bristol, Research Station, Long Ashton, Bristol, England, United Kingdom. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617755. *Ribes nigrum* L.

Cultivar. Pedigree - Baldwin x Victoria. Fruit: skin black, resembles Baldwin. Plant: main crop high yielding. Brooks and Olmo, 1972.

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617756. Ribes nigrum L.

Cultivar. "Eagle". Developed in United Kingdom. Pedigree - late ripening gooseberry.

PI 617757. Ribes nigrum L.

Cultivar. Developed in France. Pedigree - Carter's Champion x Victoria (selection of pure *R. nigrum*). The main use of this cultivar is for cassis liqueur production.

PI 617758. Ribes nigrum L.

Cultivar. "Goliath"; Q 27877. Developed in Netherlands. Pedigree - Victoria open pollinated developed in mid to late 1800s. Plants upright, bunches short, compact, berries medium to large, unusually sweet for a black currant. U. P. Hedrick. 1925. Small Fruit of New York. p. 306.

PI 617759. Ribes nigrum L.

Cultivar. Developed in United Kingdom. Pedigree - selection of *R. nigrum*.

PI 617760. Ribes nigrum L.

Cultivar. Developed in United Kingdom. Pedigree - selection of *R. nigrum*.

PI 617761. Ribes nigrum L.

Cultivar. "Karlstein Longbunch"; Karlsteinsky dlouhohrozen; Rozenhal's Lantraubig. Developed in Germany. Pedigree - selection of *R. nigrum*.

The following were developed by T. Laxton. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617762. Ribes nigrum L.

Cultivar. Pedigree - selection of *R. nigrum*.

PI 617763. Ribes nigrum L.

Cultivar. Pedigree - selection of *R. nigrum*.

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617764. Ribes nigrum L.

Cultivar. Developed in Sweden. Pedigree - selection of *R. nigrum* from Cologne, Germany.

PI 617765. Ribes nigrum L.

Cultivar. Developed in United Kingdom. Pedigree - selection of *R. nigrum*.

The following were developed by N.I. Vavilov Research Institute of Plant Industry, 44, B. Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617766. *Ribes nigrum* L.

Cultivar. CANADA RIB0112. Pedigree - (Baldwin x *R. nigrum* v. *sibiricum*) x Golubka.

PI 617767. *Ribes nigrum* L.

Cultivar. Pedigree - Ovalnaja x Black Naples (aka. Neapolitanskaya).

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617768. *Ribes nigrum* L.

Cultivar. "Nysa"; Q 27910. Developed in Unknown. Pedigree - selection of *R. nigrum*.

The following were developed by A.W.S. Hunter, Central Experiment Farm, Ottawa, Ontario, Canada. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617769. *Ribes nigrum* L.

Cultivar. Pedigree - selection of *R. nigrum*.

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617770. *Ribes nigrum* L.

Cultivar. Developed in Unknown. Pedigree - Victoria open pollinated.

PI 617771. *Ribes nigrum* L.

Cultivar. Developed in Unknown. Pedigree - Goliath x Seyane iz biiiska.

PI 617772. *Ribes nigrum* L.

Cultivar. Developed in United Kingdom. Pedigree - selection of *R. nigrum*.

PI 617773. *Ribes nigrum* L.

Cultivar. Developed in France. Pedigree - selection of *R. nigrum*.

PI 617774. *Ribes nigrum* L.

Cultivar. Developed in Germany. Pedigree - selection of *R. nigrum* from Germany.

PI 617775. *Ribes nigrum* L.

Cultivar. Developed in United Kingdom. Pedigree - selection of *R. nigrum*.

PI 617776. Ribes nigrum L.
Cultivar. Developed in Netherlands. Pedigree - selection of R. nigrum.

PI 617777. Ribes nigrum L.
Cultivar. Developed in United Kingdom. Pedigree - selection of R. nigrum.

PI 617778. Ribes nigrum L.
Cultivar. Developed in Sweden. Pedigree - Goliath open pollinated.

PI 617779. Ribes nigrum L.
Cultivar. "Kirovchanka"; Q 27889. Developed in Russian Federation. Pedigree - Slava Leningrada x Baldwin.

The following were developed by Swedish University of AG Sciences, Expt. Div. of North Swedish Hort., Box 5097, Robacksdalen, Umea, Vasterbotten 900 05, Sweden. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617780. Ribes nigrum L.
Cultivar. CANADA RIB0189. Pedigree - Seedling selection of R. nigrum from North Sweden. Midseason, dwarf habit, very hardy. Fruit uneven in size, generally thick skinned.

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617781. Ribes nigrum L.
Cultivated. Developed in France. Pedigree - selection of R. nigrum.

PI 617782. Ribes nigrum L.
Cultivar. "Sligo"; Q 27928. Developed in Unknown. Pedigree - selection of R. nigrum.

PI 617783. Ribes nigrum L.
Cultivar. Developed in United Kingdom. Pedigree - selection of R. nigrum.

PI 617784. Ribes nigrum L.
Cultivar. Developed in United Kingdom. Pedigree - selection of R. nigrum.

PI 617785. Ribes nigrum L.
Cultivar. Developed in United Kingdom. Pedigree - selection of R. nigrum.

PI 617786. Ribes nigrum L.
Cultivar. Developed in United Kingdom. Pedigree - selection of R. nigrum.

The following were developed by H. Jones, Market Drayton, England, United Kingdom. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617787. *Ribes nigrum* L.

Cultivar. Pedigree - Boskoop Giant probably crossed with Carter's Champion. Plant: moderately vigorous, fairly compact, of similar size to Baldwin, produces a moderate number of one-year old basal shoots. Flowers early midseason, reaching full flower a day earlier than Baldwin. Berry: medium size usses: two to three short trusses per node. Season: second early, ripening with French Black and Wellington XXX. It has cropped well in some trials and better than Baldwin in frost years. Although the fruit is reasonably well exposed, the trusses do not lend themselves to easy hand picking, but it should be suitable for machine harvesting. Gardner, 1976.

The following were developed by T. Laxton. Donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 06/06/1994.

PI 617788. *Ribes nigrum* L.

Cultivar. Pedigree - selection of *R. nigrum*.

The following were donated by John Lejeune, Sr., Falcon Farms Ltd., 5936 McCallum Road, RR #1, Agassiz, British Columbia V0M 1A0, Canada. Received 01/16/1995.

PI 617789. *Ribes nigrum* L.

Cultivar. "Polar"; BRI 74020-6. Pedigree - (Silvergieters Black x Sunderbyn 11) x Nikkala X1.

PI 617790. *Ribes nigrum* L.

Cultivar. Developed in Canada. Pedigree - cross of *R. nigrum* from Sweden.

The following were donated by Scott Skogerboe, Colorado State University, Department of Horticulture, Fort Collins, Colorado 80523, United States. Received 03/08/1995.

PI 617791. *Ribes uva-crispa* L.

Cultivar. Developed in United Kingdom. Pedigree - gooseberry selection. The original 'Red Jacket' Gooseberry (*Ribes uva-crispa*) is a pure European cultivar, developed in England prior to 1881 and unfortunately shares its common name with at least 4 distinct clones in the world today. Adding to the confusion is the fact that a Canadian gooseberry hybrid was named 'Red Jacket' (a.k.a. Josselyn) in 1890 without the knowledge of the existing English cultivar. During the 1930s a large collection of various gooseberry cultivars were assembled at the USDA Horticultural Field Station in Cheyenne, Wyoming to evaluate, among other criteria, their adaptability to regional climatic conditions (never published). The English 'Red Jacket' cultivar stood alone as the winner, primarily due to its superior hardiness (per conversation with Gene Howard, superintendent of the Cheyenne Station from 1964 to 1974).

Mr. Howard told me cuttings had been obtained directly from England and that it eventually became his personal favorite due to its hardiness, productivity, flavor and relative freedom from powdery mildew. He held the English 'Red Jacket' in such high regard that he transplanted it, and none other, to his personal residence before the collection was destroyed. The plant in Cheyenne is extremely thorny with thick, heavy thorns in triplets at each node and bears prolifically, so much that the weight of the fruit has caused the branches to grow in a mounded, almost prostrate form. The earliest known reference dates to 1881 where the 'Red Jacket' took 6th place in the red category at the English National Gooseberry Show held in Manchester. One of its berries was reported to have weighed 22 pennyweight and 20 grains, which converts to approx. 1.1 ounces. Berries in Cheyenne were about the circumference of a nickel with 20 to 30 berries per branch. From a reference (J.L. Budd and N.E. Hansen in 1903) it is described as having smooth skin and flesh sweet and good. Budd and Hansen named it 'English Red Jacket' to distinguish it from the Canadian sort.

The following were donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 03/27/1995.

PI 617792. *Ribes uva-crispa* L.

Cultivar. Developed in United Kingdom. Pedigree - gooseberry selection.

PI 617793. *Ribes uva-crispa* L.

Cultivar. Developed in United Kingdom. Pedigree - gooseberry selection. Green-fruited cultivar, early.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 617794. *Ribes* sp.

Wild. WM 397. Collected 02/26/1995 in Bolivia. Pedigree - collected in the wild from Bolivia.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Donated by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States; Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 617795. *Ribes* sp.

Wild. WM 408. Collected 02/26/1995 in Bolivia. Pedigree - collected in the wild from Bolivia.

PI 617796. *Ribes* sp.

Wild. WM 412. Collected 02/26/1995 in Bolivia. Pedigree - collected in the wild from Bolivia.

PI 617797. *Ribes pentlandii* Britton

Wild. WM 420. Collected 02/26/1995 in Bolivia. Pedigree - collected in the wild from Bolivia.

The following were donated by Ronald Smith, 9935 NW Cornell Road, Portland, Oregon 97229, United States. Received 05/21/1995.

PI 617798. *Ribes uva-crispa* L.

Cultivar. "Red Gooseberry from Holland". Developed in Netherlands.

Pedigree - gooseberry selection.

PI 617799. *Ribes uva-crispa* L.

Cultivar. "Red Gooseberry from Belgium". Developed in Belgium. Pedigree

- gooseberry selection.

The following were donated by John M. Row, USDA/ARS/SCS, Plant Materials Center, 3800 S 20th Street, Manhattan, Kansas 66502, United States. Received 06/08/1995.

PI 617800. *Ribes aureum* var. *villosum* DC.

Wild. 9049768. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617801. *Ribes aureum* var. *villosum* DC.

Wild. 9049769. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617802. *Ribes aureum* var. *villosum* DC.

Wild. 9049770. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617803. *Ribes aureum* var. *villosum* DC.

Wild. 9049771. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617804. *Ribes aureum* var. *villosum* DC.

Wild. 9049773. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617805. *Ribes aureum* var. *villosum* DC.

Wild. 9049777. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617806. *Ribes aureum* var. *villosum* DC.

Wild. 9049778. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617807. *Ribes aureum* var. *villosum* DC.

Wild. 9049780. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617808. *Ribes aureum* var. *villosum* DC.

Wild. 9049781. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

PI 617809. *Ribes aureum* var. *villosum* DC.

Wild. 9049782. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

- PI 617810. *Ribes aureum* var. *villosum* DC.**
Wild. 9049783. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617811. *Ribes aureum* var. *villosum* DC.**
Wild. 9049788. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617812. *Ribes aureum* var. *villosum* DC.**
Wild. 9049803. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617813. *Ribes aureum* var. *villosum* DC.**
Wild. 9049804. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617814. *Ribes aureum* var. *villosum* DC.**
Wild. 9049806. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617815. *Ribes aureum* var. *villosum* DC.**
Wild. 9049807. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617816. *Ribes aureum* var. *villosum* DC.**
Wild. 9049810. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617817. *Ribes aureum* var. *villosum* DC.**
Wild. 9049811. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617818. *Ribes aureum* var. *villosum* DC.**
Wild. 9049816. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617819. *Ribes aureum* var. *villosum* DC.**
Wild. 9049842. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617820. *Ribes aureum* var. *villosum* DC.**
Wild. 9049885. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.
- PI 617821. *Ribes aureum* var. *villosum* DC.**
Wild. 9049930. Collected in Kansas, United States. Pedigree - selection of *R. odoratum* from Kansas.

The following were collected by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 01/29/1990.

- PI 617822. *Ribes magellanicum* Poir.**
Wild. TDC-03. Collected 01/01/1990 in Chile. Pedigree - collected from the wild in Chile. This accession was renumbered CRIB 1053; it was Corvallis inventory number CRIB 669.001. It was discovered that this

accession is from a different seed lot than CRIB 669. Two plants look quite different from each other in the field.

The following were collected by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Donated by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States. Received 09/25/1995.

PI 617823. *Ribes turbinatum* Pojark.

Wild. Collected 09/03/1995 in Kazakhstan. Latitude 45° 24' 25" N. Longitude 80° 24' 42" E. Elevation 1170 m. Kazakhstan, 15 km E of Topolevka, Djungarsky Mountain Range; 3 km E of Topolevka Forestry camp. Site 13, Collection no. 05. Fertile soil; 80 deg slope toward NW; edge of cliff; open environment. Pedigree - collection from the wild in Kazakhstan.

The following were collected by Dan Parfitt, USDA, ARS, National Clonal Germplasm Repository, University of California, Davis, California 95616, United States; George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 10/16/1995.

PI 617824. *Ribes uva-crispa* L.

Cultivated. Collected 09/03/1995 in Turkmenistan. Latitude 38° 25' 55" N. Longitude 56° 17' 43" E. Elevation 0 m. Turkmenistan, garden between guest house and director's house, Garrygala Station. Shaded area along fence. Pedigree - gooseberry selection.

The following were donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 10/31/1995.

PI 617825. *Ribes nigrum* L.

Cultivar. "Belaruskaya Slodkaya [Sweet]"; CANADA RIB0109. Developed in Belarus. Pedigree - {[Baldwin x *R. nigrum* var. *sibericum*) x Carter's Champion] x *R. dikuscha* selection DB}.

PI 617826. *Ribes nigrum* L.

Cultivar. "Doch Siberyachki [Daughter of Siberia]"; CANADA RIB0111. Developed in Russian Federation. Pedigree - Zelenoplodnaya x Slava Leningrad.

PI 617827. *Ribes nigrum* L.

Cultivar. "Nesravnennaya"; CANADA RIB0113. Developed in Russian Federation. Pedigree - selection of *R. nigrum*.

PI 617828. *Ribes nigrum* L.

Cultivar. "Lunnaja"; Tunnaja. Developed in Russian Federation. Pedigree - Stakhanovka Altaya x (Vlstavochnaya x Neosepuyastayasya).

PI 617829. Ribes nigrum L.

Cultivar. "Kantata"; CANADA RIB0114. Developed in Russian Federation. Pedigree - {(Baldwin x R. nigrum v. sibericum) x Carter's Champion} x R. dikuscha}.

The following were developed by M. B. Davis, Canada Department of Agriculture, Central Experiment Station, Ottawa, Ontario, Canada; A.W.S. Hunter, Central Experiment Farm, Ottawa, Ontario, Canada. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 10/31/1995.

PI 617830. Ribes rubrum L.

Clone. O-399; CANADA RIB0186; R. rubrum O-399. Pedigree - selection of red currant.

The following were developed by A.W.S. Hunter, Central Experiment Farm, Ottawa, Ontario, Canada. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 10/31/1995.

PI 617831. Ribes rubrum L.

Clone. O-261; CANADA RIB0179; R. uva-crispa O-261. Pedigree - selection of gooseberry from Ontario.

PI 617832. Ribes rubrum L.

Clone. O-271; CANADA RIB0180; R. uva-crispa O-271. Pedigree - selection of gooseberry. The berries are about the same size as Poorman, medium-red when ripe and of fairly good quality. This cross is fairly productive but less so than Captivator. A. W. S. Hunter, 1953.

PI 617833. Ribes rubrum L.

Clone. O-274; CANADA RIB0181; R. uva-crispa O-274. Pedigree - selection of gooseberry.

PI 617834. Ribes rubrum L.

Clone. O-275; CANADA RIB0182; R. rubrum O-275. Pedigree - selection of red currant.

The following were developed by A.F. Yeager. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 10/31/1995.

PI 617835. Ribes uva-crispa L.

Cultivar. "Abundance"; N. Dak. 9; CANADA RIB0188. Pedigree - Ribes missouriensis x Oregon Champion. Fruit: size medium, round, skin purplish when ripe, thick, tough, borne on long stems. Plant: strong grower, hardy extremely productive. Brooks and Olmo, 1997.

The following were developed by Nicholas Pankiw, Dufrost, Manitoba, Canada. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 10/31/1995.

PI 617836. *Ribes uva-crispa* L.

Cultivar. "Pankiw"; CANADA RIB0183. Pedigree - Selection of European gooseberry made in Canada. Fruit: size medium, quality good. Plant: bears well annually. grows well on heavy soil. Brooks and Olmo, 1996.

The following were developed by A.W.S. Hunter, Central Experiment Farm, Ottawa, Ontario, Canada. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 10/31/1995.

PI 617837. *Ribes uva-crispa* L.

Cultivar. "Sabine"; CANADA RIB0102. Pedigree - gooseberry selection.

PI 617838. *Ribes uva-crispa* L.

Cultivar. "Sebastien"; CANADA RIB0103. Pedigree - gooseberry selection.

PI 617839. *Ribes uva-crispa* L.

Cultivar. "Selby"; CANADA RIB0104. Pedigree - gooseberry selection.

PI 617840. *Ribes uva-crispa* L.

Cultivar. "Shefford"; CANADA RIB0105. Pedigree - gooseberry selection.

PI 617841. *Ribes uva-crispa* L.

Cultivar. "Stanbridge". Pedigree - gooseberry selection.

PI 617842. *Ribes uva-crispa* L.

Cultivar. "Sutton"; CANADA RIB0107. Pedigree - gooseberry selection.

PI 617843. *Ribes uva-crispa* L.

Cultivar. "Thoreson"; Pembina Pride; Friesen's Mammoth; CANADA RIB0185. Pedigree - Seedling gooseberry brought from central Europe.

The following were developed by Dominion Arboretum and Botanic Garden, Plant Research Institute, Ottawa, Ontario, Canada. Donated by Margie Luffman, Agriculture Canada, Canadian Clonal Genebank, Smithfield Experiment Station, Trenton, Ontario K8V 5R5, Canada. Received 10/31/1995.

PI 617844. *Ribes laciniatum* Hook. f. & Thomson

Cultivated. Collected in Uncertain. Pedigree - selection of the species.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Rex M. Brennan, Scottish Crop Research Inst., Mylnefield, Genome Dynamics Programme, Dundee, Scotland DD2 5DA, United Kingdom. Donated by Rex M. Brennan, Scottish Crop Research Inst., Mylnefield, Genome Dynamics Programme, Dundee, Scotland DD2 5DA, United Kingdom. Received 08/20/1995.

PI 617845. *Ribes cereum* Douglas

Wild. Collected 08/20/1995 in Oregon, United States. Latitude 45° 30' N. Longitude 117° 30' W. Elevation 1600 m. Hurricane Creek, Wallowa county, Oregon. Forested region, shaded, eastern slope. Pedigree - collection from the wild.

PI 617846. *Ribes viscosissimum* Pursh

Wild. Collected 08/20/1995 in Oregon, United States. Latitude 45° 30' N. Longitude 117° 30' W. Elevation 1600 m. Hurricane Creek, Wallowa county, Oregon. South facing slope. Pedigree - selection from the wild in Oregon.

The following were donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 1995.

PI 617847. *Ribes cynosbati* L.

Cultivated. CRIB 1083. Pedigree - selection of *R. cynosbati*.

PI 617848. *Ribes uva-crispa* L.

Cultivated. "Amish Gooseberry"; CRIB 1084. Pedigree - gooseberry selection.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 03/15/1996.

PI 617849. *Ribes uva-crispa* L.

Cultivar. CRIB 1085. Pedigree - [(*R. missouriense* Nutt. x Red Warrington) x Triumph] x Keepsake.

PI 617850. *Ribes nigrum* L.

Cultivar. CRIB 1087. Developed in Russian Federation. Pedigree - selection of *R. nigrum*.

PI 617851. *Ribes uva-crispa* L.

Cultivar. CRIB 1088. Developed in United Kingdom. Pedigree - gooseberry selection.

PI 617852. *Ribes uva-crispa* L.

Cultivar. CRIB 1089. Pedigree - gooseberry selection.

PI 617853. *Ribes aureum* Pursh var. *aureum*

Cultivar. CRIB 1090. Pedigree - selection of *R. aureum*.

The following were collected by Catherine I. Wright, Alaska Plant Materials Center, HCO2, Box 7440, Palmer, Alaska 99645, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/08/1996.

PI 617854. *Ribes hudsonianum* Richardson

Wild. KHCW 96-03-02; CRIB 1091. Collected 07/30/1996 in Alaska, United States. Latitude 60° 29' 29" N. Longitude 145° 52' 14" W. Elevation 10 m. Whitshed Road 6 miles south of Cordova. In ditch on south side of road. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Epilobium*, *Potentilla*, *Festuca* *Alnus*, *Picea*, *Heracleum*, *Rubus spectabilis*.

- PI 617855. *Ribes bracteosum* Douglas**
 Wild. KHCW 96-06-01; CRIB 1092. Collected 07/30/1996 in Alaska, United States. Latitude 60° 28' N. Longitude 145° 20' W. Elevation 15 m. Between road and McKinley Cabin, 22 miles southeast of Cordova, Copper River Road. Edge of trail in forest understory. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Picea sitchensis*, *Echinopanax horridum*, *Tiarella trifoliata*, *Sambucus racemosum*, *Tsuga mertensiana*.
- PI 617856. *Ribes bracteosum* Douglas**
 Wild. KHCW 96-09-05; CRIB 1093. Collected 07/30/1996 in Alaska, United States. Latitude 60° 28' N. Longitude 145° 12' W. Elevation 30 m. McKinley Cabin Trail to McKinley Lake about 2 miles from Copper River Road. By stream, open edge of trail. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Cornus canadensis*, *Sanguisorba*, *Alnus*, *Arunkus*, *Pyrola*, *Potentilla* *Alnus*, *Tsuga mertensiana*, *Picea sitchensis*, *Lycopodium annotinum* *Dryopteris dilatata*, *Menziesia ferruginea*.
- PI 617857. *Ribes laxiflorum* Pursh**
 Wild. KHCW 96-13-06; CRIB 1094. Collected 07/31/1996 in Alaska, United States. Latitude 60° 30' N. Longitude 145° 30' W. Elevation 15 m. Cabin Lake parking lot, north of Cordova airport, 3 miles north of Copper River Road, . Open edge of woods near parking lot. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996.
- PI 617858. *Ribes hudsonianum* Richardson**
 Wild. KHCW 96-14-02; CRIB 1095. Collected 07/30/1996 in Alaska, United States. Latitude 60° 28' N. Longitude 145° 12' W. Elevation 30 m. McKinley Cabin Trail to McKinley Lake about 2 miles from Copper River Road. By stream, open edge of trail. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996. Associated plants: *Cornus*, *Sanguisorba*, *Alnus*, *Tsuga* *Arunkus*, *Pyrola*, *Potentilla*.
- PI 617859. *Ribes triste* Pall.**
 Wild. KHCW 96-23-08; CRIB 1096. Collected 08/04/1996 in Alaska, United States. Latitude 60° 25' N. Longitude 151° 5' W. Elevation 30 m. Plants collected on the nature trails at the Kenai National Wildlife Refuge Headquarters, Skihill Road, Soldotna. Open edge of trail, upland site. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996.
- PI 617860. *Ribes bracteosum* Douglas**
 Wild. KHCW 96-27-02; CRIB 1098. Collected 08/05/1996 in Alaska, United States. Latitude 60° 45' N. Longitude 148° 40' W. Elevation 75 m. About 1 mile south of Whittier, AK towards 'Salmon Run'. Edge of woods. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996.
- PI 617861. *Ribes triste* Pall.**
 Wild. KHCW 96-29-01; CRIB 1099. Collected 08/06/1996 in Alaska, United States. Latitude 61° 10' N. Longitude 150° 5' W. Elevation 30 m. Klatt Bog, Anchorage. This bog will be eliminated by construction by 1997. Edge of sphagnum bog. Pedigree - collected from the wild in Alaska. USDA Sponsored plant collecting expedition, 1996.

PI 617862. *Ribes nigrum* L.

Cultivated. Swedish Black open pollinated; KHCW 96-29-04; CRIB 1100. Collected 08/06/1996 in Alaska, United States. Latitude 61° 10' N. Longitude 150° 5' W. Elevation 30 m. Klatt Bog, Anchorage This bog will be eliminated by construction by 1997. Roadside edge of sphagnum bog. Pedigree - open pollinated Swedish Black. USDA Sponsored plant collecting expedition, 1996.

The following were developed by Gunny Larsson, Swedish University of Agric. Sci., Umea, Vasterbotten, Sweden. Donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 617863. *Ribes nigrum* L.

Cultivar. "Erkiheikki VII"; CRIB 1101. Pedigree - selection of *R. nigrum* from the wild in N. Sweden. USDA Sponsored plant collecting expedition, 1996.

PI 617864. *Ribes nigrum* L.

Cultivar. CRIB 1102. Pedigree - selection of *Ribes nigrum* from North of Sweden. USDA Sponsored plant collecting expedition, 1996.

The following were donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 617865. *Ribes nigrum* L.

Cultivar. CRIB 1103. Developed in Finland. Pedigree - selection of *Ribes nigrum* from the wild in Finland selected before 1940. USDA Sponsored plant collecting expedition, 1996.

The following were developed by Gunny Larsson, Swedish University of Agric. Sci., Umea, Vasterbotten, Sweden. Donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 617866. *Ribes nigrum* L.

Cultivar. CRIB 1104. Pedigree - selection of *Ribes nigrum* from North Sweden. USDA Sponsored plant collecting expedition, 1996.

The following were developed by F. Nilsson, Horticultural Research Station, Akapr, Alnarp, Malmohus, Sweden. Donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 617867. *Ribes nigrum* L.

Cultivar. CRIB 1105. Pedigree - wild *R. nigrum* (Erkiheikki-type) x Boskoop Giant. USDA Sponsored plant collecting expedition, 1996.

The following were donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 617868. *Ribes rubrum* L.

Cultivar. CRIB 1107. Developed in Netherlands. Pedigree - selection of *Ribes rubrum*. USDA Sponsored plant collecting expedition, 1996.

The following were developed by Honeywood Nursery, Canada. Donated by Stoney J. Wright, Alaska Plant Materials Center, Alaska Department of Natural Resources, Division of Agriculture, Palmer, Alaska 99645-9706, United States. Received 08/08/1996.

PI 617869. *Ribes rubrum* L.

Cultivar. CRIB 1108. Pedigree - selection of *Ribes rubrum*. USDA Sponsored plant collecting expedition, 1996.

The following were donated by Fumiomi Takeda, USDA/ARS/NER, Appalachian Fruit Res. Sta., 2217 Wiltshire Road, Kearneysville, West Virginia 25430-9802, United States. Received 06/28/1996.

PI 617870. *Ribes aureum* Pursh var. *aureum*

Rootstock. CRIB 1114. Developed in Hungary. Pedigree - selection of *Ribes aureum* used for rootstock.

PI 617871. *Ribes uva-crispa* L.

Cultivar. "Tasty Red"; "Piros isletes"; CRIB 1115. Developed in United Kingdom. Pedigree - old English gooseberry selection. red berries, yield per bush 1,500 grams about 3 lbs. 50 berries weighed about 280 grams (10 oz) 5.6 grams/berry. Data from F. Takeda, W. VA. 1996.

PI 617872. *Ribes uva-crispa* L.

Cultivar. CRIB 1116. Developed in Hungary. Pedigree - gooseberry selection. green/yellow fruit, yield per bush about 4,000 grams or 9 lbs. 50 berries weighed about 320 g or 11 oz. (6.4 grams per berry). Data from F. Takeda, W. VA. 1996.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Sheng Ke Xi, The Chinese Academy of Forestry, Beijing, Beijing, China; Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/24/1996.

PI 617873. *Ribes procumbens* Pall.

Wild. 96028; CRIB 1120. Collected 07/24/1996 in Heilongjiang, China.
Pedigree - collected from the wild in Heilongjiang, China.

The following were collected by Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Received 10/24/1996.

PI 617874. *Ribes meyeri* Maxim.

Wild. 96127; CRIB 1123. Collected 09/1996 in Hubei, China. Pedigree - collected from the wild in Hubei, China.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Sheng Ke Xi, The Chinese Academy of Forestry, Beijing, Beijing, China; Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/24/1996.

PI 617875. *Ribes procumbens* Pall.

Wild. 96036; CRIB 1125. Collected in China. Latitude 53° 25' N. Longitude 122° 16' E. Elevation 438 m. 74 km north of Mo He Jagedaqi, Mo He Bureau. hills - Da xing an ling Meadow - opening in forest of *Pinus sylvestris* var. *mongolica*. Collected 07/25/1996 in Heilongjiang, China. Latitude 53° 25' N. Longitude 122° 16' E. Elevation 438 m. 74 km north of Mo He Jagedaqi, Mo He Bureau. hills - Da xing an ling Meadow - opening in forest of *Pinus sylvestris* var. *mongolica*. Pedigree - collected from the wild in Heilongjiang, China.

PI 617876. *Ribes procumbens* Pall.

Wild. 96045; CRIB 1126. Collected in China. Latitude 51° 40' N. Longitude 124° 23' E. Elevation 500 m. 1 km north of Xin Ling. Hilld - Da xinggan ling understory in forest. Collected 07/27/1996 in Heilongjiang, China. Latitude 51° 40' N. Longitude 124° 23' E. Elevation 500 m. 1 km north of Xin Ling. Hilld - Da xinggan ling understory in forest. Pedigree - collected from the wild in Heilongjiang, China.

The following were collected by Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Received 10/24/1996.

PI 617877. *Ribes burejense* F. Schmidt

Wild. 96121; CRIB 1128. Collected 10/06/1996 in Heilongjiang, China.
Pedigree - collected from the wild in Heilongjiang, China.

The following were developed by Harrell Sellers, 1514 28th Ave. West, Brookings, South Dakota 57006, United States. Received 02/03/1997.

PI 617878. *Ribes americanum* Mill.

Breeding. "H-Clone"; "Rain-in-the-Face"; CRIB 1131. Pedigree - Selection of *R. americanum* from South Dakota. This clone was selected for upright plant habit.

PI 617879. *Ribes americanum* Mill.

Breeding. "L-Clone"; "Gall"; CRIB 1132. Pedigree - Selection of *R. americanum* from South Dakota. Selected for prostrate plant growth habit.

The following were donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 03/13/1997.

PI 617880. *Ribes uva-crispa* L.

Cultivar. "Winter Green"; "Z ld Gy ztes"; CRIB 1134. Developed in United Kingdom. Pedigree - Old English gooseberry cultivar.

PI 617881. *Ribes uva-crispa* L.

Cultivar. CRIB 1135. Pedigree - gooseberry selection.

PI 617882. *Ribes uva-crispa* L.

Cultivar. CRIB 1136. Pedigree - gooseberry selection.

Unknown source. Received 01/30/1997.

PI 617883. *Ribes fasciculatum* var. *chinense* Maxim.

Wild. KSW 3773; NA 56697; CRIB 1137. Collected 10/13/1985 in Cholla Puk, Korea, South. Latitude 35° 29' N. Longitude 126° 53' E. Elevation 230 m. Chongup Gun, Naejang Mt. At bottom of S-facing rocky hillside at edge of woods among loose rocks, disturbed area. Pedigree - selection of the species.

The following were collected by Charles Tubering, The Holden Arboretum, 9500 Sperry Road, Kirtland, Ohio 44094-5172, United States; Rick J. Lewandowski, Morris Arboretum, The University of Pennsylvania, 9414 Meadowbrook Road, Philadelphia, Pennsylvania 19118, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Kris Bachtell, The Morton Arboretum, 4100 Illinois Route 53, Lisle, Illinois 60532-1293, United States. Donated by Shawn Belt, USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Glenn Dale, Maryland 20769-9157, United States. Received 01/30/1997.

PI 617884. *Ribes mandshuricum* (Maxim.) Kom.

Wild. BJB 140; NA 64650; CRIB 1138. Collected 09/29/1994 in Beijing, China. Latitude 39° 57' 21" N. Longitude 115° 25' 40" E. Elevation 1420 m. Da Nang Gou (Big South Valley), Xiao Long Meng Forest Preserve, Dongling Shan, Mentougou District. Growing in rich, moist organic soils near a stream in a cool moist valley protected from sun and wind. Pedigree - collection from the wild.

The following were collected by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Sharon K. Dragula, 2121 Burnett Ave., Ames, Iowa 50010, United States. Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 08/18/1997.

PI 617885. *Ribes missouriense* Nutt.

Wild. CRIB 1139. Collected in Iowa, United States. Latitude 42° 2' 35" N. Longitude 93° 36' 22" W. Elevation 280 m. Story county; T84N, R24W, NE1/4 OF Sec. 35, Ames East Quadrangle. Growing in woods just above the floodplain along the South Skunk River with *Campanula americana*, *Smilax*, *Tilia* and *Toxicodendron*. Collected 07/31/1997 in Iowa, United States. Latitude 42° 2' 35" N. Longitude 93° 36' 22" W. Elevation 280 m. Story county; T84N, R24W, NE1/4 OF Sec. 35, Ames East Quadrangle. Growing in woods just above the floodplain along the South Skunk River with *Campanula americana*, *Smilax*, *Tilia* and *Toxicodendron*. Pedigree - collection from the wild in Iowa.

The following were donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 08/26/1997.

PI 617886. *Ribes cynosbati* L.

Cultivated. CRIB 1141. Collected in Pennsylvania, United States. Pedigree - selection of *R. cynosbati* from Pennsylvania.

The following were collected by M. Nevin Smith, 400 Casserly Road, Watsonville, California 95076, United States. Donated by Rusty Scalf, 2771 Dohr St., Berkeley, California 94702, United States. Received 03/24/1998.

PI 617887. *Ribes malvaceum* Sm.

Cultivated. Wunderlich; CRIB 1144. Collected in California, United States. Latitude 37° 20' N. Longitude 122° 17' W. Elevation 0 m. Near Wunderlich Park near Woodside, California. Open chaparral. Collected 04/1977 in California, United States. Latitude 37° 20' N. Longitude 122° 17' W. Elevation 0 m. Near Wunderlich Park near Woodside, California. Open chaparral. Pedigree - Collected from the wild in California.

The following were donated by Rusty Scalf, 2771 Dohr St., Berkeley, California 94702, United States. Received 04/02/1998.

PI 617888. *Ribes viburnifolium* A. Gray

Cultivar. "Catalina Perfume"; CRIB 1145. Pedigree - selection of *R. viburnifolium*.

The following were collected by P. Lee, United States. Donated by Holly Forbes, University of California, Botanical Garden, 200 Centennial Drive, Berkeley, California 94720-5045, United States. Received 04/13/1998.

PI 617889. *Ribes amarum* McClatchie

Wild. CRIB 1146. Collected in California, United States. Latitude 34° 26' N. Longitude 119° 38' W. Elevation 0 m. Santa Barbara county, Montecito, about Casa Dorinda. Oak woodland.

The following were collected by Walter Wisura, Rancho Santa Ana Botanical Garden, 1500 North College Avenue, Claremont, California 91711-3101, United States; Robert F. Thorne, Rancho Santa Ana Botanic Garden, 1500 North College Avenue, Claremont, California 91711-3101, United States; Jamie Romero, Rancho Santa Ana Botanic Garden, 1500 North College Avenue, Claremont, California 91711-3101, United States; Tom Hayduk, Rancho Santa Ana Botanic Garden, 1500 North College Avenue, Claremont, California 91711-3101, United States. Donated by Holly Forbes, University of California, Botanical Garden, 200 Centennial Drive, Berkeley, California 94720-5045, United States. Received 04/13/1998.

PI 617890. *Ribes viburnifolium* A. Gray

Wild. Catalina Currant; 16662; CRIB 1147. Collected 04/22/1991 in Baja Norte, Mexico. Latitude 32° 1' N. Longitude 116° 26' W. Elevation 0 m. 4.4 miles NE of junction with Highway 1 along highway 3 toward Tecate. Moist loam soil, East facing slope in chaparral. Pedigree - selection of *R. viburnifolium* from Baja, Mexico.

The following were collected by Barbara Reed, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/30/1998.

PI 617891. *Ribes missouriense* Nutt.

Wild. Nebraska Gooseberry; CRIB 1148. Collected 04/24/1998 in Nebraska, United States. Latitude 40° 30' N. Longitude 95° 55' W. Elevation 315 m. Seven miles south of Nebraska City and one mile west, at Baltensperger Farm. Pedigree - Collected from the wild in Nebraska.

The following were donated by Chollipo Arboretum, 344-16 Yonhui-Dong, Sodaemun-KuSosan Gun, Seoul, Seoul 120-113, Korea, South. Received 05/22/1998.

PI 617892. *Ribes komarovii* Pojark.

Cultivated. 1-1-105; CRIB 1149. Collected in Chungchong Nam, Korea, South. Latitude 36° 52' N. Longitude 126° 13' E. Elevation 0 m. Chollipo Arboretum, Sowon-Myon, Tae-an-Gun. Pedigree - Collected from the Chollipo Arboretum in South Korea.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/11/1998.

PI 617893. *Ribes triste* Pall.

Wild. CRIB 1152. Collected 08/07/1998 in Alaska, United States. Latitude 61° 26' 16" N. Longitude 150° 10' 5" W. Elevation 10 m. Along river's edge for about 0.5 mile, sampling many plants, Little Susitna River Park, about 40 miles southeast of Wasilla, Alaska. East of

Ayrshire and Mackenzie Roads. Collected along river's edge. Associated plant *Rubus idaeus*, devil's club, watermelonberry, cranberry-bush (*Viburnum edulum*). Pedigree - OP seed collected from the wild in Alaska.

PI 617894. *Ribes laxiflorum* Pursh

Wild. CRIB 1153. Collected 08/07/1998 in Alaska, United States. Latitude 61° 26' 16" N. Longitude 150° 10' 5" W. Elevation 10 m. Little Susitna River Park, about 40 miles southeast of Wasilla, Alaska. East of Ayrshire and Mackenzie Roads. Open wooded area. Associated plants: *Vaccinium vitis-idaeus*, Sitka Spruce, Black Cottonwood, horsetail and lycopodium. Found on knolls under taller trees. Pedigree - OP seed collected from the wild in Alaska.

PI 617895. *Ribes triste* Pall.

Wild. KH98-08; CRIB 1154. Collected 08/08/1998 in Alaska, United States. Latitude 62° 0' N. Longitude 150° 0' W. Elevation 30 m. Milepost xx on George Parks Highway (highway 3) one mile north of Caswell, Alaska. Sheep Creek overpass pulloff, west of highway. Plants were scattered though open woods. Associated plants: Devil's club, fescue, horsetail, cranberry bush, Rosa and under paper birch. Pedigree - Collected from the wild in Alaska.

PI 617896. *Ribes laxiflorum* Pursh

Wild. KH98-09A; CRIB 1155. Collected 08/08/1998 in Alaska, United States Latitude 62° 0' N. Longitude 150° 0' W. Elevation 30 m. Milepost xx on George Parks Highway (highway 3) one mile north of Caswell, Alaska. Sheep Creek overpass pulloff, west of highway. Plants were scattered though open woods. Associated plants: Devil's club, fescue, horsetail, cranberry bush, Rosa and under paper birch. Pedigree - Collected from the wild in Alaska.

The following were collected by Brian Geils, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Southwest Forest Science Complex, Flagstaff, Arizona 86001, United States. Received 10/05/1998.

PI 617897. *Ribes inerme* Rydb.

Wild. BG-01; CRIB 1157. Collected 07/15/1998 in New Mexico, United States. Latitude 32° 49' 47" N. Longitude 105° 44' 18" W. Elevation 2500 m. Bluff Springs on south side of stream three chains (about 220 feet) from parking lot. Otero county, New Mexico. Pedigree - Collected from the wild in New Mexico.

The following were collected by Brian Geils, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Southwest Forest Science Complex, Flagstaff, Arizona 86001, United States. Donated by Brian Geils, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Southwest Forest Science Complex, Flagstaff, Arizona 86001, United States; James Oliphant, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 10/05/1998.

PI 617898. *Ribes cereum* Douglas

Wild. BG-02; CRIB 1158. Collected 08/19/1998 in New Mexico, United States. Latitude 32° 58' N. Longitude 105° 36' W. Elevation 2623 m. Near James Lookout, 0.4 miles west north west of junction FR 175 and

FR 5583 on south side of 5583. Otero County, New Mexico. Pedigree - Collected from the wild in New Mexico.

PI 617899. *Ribes mescaleerium* Coville

Wild. BG-03; CRIB 1159. Collected 08/19/1998 in New Mexico, United States. Latitude 32° 57' N. Longitude 105° 43' W. Elevation 2638 m. Sleepy Grass Picnic Ground, near site 44, between drive and phone pole. Near Cloudcroft, Otero County, New Mexico. Pedigree - Collected from the wild in New Mexico.

PI 617900. *Ribes pinetorum* Greene

Wild. BG-05; CRIB 1161. Collected 08/19/1998 in New Mexico, United States. Latitude 32° 57' N. Longitude 105° 43' W. Elevation 2648 m. Sleepy Grass Picnic Ground, site 44, just outside Cloudcroft, Otero county, New Mexico. Pedigree - Collected from the wild in New Mexico.

PI 617901. *Ribes mescaleerium* Coville

Wild. BG-06; CRIB 1162. Collected 09/10/1998 in New Mexico, United States. Latitude 32° 58' N. Longitude 105° 46' W. Elevation 2437 m. Cloudcroft, Otero county, New Mexico. At the junction of US 82 and Bailey Canyon Road. Pedigree - Collected from the wild in New Mexico.

The following were donated by Howard Waterworth, USDA, ARS, Plant Germplasm Quarantine Office, Building 465, BARC-East, Beltsville, Maryland 20705-2350, United States. Received 12/18/1998.

PI 617902. *Ribes nigrum* L.

Cultivar. "Laxon's Giant"; CRIB 1164; Q 27847. Developed in United Kingdom. Pedigree - selection of *R. nigrum*.

PI 617903. *Ribes nigrum* L.

Cultivar. "Blacksmith"; CRIB 1165; Q 27859. Developed in United Kingdom. Pedigree - Baldwin x Victoria.

PI 617904. *Ribes nigrum* L.

Cultivar. "Boskoop Giant"; CRIB 1166; Q 27862. Developed in Netherlands. Pedigree - seedling selection of pure *R. nigrum*.

PI 617905. *Ribes nigrum* L.

Cultivar. "Climax"; CRIB 1167; Q 27866. Developed in Canada. Pedigree - selection of *R. nigrum* from Ontario.

PI 617906. *Ribes nigrum* L.

Cultivar. "Coronet"; CRIB 1168; Q 27868. Developed in Canada. Pedigree - *R. ussuriense* x Kerry (*R. nigrum*).

PI 617907. *Ribes nigrum* L.

Cultivar. "Crusader"; CRIB 1169; Q 27871. Developed in Canada. Pedigree - *R. ussuriense* x Kerry (*R. nigrum*).

PI 617908. *Ribes nigrum* L.

Cultivar. "Ben Tirran"; CRIB 1172; Q 28926. PP11330. Developed in United Kingdom. Pedigree - Ben Lomond x [(Seabrook's Black x Amos Black) x (Seabrook's black x *Ribesia* sp.)].

- PI 617909. *Ribes nigrum* L.**
Cultivar. "Westwick Choice"; CRIB 1173; Q 28028. Developed in United Kingdom.
- PI 617910. *Ribes nigrum* L.**
Cultivar. "Beauty of Altay"; CRIB 1175; Q 28607. Developed in Russian Federation. Pedigree - Koksa x Karakol. Bred by Z. S. Zotova in Altai, Russia, in the early 1960s.
- PI 617911. *Ribes nigrum* L.**
Cultivar. "Triton"; CRIB 1176; Q 28609. Developed in Sweden.
- PI 617912. *Ribes nigrum* L.**
Cultivar. "Buraya Favorskaya"; Favorskaya; Russian Brown; Buraya Dalnevostochnaya; Buraya Favorskoy; Q 28612; CRIB 1177. Developed in Russian Federation. Pedigree - Liya Plodorodnaya x Taekhnaya.
- PI 617913. *Ribes nigrum* L.**
Cultivar. "Beloruskaya Sweet"; "Belaruskaya Slodkaya [Sweet]"; Beloruskaja Sladkaja; Q 28850; CRIB 1178. Developed in Belarus. Pedigree - R. hybrid 2-6D x R. dikuscha. Bred by A. G. Voluznev in Minsk, Belorussia.
- PI 617914. *Ribes nigrum* L.**
Cultivar. "Dobraya"; CRIB 1179; Q 30857. Developed in Russian Federation. Pedigree - Milusinka x (Primorski Champion x Altaiski Champion x Zoja). bred by V. F. Tcherkashin.
- PI 617915. *Ribes nigrum* L.**
Cultivar. "Czerniega"; CRIB 1181; Q 35889. Developed in Russian Federation. Pedigree - Novosti Prikarparaja x Minaj Shmyriov. From Ukraine bred by Kopan'.

The following were donated by E.F. Mashburn, The International Ribes Association, 707 Front Street, Northumberland, Pennsylvania 17857, United States. Received 03/29/1999.

- PI 617916. *Ribes* sp.**
Cultivar. CRIB 1183. Pedigree - Probably common red x common white.
- PI 617917. *Ribes* sp.**
Cultivar. CRIB 1184. Pedigree - red gooseberry selection from Lepa.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States; Barbara Fick, Oregon State University, Extension Service, Benton County, 1849 NW 9th Street, Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/20/1994.

- PI 617918. *Ribes* sp.**
Wild. CRIB 1186. Collected 08/24/1993 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

PI 617919. Ribes sp.

Wild. CRIB 1187. Collected 08/24/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

The following were donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/16/1999.

PI 617920. Ribes nigrum L.

Cultivar. CRIB 1188. Pedigree - Open pollinated seed from cultivar 'Titania', Altajskaja Desertnaja x (Consort x Kaajanin Musta).

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 05/24/1999.

PI 617921. Ribes fasciculatum Siebold & Zucc.

Cultivated. rila041; R. lasiandra; CRIB 1194; R. fasciculatum China.
Pedigree - collected from the wild in China. Deciduous, 3-4 ft. shrub; pendulous clusters of soft-yellow flowers in spring; yellow, pink and red fall color; adapted to sun, zone 7.

Unknown source. Received 05/24/1999.

PI 617922. Ribes nevadense Kellogg

Cultivated. Mountain Pink Currant; rine045; CRIB 1195. Pedigree - selection of R. sanguineum. Deciduous, rounded, medium sized shrub with pendulous clusters of pink flowers and blue fruit; yellow fall color, adapted to sun, zone 5.

Unknown source. Received 05/24/1999.

PI 617923. Ribes sanguineum Pursh

Cultivar. "Spring Snow"; risa072; CRIB 1196. Pedigree - selection of white flowering currant.

Unknown source. Received 05/24/1999.

PI 617924. Ribes viburnifolium A. Gray

Cultivated. R. viburnifolium; rivi075; CRIB 1197. Pedigree - Selection from native Californian plant material. Evergreen trailing shrub, ground cover, 2-6 ft. tall, 12 ft. wide; round shiny green leaves produce a pleasant scent when crushed; small upright clusters of pink flowers in spring and summer; red fruits in fall; adapted to sun or partial shade, zone 8.

The following were donated by USDA, ARS, Fruit Laboratory, Plant Germplasm Quarantine Office, Beltsville, Maryland 20705-2350, United States. Received 12/10/1999.

PI 617925. *Ribes nigrum* L.
Cultivar. "Black Reward"; CRIB 1199; Q 27619. Pedigree - selection of *R. nigrum*.

PI 617926. *Ribes nigrum* L.
Cultivar. "Dikovinka"; CRIB 1200; Q 30858. Developed in Russian Federation. Pedigree - Zoja x Pushistaja. Bred by Z. S. Zotova in Altai, Russia.

PI 617927. *Ribes nigrum* L.
Cultivar. "Triton"; CRIB 1202; Q 35903.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 03/09/2000.

PI 617928. *Ribes montigenum* McClatchie
Wild. *R. montigenum* rimo084; Rocky Mountain Gooseberry; CRIB 1214. Pedigree - collected from the wild. From subalpine slopes of the Rockies, this low, mounding (1 to 3 feet) thorned shrub produces small but pretty and edible (especially by wildlife) spiny red 'gooseberries' in fall.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/10/2000.

PI 617929. *Ribes viburnifolium* A. Gray
Cultivated. CRIB 1226; *R. viburnifolium* Rancho Santa Ana. Collected 05/08/2000 in California, United States. Pedigree - Selection from native Californian plant material.

The following were donated by M. Schultz, Seed Bank, 143 Charles, Monroe, Washington 98272-2302, United States. Received 03/09/1990.

PI 617930. *Lactuca sativa* L.
Cultivar. "SPECKLED"; W6 3794.

PI 617931. *Lactuca sativa* L.
Cultivar. "UNRIVALLED/ATTRACTIVE"; W6 3734.

PI 617932. *Lactuca sativa* L.
Cultivar. "AUSTRALIAN YELLOW LEAF"; W6 3739.

PI 617933. *Lactuca sativa* L.
Cultivar. "BATAVIA ROUGE GRENOBLOISE"; W6 3741.

PI 617934. *Lactuca sativa* L.
Cultivar. "CACA"; W6 3744. Cultivar means 'Cut and Come Again'.

PI 617935. *Lactuca sativa* L.
Cultivar. "CAPITANE"; W6 3745.

PI 617936. *Lactuca sativa* L.
Cultivar. "COSMO"; W6 3748.

- PI 617937. *Lactuca sativa* L.
Cultivar. "DIAMANTE"; W6 3750.
- PI 617938. *Lactuca sativa* L.
Cultivar. "FERIA"; W6 3756.
- PI 617939. *Lactuca sativa* L.
Cultivar. "GERMAN"; W6 3759.
- PI 617940. *Lactuca sativa* L.
Cultivar. "GLOIRE DU DAUPHNE"; W6 3760.
- PI 617941. *Lactuca sativa* L.
Cultivar. "GRANDPA'S"; W6 3761.
- PI 617942. *Lactuca sativa* L.
Cultivar. "LINGUE DI CANARINO"; W6 3767.
- PI 617943. *Lactuca sativa* L.
Cultivar. "LOLLA ROSSA"; W6 3770.
- PI 617944. *Lactuca sativa* L.
Cultivar. "LOLLO BIONDO"; W6 3771.
- PI 617945. *Lactuca sativa* L.
Cultivar. "NEW YORK/WONDERFUL"; W6 3777.
- PI 617946. *Lactuca sativa* L.
Cultivar. "RADIAN"; W6 3780.
- PI 617947. *Lactuca sativa* L.
Cultivar. "RED LEPRECHAUN"; W6 3783.
- PI 617948. *Lactuca sativa* L.
Cultivar. "RED RIDING HOOD"; W6 3785.
- PI 617949. *Lactuca sativa* L.
Cultivar. "WHITE PARRIS COS"; W6 3803.
- PI 617950. *Lactuca sativa* L.
Cultivar. "LOBJOIT'S GREEN"; W6 3769.
- PI 617951. *Lactuca sativa* L.
Cultivar. "HILDE"; W6 3762.
- PI 617952. *Lactuca sativa* L.
Cultivar. "LA BRILLIANTE"; W6 3766.
- PI 617953. *Lactuca sativa* L.
Cultivar. "SELF-SEEDING"; W6 3793.
- PI 617954. *Lactuca sativa* L.
Cultivar. "RICCOLINA DA TAGLIO"; W6 3787.

The following were donated by Pauline Mullins, The Organic Plant Institute, Peaceable Kingdom Foundation, P.O. Box 313, Washington-On-Brazos, Texas 77880, United States. Received 11/30/1996.

PI 617955. *Lactuca sativa* L.
Cultivated. "Kweik Lettuce"; W6 19001. Texas Heirloom.

The following were donated by M. Schultz, Seed Bank, 143 Charles, Monroe, Washington 98272-2302, United States. Received 03/09/1990.

PI 617956. *Lactuca sativa* L.
Cultivar. "FLORICOS"; W6 3757.

PI 617957. *Lactuca sativa* L.
Cultivar. "ANVENUE"; W6 3738.

PI 617958. *Lactuca sativa* L.
Cultivar. "MISTICANZA"; W6 3775.

PI 617959. *Lactuca sativa* L.
Cultivar. "LITTLE GEM"; Sucrine, W. Density; W6 3768.

PI 617960. *Lactuca sativa* L.
Cultivar. "RODAN BRONZE"; W6 3789.

PI 617961. *Lactuca sativa* L.
Cultivar. "ITALIAN"; W6 3763.

PI 617962. *Lactuca sativa* L.
Cultivar. "RED OAK LEAF"; W6 3784.

PI 617963. *Lactuca sativa* L.
Cultivar. "CRACOVIENSIS"; W6 9041.

PI 617964. *Lactuca sativa* L.
Cultivar. "DOREE DEPRINTEMPS"; W6 3752.

Unknown source. Received 05/1999.

PI 617965. *Lolium perenne* L.
Cultivar. Elka-1; CLOL 2. Developed in Netherlands. Pedigree - Seedling selection from Elka (PI 600841).

Unknown source. Received 05/1999.

PI 617966. *Lolium perenne* L.
Cultivar. Linn-3; CLOL 3.

Unknown source. Received 05/1999.

PI 617967. *Lolium perenne* L.
Cultivar.

Unknown source. Received 05/1999.

PI 617968. *Lolium perenne* L.
Cultivar. 4400-2; CLOL 5.

The following were developed by Scott Warnke, Michigan State University, Department of Crop & Soil Science, East Lansing, Michigan 48825, United States; Reed E. Barker, USDA, ARS, Natl. Forage Seed Prod. Res. Ctr., Oregon State University, Corvallis, Oregon 97331-7102, United States; Loreene M. Evans-Marks, USDA, ARS, NFSPRC, 3450 S.W. Campus Way, Corvallis, Oregon 97331-7102, United States. Received 07/20/2000.

PI 617969. *Lolium perenne* L.
Cultivar. 4LA-4; CLOL 6. Pedigree - SR 4400 x Linn.

Unknown source. Received 07/20/2000.

PI 617970. *Lolium perenne* L.
Cultivar. 4LB-1; CLOL 7.

The following were developed by Scott Warnke, Michigan State University, Department of Crop & Soil Science, East Lansing, Michigan 48825, United States; Reed E. Barker, USDA, ARS, Natl. Forage Seed Prod. Res. Ctr., Oregon State University, Corvallis, Oregon 97331-7102, United States; Loreene M. Evans-Marks, USDA, ARS, NFSPRC, 3450 S.W. Campus Way, Corvallis, Oregon 97331-7102, United States. Received 07/20/2000.

PI 617971. *Lolium perenne* L.
Cultivar. LNA-5; CLOL 8. Pedigree - Linn x SR 4500.

PI 617972. *Lolium perenne* L.
Cultivar. NLA-3; CLOL 9. Pedigree - SR 4500 x Linn.

PI 617973. *Lolium perenne* L.
Cultivar. L4A-2; CLOL 10. Pedigree - Linn x SR 4400.

PI 617974. *Lolium perenne* L.
Cultivar. LNA-1; CLOL 11. Pedigree - Linn x SR 4500.

PI 617975. *Lolium perenne* L.
Cultivar. LNB-2; CLOL 12. Pedigree - Linn x SR 4500.

PI 617976. *Lolium perenne* L.
Cultivar. 4LA-1; CLOL 13. Pedigree - SR 4400 x Linn.

PI 617977. *Lolium perenne* L.
Cultivar. L4B-5; CLOL 14. Pedigree - Linn x SR 4400.

PI 617978. *Lolium perenne* L.
Cultivar. NLB-2; CLOL 15. Pedigree - SR 4500 x Linn.

PI 617979. *Lolium perenne* L.
Cultivar. L4A-4; CLOL 16. Pedigree - Linn x SR 4400.

- PI 617980. *Lolium hybrid***
Cultivar. MFA-4; CLOL 17.
- PI 617981. *Lolium hybrid***
Cultivar. MFB-2; CLOL 18.
- PI 617982. *Lolium perenne* L.**
Cultivar. 4LB-2; CLOL 19. Pedigree - SR 4400 x Linn.
- PI 617983. *Lolium perenne* L.**
Cultivar. NLB-1; CLOL 20. Pedigree - SR 4500 x Linn.
- PI 617984. *Lolium perenne* L.**
Cultivar. U4A-1; CLOL 21.
- PI 617985. *Lolium perenne* L.**
Cultivar. U4B-4; CLOL 22.
- PI 617986. *Lolium perenne* L.**
Cultivar. U4B-1; CLOL 23.
- PI 617987. *Lolium perenne* L.**
Cultivar. U4A-2; CLOL 24.
- PI 617988. *Lolium perenne* L.**
Cultivar. 4UB-5; CLOL 25.
- PI 617989. *Lolium perenne* L.**
Cultivar. 4UA-1; CLOL 26.
- PI 617990. *Lolium perenne* L.**
Cultivar. Cultivar No. 2; CLOL 27.
- PI 617991. *Lolium multiflorum* Lam.**
Cultivar. Floregon (FAR 16-3); CLOL 28.

Unknown source. Received 07/20/2000.

- PI 617992. *Lolium multiflorum* Lam.**
Cultivar. Floregon (FAR 19-6); CLOL 29.

Unknown source. Received 07/20/2000.

- PI 617993. *Lolium multiflorum* Lam.**
Cultivar. Floregon (FAR 28-3); CLOL 30.

Unknown source. Received 07/20/2000.

- PI 617994. *Lolium multiflorum* Lam.**
Cultivar. Floregon (FAR 15-3); CLOL 31.

Unknown source. Received 07/20/2000.

PI 617995. *Lolium multiflorum* Lam.
Cultivar. Floregon (FAR 21-4); CLOL 32.

Unknown source. Received 07/20/2000.

PI 617996. *Lolium multiflorum* Lam.
Cultivar. Floregon (FAR 18-2); CLOL 33.

Unknown source. Received 05/1999.

PI 617997. *Lolium perenne* L.
Cultivar. Elka -2; CLOL 34. Pedigree - Seedling selection from Elka (PI 600841).

Unknown source. Received 05/1999.

PI 617998. *Lolium perenne* L.
Cultivar. Elka -3; CLOL 35. Pedigree - Seedling selection from Elka (PI 600841).

Unknown source. Received 05/1999.

PI 617999. *Lolium perenne* L.
Cultivar. Elka -4; CLOL 36. Pedigree - Seedling selection from Elka (PI 600841).

Unknown source. Received 05/1999.

PI 618000. *Lolium perenne* L.
Cultivar. 4500-1 (4NJ96-1); 4NJ96-1; CLOL 37.

Unknown source. Received 05/1999.

PI 618001. *Lolium perenne* L.
Cultivar. Linn -1; CLOL 38.

Unknown source. Received 05/1999.

PI 618002. *Lolium perenne* L.
Cultivar. Linn -2; CLOL 39.

Unknown source. Received 05/1999.

PI 618003. *Lolium perenne* L.
Cultivar. Manhattan-1 (Mann-1); Manhattan-1; CLOL 40.

Unknown source. Received 07/20/2000.

PI 618004. *Lolium perenne* L.

Cultivar. LNB-5; CLOL 41. Pedigree - Linn x SR 4500.

The following were developed by HZPC Holland B.V., Netherlands. Received 04/18/2001.

PI 618005 PVPO. *Solanum tuberosum* L.

Cultivar. "SYMFONIA". PVP 9700235.

PI 618006 PVPO. *Solanum tuberosum* L.

Cultivar. "LATONA". PVP 9700245.

The following were collected by James F. Hancock, Michigan State University, Department of Horticulture, Plant and Soil Science A 342, East Lansing, Michigan 48824-1325, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Donated by James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Received 08/24/1989.

PI 618007. *Vaccinium* sp.

Wild. Collected 08/1989 in Idaho, United States. Latitude 45° 50' N. Longitude 115° 15' W. Elevation 2403 m. Bitterroot Nat'l Forest, Hell's Half Acre Mountain, old burn. Pedigree - Collected from the wild in Idaho. IDX. Incorrectly received as *Vaccinium*, keyed out as a *Ribes*.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 09/06/1991.

PI 618008. *Vaccinium vitis-idaea* L.

Wild. Collected 08/27/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1930 m. Mt. Tateyama, Tateyama-machi, Nakaniikawa-gun, Toyama Pref. Pedigree - Collected from the wild in Japan. Inspection station reference no. SEA 8006.

The following were collected by Jeannie Allen, USDA, ARS, 7000 Storch Lane, Seabrook, Maryland 20706, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Gene Cooley. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/26/1991.

PI 618009. *Vaccinium macrocarpon* Aiton

Wild. American Cranberry, Large Cranberry. Collected 09/17/1991 in Maryland, United States. Latitude 39° N. Longitude 76° 30' W. Elevation 10 m. Anne Arundel Co. near Annapolis, small sphagnum bog. Pedigree - Collected from the wild in Maryland. Native or introduced(?), found abundant with pitcher plant, yellow-eyed grass, *Rhynchospora*, *Hypericum urginum*, *Panicum*.

The following were developed by Albert Zillmer. Donated by Elden J. Stang, University of Wisconsin, Dept. Horticulture, 1575 Linden Dr., Madison, Wisconsin 53706, United States. Received 08/13/1991.

PI 618010. *Vaccinium vitis-idaea* L.

Cultivar. "Erntedank". Pedigree - Selected from the wild in Germany. 'Erntedank' originated by Albert Zillmer, Uchte, Germany. Plant selected from the wild in a upland moor west of Uchte, Germany. Named and released in 1975. Moderate growth, fruit small to medium sized, very productive, producing both a spring and summer crop. -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6. Characterized by weak growth and light light green, oblong leaves. Fruit abundant, small to medium in size, bright red.

The following were collected by Sven Dahlbro. Developed by Sven Dahlbro. Donated by Elden J. Stang, University of Wisconsin, Dept. Horticulture, 1575 Linden Dr., Madison, Wisconsin 53706, United States; Ross Penhallegon, Oregon State University, Lane County Extension, 950 W 13th Avenue, Eugene, Oregon 97402-3913, United States. Received 08/13/1991.

PI 618011. *Vaccinium vitis-idaea* L.

Cultivar. "Sussi". Latitude 57° 10' N. Longitude 13° 25' E. Original seeds collected from province of Smaland in southern Sweden. Pedigree - open pollinated lingonberry from the province of Smaland in southern Sweden. Selected by Professor Sven Dahlbro. Hardy and well adapted to the Swedish (origin) climate. High yield (8-10 tons/ha) and berries ripen uniformly. High ornamental value. 'Sussi' is spreading in habit, reaching 6 to 10 inches in height. Production is moderate and ripening is uniform with berries averaging medium to large. Sussi is quite vigorous and has excellent color in the Pacific Northwest of the U.S. It is a good pollinator for Sanna. --Fall Creek Catalog, 1997. 'Sussi' originated in Copenhagen, Sweden by Professor Swen Dahlbro. Evaluated as selection BV-40 and released in 1985 by the Swedish University of Agricultural Sciences, Division of Fruit Breeding in Balsgard. Originated as a selection from seed collected in Smaland, Sweden. Lowbush plant form with erect shoots 15-25 cm height, flowering late May in southern Sweden; berries globular, dark red, large (0.4 g/fruit) uniformly ripening about 20 August in Sweden. Productive, averaging 11 fruit per cluster. -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6.

The following were collected by Jeannie Allen, USDA, ARS, 7000 Storch Lane, Seabrook, Maryland 20706, United States. Received 10/23/1991.

PI 618012. *Vaccinium macrocarpon* Aiton

Wild. Site I; American Cranberry, Large Cranberry. Collected 10/17/1991 in Virginia, United States. Latitude 36° 50' N. Longitude 80° 49' W. Elevation 840 m. Amburn/Landreth Farm, Woodlawn, north of Poplar Knob. Pedigree - Collected from the wild in Virginia. Site is called, 'locality No 3' in paper listed in collector's notes: typical cranberry bog. Part of site described in paper from which all germplasm was collected was to the right of the driveway as one faces the house. (Site to the left and

downslope held no cranberries.) Site was surrounded by cleared pasture. Had been carefully cleared of invading vegetation by previous owner, Charles Auburn (farther of present owner), and no. is dropping in productivity due to same.

PI 618013. *Vaccinium macrocarpon* Aiton

Wild. Site II; American Cranberry, Large Cranberry. Collected 10/17/1991 in Virginia, United States. Latitude 36° 40' N. Longitude 80° 56' W. Elevation 786 m. Big Spring Glade, natural area owned by Nature Conservancy. Pedigree - Collected from the wild in Virginia. 'Poor fen' as described by Ogle in paper and by Sjors (1959) cited by Ogle (p 144). Cranberry crop at this site very poor in 1991, leaves smaller than usual. 'Something had been in and tramping but probably not human.'

PI 618014. *Vaccinium macrocarpon* Aiton

Wild. Site IV; American Cranberry, Large Cranberry. Collected 10/17/1991 in Tennessee, United States. Latitude 36° 29' N. Longitude 81° 57' W. Cross Mountain, private residence, Shady Valley, downslope Owned by Lester & Pearl Osborne. To be inherited by daughter. Pedigree - Collected from the wild in Tennessee. Site a nearly level half acre seepage area. Fenced and Maintained by Watauga Audubon Chapter in Kingsport.

PI 618015. *Vaccinium macrocarpon* Aiton

Wild. Allen 7; American Cranberry, Large Cranberry. Collected 10/29/1991 in West Virginia, United States. Latitude 39° 31' N. Longitude 79° 29' W. Elevation 860 m. Bog near WV/MD border owned by the Nature Conservancy Cranesville Swamp. Pedigree - Collected from the wild in West Virginia. Site holding moisture well in a regional drought, designated as a National Natural Landmark. Additional plants are *Hypericum densiflorum*, *Carex folliculata*, *Juncus effusus*, *J. canadensis*, *Bartonia virginica*, *Gaultheria procumbens*.

PI 618016. *Vaccinium macrocarpon* Aiton

Wild. Allen 8; American Cranberry, Large Cranberry. Collected 10/29/1991 in Maryland, United States. Elevation 830 m. Pedigree - Collected from the wild in Maryland. *V. macrocarpon* intermixed with *V. oxycoccos*. Collection site to be renamed by the Maryland National Heritage Program Staff.

PI 618017. *Vaccinium oxycoccos* L.

Wild. Allen 13; Cranberry, Small-fruited Cranberry. Collected 10/30/1991 in Maryland, United States. Elevation 893 m. Pedigree - Collected from the wild in Maryland. Associated with *Rubus Hispidus*, *Polytrichum* sp., *Alnus Rugosa*.

PI 618018. *Vaccinium macrocarpon* Aiton

Wild. Allen 14; American Cranberry, Large Cranberry. Collected 10/30/1991 in Maryland, United States. Elevation 893 m. Pedigree - Collected from the wild in Maryland. Very dry site, *V. macrocarpon* fruits few and scattered. additional associated plants *Pyrus melanocarpa*, *Gaultheria procumbens*, *Rhododron* sp.

PI 618019. *Vaccinium oxycoccos* L.

Wild. Allen 15; Cranberry, Small-fruited Cranberry. Collected 10/30/1991 in Maryland, United States. Elevation 893 m. Pedigree - Collected from

the wild in Maryland. Very dry site, *V. macrocarpon* fruits few and scattered. additional associated plants *Pyrus melanocarpa*, *Gaultheria procumbens*, *Rhododron* sp.

PI 618020. *Vaccinium macrocarpon* Aiton

Wild. Allen 16; American Cranberry, Large Cranberry. Collected 10/30/1991 in West Virginia, United States. Latitude 39° 7' N. Longitude 79° 26' W. Minerotrophic fen in large basin between 2 ridges, Tucker Co Big Run Bog (A.K.A. Olson Bog), Monongahela National Forest. Pedigree - Collected from the wild in West Virginia. Site proposed as a research natural area.

PI 618021. *Vaccinium oxycoccos* L.

Wild. Allen 17; Cranberry, Small-fruited Cranberry. Collected 10/30/1991 in West Virginia, United States. Latitude 39° 7' N. Longitude 79° 26' W. Minerotrophic fen in large basin between 2 ridges, Tucker Co Big Run Bog (A.K.A. Olson Bog) Monongahela National Forest. Pedigree - Collected from the wild in West Virginia. Site proposed as a research natural area.

PI 618022. *Vaccinium macrocarpon* Aiton

Wild. Allen 18; American Cranberry, Large Cranberry. Collected 10/30/1991 in West Virginia, United States. Latitude 39° 5' N. Longitude 79° 29' W. Elevation 373 m. 50A area intermediate between bog and fen, Tucker Co. Red Run Headwaters Bog, Monongahela National Forest. Pedigree - Collected from the wild in West Virginia. a very small population of *V. oxycoccos* was found across the road from this site, too few plants to collect.

The following were donated by Oregon Blueberry Farms, 8474 Hazelgreen Road, Silverton, Oregon 97381, United States. Received 11/22/1991.

PI 618023. *Vaccinium corymbosum* L.

Cultivar. "Toro"; G-360. Developed in United States. Pedigree - Earliblue x Ivanhoe. Fruit: scar, color, firmness and flavor good. concentrated ripening in Bluecrop season. High-chill, upright, vigorous plant with consistent high yields. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 187. <P><P>Strong, spreading, moderate growth. Fruit is consistently large, outstanding firm quality, exceptional color and flavor concentrates ripening. Toro may possess the best overall fresh market quality fruit of any variety. The easy to pare borne on large clusters that hang like grapes from the spreading stocky bush. In some areas it is replacing Bluecrop as the preferred midseason variety. Production has been consistent and quite high in Oregon. Highly recommended for fresh market and local sales.

The following were developed by G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States; Nick Vorsa, Rutgers University, Blueberry & Cranberry, Research Station, Chatsworth, New Jersey 08109, United States; G. Jelenkovic; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States. Donated by Oregon Blueberry Farms, 8474 Hazelgreen Road, Silverton, Oregon 97381, United States. Received 11/22/1991.

PI 618024. *Vaccinium corymbosum* L.

Cultivar. "Sunrise"; G-482. Pedigree - G-180 x Me-US 6620. Fruit: medium blue; scar good; firm; high quality; early ripening, with Bluetta. Bush: moderately vigorous; taller than Bluetta; medium yields. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 187 The crossed SUNRISE was made at Beltsville, Maryland, by A.D. Draper in 1974. SUNRISE was selected in 1978 on the farm of the Atlantic Blueberry Company, Weymouth, New Jersey by A.D. Draper and G. Jelenkovic, and was further evaluated by N. Vorsa, and G.J. Galletta. SUNRISE is recommended for trial as an early season cultivar (ripening with Bluetta) for both commercial packing and pick-your-own operations in areas where high chilling highbush blueberries are grown successfully. Plants of Sunrise are moderately vigorous, taller than Bluetta, but berries are similar in size and color, and superior in scar and flavor. The outstanding characteristics of SUNRISE are medium, yields of good quality, early-season fruit.

The following were collected by Jerry Tecklin, 21020 Shields Camp Rd., Nevada City, California 95959, United States. Received 12/18/1991.

PI 618025. *Vaccinium macrocarpon* Aiton

Wild. American Cranberry, Large Cranberry. Collected 12/1991 in California, United States. Badger Pit, old mining area. Pedigree - Collected from the wild in California. From small seep-fed depression in center of an excavated pit.

PI 618026. *Vaccinium macrocarpon* Aiton

Wild. American Cranberry, Large Cranberry. Collected 12/1991 in California, United States. Lonesome Lake, an old mining area. Pedigree - Collected from the wild in California. Part of the excavation of the East Pit area. One fourth acre depression with a shallow water table, grown in hummocks.

PI 618027. *Vaccinium macrocarpon* Aiton

Wild. American Cranberry, Large Cranberry. Collected 12/1991 in California, United States. Lonesome Lake, an old mining area. Pedigree - Collected from the wild in California. Part of the excavation of the East Pit area. One fourth acre depression with a shallow water table, grown in hummocks.

PI 618028. *Vaccinium macrocarpon* Aiton

Wild. American Cranberry, Large Cranberry. Collected 12/1991 in California, United States. East Pit, an old mining area. Pedigree - Collected from the wild in California. Old flooded excavation, several hundred acres large. Many seeps and springs. From drained area in the center.

PI 618029. *Vaccinium macrocarpon* Aiton

Wild. American Cranberry, Large Cranberry. Collected 12/1991 in California, United States. East Pit, an old mining area. Pedigree - Collected from the wild in California. Old flooded excavation, several hundred acres large. Many seeps and springs. From drained area in the center.

The following were donated by John Hart, Oregon State University, Dept. Crop and Soil Science, Corvallis, Oregon 97331-2213, United States. Received 01/10/1992.

PI 618030. *Vaccinium macrocarpon* Aiton

Wild. American Cranberry, Large Cranberry. Pedigree - Collected from the wild in Oregon. Awaiting collection information from Hart.

The following were collected by Toma Dimitrovski, Faculty of Agriculture and Forestry, University of Skopje, Skopje, Macedonia. Donated by Paul R. Hepler, University of Maine, Dept. Plant and Soil Sci., Deering Hall, Orono, Maine 04473, United States. Received 12/10/1986.

PI 618031. *Vaccinium vitis-idaea* L.

Wild. Collected 1971 in Uncertain. Latitude 44° N. Longitude 20° E. Elevation 1250 m. Pedigree - Collected from the wild in Yugoslavl. (This accession was part of the PL,SD 'breakout' - 1992).

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; G. J. Galletta, USDA, ARS, Building 010A, BARC-West, 10300 Baltimore Avenue, Beltsville, Maryland 20705-2350, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 04/03/1984.

PI 618032. *Vaccinium corymbosum* L.

Breeding. Collected in North Carolina, United States. Pedigree - Increased seed of NC 1523 (CVAC 311). (This accession was part of the PL,SD 'breakout' - 1992).

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Donated by Mike Baker, N.C. Foundation Seed Producers, P.O. Box 33245, Method Station, Raleigh, North Carolina 27636, United States. Received 03/15/1992.

PI 618033. *Vaccinium corymbosum* L.

Cultivar. "Bladen"; NC2055; Southern Highbush. Pedigree - NC 1171 x NC SF-12-L. Berry: size medium (about the same as Croatan); dark blue; scar, firmness, and flavor good. Flowers a few days before Croatan in eastern North Carolina, and ripens about the same time as Reveille and O'Neal and somewhat before Croatan. Bush: upright; vigorous; good productivity; not completely self-fruitful and should be interplanted with another clone, such as Reveille; resistant to cane canker; field tolerance to stem blight. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 175. Tetraploid 'southern highbush' type involving 3 species of Southern origin: *V. darrowi*, *V. ashei*, and *V. tenellum*. This blueberry genotype is intended for release as a complementary cultivar to 'Reveille' to 'Reveille', in fruit color development at harvest and for resistance to fruit cracking in wet weather. 'Bladen' is early ripening (generally a little earlier than 'Reveille' and 'O'Neal') with good productivity, quality, fruit cos, picking scar, and modest fruit

size. It is the second highbush blueberry cultivar developed in North Carolina that is adapted to mechanical harvesting for fresh market outlets. Mechanically harvested fruit of 'Bladen' is equal or hand harvested fruit of 'Croatan' for both fruit color and firmness. Picking ease is similar to 'Croatan', placing it in the desirable range for mechanical harvesting. The soluble solids/acids ration of the ripe fruit is significantly lower than 'Croatan' and similar to 'Bounty', indicating good potential for extended shelf life. Fruit storage studies also indicate that the shelf life of machine and hand-harvested fruit of 'Bladen' is generally superior to 'Croatan'. 'Bladen' is bushy and vigorous with a slightly wider canopy than 'Reveille'. In greenhouse studies, the blossoms were not completely self fruitful. Planting a pollinator cultivar such as 'Reveille' or 'O'Neal' in every 5th row will insure adequate cross-pollination.

The following were developed by D.H. Scott, Crops Research Division, USDA-ARS, Plant Industry Station, Beltsville, Maryland 20705-2350, United States; G. Jelenkovic; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 04/03/1992.

PI 618034. *Vaccinium corymbosum* L.

Cultivar. "Bluegold"; G-355. Pedigree - Bluehaven x Me-US 5 (Ashworth x Bluecrop). Fruit: light blue color; scar good; firm; flavor good; late ripening, with Jersey. Bush: vigorous; low-growing; highly productive. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 176. Midseason. Compact, sh to 4 ft. Extremely productive. Fruit is very round, sky blue, exceptionally firm, with a small recessed scar Cold hardy. We bring Bluegold back by popular demand. When first released in 1990, Bluegold was thought to be late ripening disappointed to learn that this variety was actually midseason, ripening most all of its fruit within the first two pickings of Bluecrop. A pleasant surprise was the very high production of truly superior fruit. The berries are very firm, flavorful, and evenly sized. Shelf life in normal storage as well as controlled atmosphere has been outstanding. A particularly exciting feature is the concentrated ripening, making Bluegold one of the easiest varieties for hand harvest and a good candidate for mechanical harvesting. We recommend Bluegold for growers desiring a superior quality midseason berry that can be profitably hand picked.

The following were developed by James N. Moore, University of Arkansas, Dept. of Horticulture and Forestry, 316 Plant Sciences Building, Fayetteville, Arkansas 72701, United States; George M. Darrow, USDA-ARS, Plant Industry Station, Plant Introduction Section, Crops Research Division, Beltsville, Maryland 20705-2350, United States; L.F. Hough, Rutgers University, Department of Horticulture, New Brunswick, New Jersey, United States; D.H. Scott, Crops Research Division, USDA-ARS, Plant Industry Station, Beltsville, Maryland 20705-2350, United States; H.H. Bowen. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 04/03/1992.

PI 618035. *Vaccinium corymbosum* L.

Cultivar. "Darrow"; G-71. Pedigree - F-72(Whareham x Pioneer) x Bluecrop. Berries attractive, as large or larger than those of Coville. Light blue, aromatic, highly flavored, ripens with Coville

Fruit: cluster medium, attractive, berry as large as, to larger than, Coville, skin light blue, flesh firm, arom flavored, tart to mildly tart depending on maturity; neither drops nor cracks during wet weather; scar medium, ripens about with Coville, which it resembles. Plant: erect, vigorous, consistently productive, more so than Coville. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASH Press. p. 180.

The following were collected by Elden J. Stang, University of Wisconsin, Dept. Horticulture, 1575 Linden Dr., Madison, Wisconsin 53706, United States. Received 04/23/1992.

PI 618036. *Vaccinium oxycoccos* L.

Wild. C44; *V. oxycoccos*. Collected 1987 in Turku ja Pori, Finland. Latitude 61° 26' N. Longitude 21° 53' E. Elevation 0 m. Ulvila. Abandoned peat mining beds. Pedigree - Collected from the wild in Finland.

PI 618037. *Vaccinium oxycoccos* L.

Wild. C45; *V. oxycoccos*. Collected 1987 in Turku ja Pori, Finland. Latitude 60° 25' N. Longitude 22° 30' E. Elevation 0 m. Pyottiala, near Piikkio. Abandoned peat mining beds. Pedigree - Collected from the wild in Finland.

PI 618038. *Vaccinium oxycoccos* L.

Wild. C46; *V. oxycoccos*. Collected 1987 in Turku ja Pori, Finland. Latitude 61° 28' N. Longitude 22° 0' E. Elevation 0 m. Kaasmaku. Abandoned peat mining beds. Pedigree - Collected from the wild in Finland.

The following were donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618039. *Vaccinium macrocarpon* Aiton

Wild. AA 4. Developed in United States. Pedigree - collected from the wild. Evaluation information provided.

PI 618040. *Vaccinium macrocarpon* Aiton

Wild. AR 2. Developed in United States. Pedigree - collected from the wild. Evaluation information provided.

The following were developed by H.F. Bain. Donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618041. *Vaccinium macrocarpon* Aiton

Breeding. Bain Favorite No. 1. Pedigree - Cranberry Selection. Evaluation information provided.

PI 618042. *Vaccinium macrocarpon* Aiton

Breeding. Bain 2. Pedigree - Cranberry Selection. Evaluation information provided.

- PI 618043. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 3. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618044. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 4. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618045. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 5. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618046. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 6. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618047. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 7. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618048. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 8. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618049. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 9. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618050. *Vaccinium macrocarpon* Aiton**
Breeding. Bain 10. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618051. *Vaccinium macrocarpon* Aiton**
Breeding. Bain Favorite No. 2. Pedigree - Cranberry Selection. Evaluation information provided.
- PI 618052. *Vaccinium macrocarpon* Aiton**
Breeding. Bain McFarlin. Pedigree - Selection of McFarlin intermeshed with Wisconsin natives. Evaluation information provided.

The following were donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

- PI 618053. *Vaccinium macrocarpon* Aiton**
Cultivar. "Biron Selection". Developed in United States. Pedigree - Uncertain. Evaluation information provided.
- PI 618054. *Vaccinium macrocarpon* Aiton**
Cultivar. "Drever". Developed in United States. Pedigree - Uncertain. Evaluation information provided.
- PI 618055. *Vaccinium macrocarpon* Aiton**
Cultivar. "Habelman 2". Developed in United States. Pedigree - Uncertain. Evaluation information provided.

The following were developed by George Batchelder. Donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618056. *Vaccinium macrocarpon* Aiton

Cultivar. "Hollison". Pedigree - selected from the wild in Massachusetts. After selecting this from the wild in 1885, George Batchelder made the first planting at Holliston, Massachusetts. The large fruit (54-75 cup count) ripens late and does not keep well in storage. The deep red berries are oblong in shape with a furrowed calyx end and are covered with a waxy bloom. The coarse vines produce tall uprights capable of giving good production.

The following were developed by Isaiah Matthews. Donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618057. *Vaccinium macrocarpon* Aiton

Cultivar. "Matthews". Pedigree - Uncertain. Isaiah Matthews made the first planting of this cultivar about 1880 at South Yarmouth, Massachusetts. Although a good producer with a cup count ranging from 59 to 80, this medium red berry with its pyriform shape and pointed stem end is regarded as a poor keeper in storage. This fancy berry was rated prime for fresh table use in the 1920s for the Central and Eastern markets. The coarse vines produce short uprights that bear fruit with a heavy bloom. It is very similar to Centerville.

The following were developed by J.W. Howes, Unknown. Donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618058. *Vaccinium macrocarpon* Aiton

Cultivar. "Middleboro". Pedigree - selected from the wild in Middleboro, Massachusetts. Middleboro is a large berry (54-58 cup count) that ripens late but does not keep well. It is a glossy, deep red, oval-shaped berry with a pointed calyx end. The vines are fine to medium textured, and the uprights are tall with very large, dark green leaves. The cultivar is considered a good producer. Middlesex. George Batchelder was the discoverer of this cultivar which he planted at Holliston, Massachusetts. The fruit is medium sized (90-96 cup count), ripens late in the season, and keep well in storage. The glossy, deep red berries are oval shaped with a pointed stem end. The medium coarse vines and tall uprights have very large, dark green leaves. Production by this cultivar is only fair.

The following were collected by J.W. Shaw, Carver, Massachusetts, United States. Developed by J.W. Shaw, Carver, Massachusetts, United States. Donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618059. *Vaccinium macrocarpon* Aiton

Cultivar. CVAC 1046. Collected in Massachusetts, United States. Pedigree - Collected from the wild in Massachusetts. Fruit: late, light

red, spindle shaped with a pointed stem end. 67 cupcount, excellent production, poor keeping quality. Moderately vigorous plant, fine-to-medium-textured vines with medium tall uprights.

The following were developed by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618060. *Vaccinium macrocarpon* Aiton
Breeding. Rezin McFarlin. Pedigree - cranberry selection. Evaluation information provided.

PI 618061. *Vaccinium macrocarpon* Aiton
Breeding. Rezin Native. Pedigree - Selected from the wild in Wisconsin. Evaluation information provided.

The following were developed by D.J. Crowley. Donated by Donald M. Boone, 3621 Spring Trail, Madison, Wisconsin 53711, United States. Received 05/06/1992.

PI 618062. *Vaccinium macrocarpon* Aiton
Breeding. WSU 61. Pedigree - Selection. Evaluation information provided.

PI 618063. *Vaccinium macrocarpon* Aiton
Breeding. WSU 77. Pedigree - Selection. Evaluation information provided.

PI 618064. *Vaccinium macrocarpon* Aiton
Breeding. WSU 108. Pedigree - Selection. Evaluation information provided.

The following were developed by Charles Doughty, Washington State University, Experiment Station, Puyallup, Washington, United States; James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Donated by Kim Patten, Washington State University, Long Beach Res. & Ext. Unit, Rt. 1, Box 520, Long Beach, Washington 98631, United States. Received 07/08/1992.

PI 618065. *Vaccinium corymbosum* L.
Breeding. Pedigree - Canada Blue x Early Blue.

PI 618066. *Vaccinium* hybrid
Breeding. Pedigree - F2 *V. corymbosum* x *V. uliginosum*.

PI 618067. *Vaccinium* hybrid
Breeding. Pedigree - F2 *V. corymbosum* x *V. uliginosum*.

PI 618068. *Vaccinium* hybrid
Breeding. Pedigree - Species hybrid.

PI 618069. *Vaccinium* hybrid
Breeding. Pedigree - Species hybrid.

PI 618070. *Vaccinium* hybrid
Breeding. Pedigree - Species hybrid.

PI 618071. *Vaccinium hybrid*

Breeding. Pedigree - Species hybrid.

The following were collected by Thomas A. Lumpkin, Washington State University, Department of Crop and Soil Science, 261 Johnson Hall, Pullman, Washington 99164-6420, United States. Received 08/05/1992.

PI 618072. *Vaccinium sp.*

Uncertain. Collected 07/31/1992 in Russian Federation. Latitude 47° 58' N. Longitude 141° 14' E. Elevation 500 m. Ilyinskij, Sakhalin Island. Pedigree - collected from the wild in Russia.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/17/1992.

PI 618073. *Vaccinium vitis-idaea* L.

Wild. Collected 08/15/1992 in Alaska, United States. Latitude 57° 3' 11" N. Longitude 135° 19' 9" W. Elevation 0 m. Sitka, Alaska - muskeg along Beaver Lake Trail. Growing with Spagnum, Cassiope, Tsuga seedlings. Pedigree - Collected from the wild in Alaska.

The following were donated by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Received 09/14/1992.

PI 618074. *Vaccinium ovalifolium* Sm.

Wild. Collected 1958 in United States. Pedigree - collected from the wild.

PI 618075. *Vaccinium praestans* Lamb.

Wild. Kamchatka Bilberry. Collected 1966 in Russian Federation. Pedigree - collected from the wild in Russia.

PI 618076. *Vaccinium retusum* (Griff.) Hook. f. ex C. B. Clarke

Wild. Collected in India. Pedigree - collected from the wild in India.

PI 618077. *Vaccinium myrtillus* L.

Wild. Myrtle Whortleberry. Collected 1962 in Poland. Pedigree - collected from the wild in Poland.

PI 618078. *Vaccinium reticulatum* Sm.

Wild. Collected 1964 in Hawaii, United States. Pedigree - collected from the wild in Hawaii.

PI 618079. *Vaccinium uliginosum* L.

Wild. Bog Bilberry. Collected 1968 in New Jersey, United States. Pedigree - collected from the wild in New Jersey.

PI 618080. *Vaccinium cespitosum* Michx.

Wild. Dwarf Huckleberry, Dwarf Bilberry. Collected 1968 in New Jersey, United States. Pedigree - collected from the wild.

PI 618081. *Vaccinium* sp.

Wild. Collected 1968 in Colombia. Pedigree - collected from the wild in Columbia.

PI 618082. *Vaccinium neilgherrense* Wight

Wild. Collected in India. W. Yercaud Region, So. India. Pedigree - collected from the wild in India.

The following were collected by George M. Darrow, USDA-ARS, Plant Industry Station, Plant Introduction Section, Crops Research Division, Beltsville, Maryland 20705-2350, United States. Donated by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Received 09/14/1992.

PI 618083. *Vaccinium reticulatum* Sm.

Wild. Collected 1965 in Hawaii, United States. Volcano site. Pedigree - collected from the wild in Hawaii.

The following were donated by Nellie M. Stark, 36053 Blakesley Creek Rd, Philomath, Oregon 97370, United States. Received 09/18/1992.

PI 618084. *Vaccinium vitis-idaea* L.

Wild. Collected in Russian Federation. Latitude 64° 34' N. Longitude 40° 32' E. Archangelsk, Russia. Pedigree - collected from the wild in Russia.

PI 618085. *Vaccinium myrtilus* L.

Wild. Myrtle Whortleberry. Collected in Russian Federation. Latitude 64° 34' N. Longitude 40° 32' E. Archangelsk, Russia. Pedigree - collected from the wild in Russia.

The following were collected by Paul Robbins, Department of Entomology, Cornell University NYSAES, Geneva, New York 14456, United States. Received 08/26/1992.

PI 618086. *Vaccinium macrocarpon* Aiton

Wild. Cranberry. Collected 08/22/1992 in New York, United States. Latitude 43° 45' N. Longitude 74° 45' W. Limekiln Lake near Fawn Mtn - Hamilton county, Town of Inlet. Pedigree - collected from the wild.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 10/15/1992.

PI 618087. *Vaccinium oxycoccos* L.

Wild. Small Cranberry. Collected in New Hampshire, United States. Maybe New Hampshire. Pedigree - collected from the wild in New Hampshire.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Barbara Fick, Oregon State University, Extension Service, Marion County, 3180 Center NE, Room 1361, Salem, Oregon 97301, United States.

Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/20/1993.

PI 618088. *Vaccinium arboreum* Marshall

Wild. Farkleberry, Sparkleberry. Collected 10/1992 in Missouri, United States. Latitude 36° N. Longitude 90° W. Elevation 0 m. T34N, R3E, Sec 15, NE 14 and Sec 16, NW 1/4. Elephant Rocks State Park, Iron County, Missouri. Plants growing in exposed granite rocky area and extending into the understory of the surrounding forest at the base of the rocks. Pedigree - collected from the wild in Missouri. Seed from a superior clone. Fruit ripens on this plant from late August until a hard freeze. Green fruits have been seen late October. Plant has a small tree form approximately 3.7 m tall with a 10 cm diameter trunk. Foliage glossy and dark green. Fruit glossy and black, about 1.0 cm in diameter. No visible winter injury or insect damage. Minimal disease problems: *Ophiodothella* spp., which doesn't appear to affect the plant; some fruit appeared to have mummyberry (*Monilinia* spp.). For best germination of dry seed, Ballington (NC State) and Lyrene (U. of Florida) suggest soaking the seeds for 24 hrs. in 500ppm GA4+7 prior to germination.

The following were donated by Rod Serres, University of Wisconsin-Madison, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States; Ross Penhallegon, Oregon State University, Lane County Extension, 950 W 13th Avenue, Eugene, Oregon 97402-3913, United States. Received 04/27/1993.

PI 618089. *Vaccinium vitis-idaea* L.

Cultivar. "Erntesegen". German plant breeder's rights. Developed in Germany. Pedigree - selection of wild lingonberry from Germany.

The following were donated by Rod Serres, University of Wisconsin-Madison, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States. Received 04/27/1993.

PI 618090. *Vaccinium vitis-idaea* L.

Breeding. Erntekrone. Developed in Germany. Pedigree - selection of wild lingonberry from Germany. 'Erntekrone' originated by Albert Zillmer, Uchte, Germany. Selected from the wild near Uchte, Germany. Named and released in 1978. Vigorous, stiff and rigid upright growth, leaves somewhat more circular compared to characteristic oval shape in lingonberry. Fruit large, dark red, highly productive. Summer crop not as consistent as for 'Erntedank' . -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6.

PI 618091. *Vaccinium vitis-idaea* L.

Breeding. Red Pearl. Developed in United States. Pedigree - lingonberry selection from the wild in Holland. 'Red Pearl' originated in Boskoop, The Netherlands in 1981 by A. Blanken. Wide, bushy plant, upright in growth habit, height 20-30 cm; 5-12 fruit in clusters, large fruited (7-12 mm), round, ripening in September-October. -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6.

The following were donated by Rod Serres, University of Wisconsin-Madison, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States; Ross Penhallegon, Oregon State University, Lane County Extension, 950 W 13th Avenue, Eugene, Oregon 97402-3913, United States. Received 04/27/1993.

PI 618092. *Vaccinium vitis-idaea* L.

Breeding. Scarlet. Developed in United States. Date and originator unknown. Seed originated in Norway. A selection from seed suggested for use as a pollinator for 'Koralle.' Plant height 30-38 cm, spread 38-40 cm at maturity. -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6.

The following were collected by Sven Dahlbro. Developed by Swedish University of Agricultural Science, Department of Horticultural Plant Breeding, Fjlskestadsv 123-1, Kristianstad, Kristianstad S 291 94, Sweden. Donated by Rod Serres, University of Wisconsin-Madison, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States; Ross Penhallegon, Oregon State University, Lane County Extension, 950 W 13th Avenue, Eugene, Oregon 97402-3913, United States. Received 04/27/1993.

PI 618093. *Vaccinium vitis-idaea* L.

Cultivar. Sanna. Swedish Patent. Hardy and well adapted to the Swedish (origin) climate. High yield (8-10 tons/ha) and berries ripen uniformly. Upright, slow spreading to 12 inches tall. Berries are medium large, a dark red, with uniform ripening. Sanna is a high yielding over 1.25 lbs per bush or about 6 tons per acre. Produces best with cross pollination. --Fall Creek Nursery Catalog, 1997. 'Sanna' originated by Professor Sven Dahlbro, Copenhagen, Sweden. Grown from seed collected in den and evaluated as selection number BV-35. Named and released in 1987 by the Swedish University of Agricultural Sciences, Balsgard. Erect shoots 15-25 cm in height, flowering late May in southern Sweden. Fruits red, globose, ripening in mid August. Fruits comparable in size to 'Sussi'. -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6.

The following were donated by Rod Serres, University of Wisconsin-Madison, Department of Horticulture, 1575 Linden Drive, Madison, Wisconsin 53706-1590, United States. Received 04/27/1993.

PI 618094. *Vaccinium vitis-idaea* L.

Breeding. Masovia. Developed in Uncertain. Pedigree - *V. vitis-idaea* seedling selection. 'Masovia' originated by Lech Kawecki in Poland. Selected from the wild in the Lasy Bolimowskie forest, 60 km west of Warsaw in 1981. Named and released in 1985 by K. Pilszka, Warsaw Agricultural University. Vigorous growth and rhizome production, heavy fruit set. -- E.J. Stang. 1994. Lingonberry Cultivars - Building Blocks for an Industry. Fruit Varieties Journal 48(1):3-6.

The following were donated by Daniel P. Hartmann, Hartmann's Plant Company, 310 60th Street, Grand Junction, Michigan 49056, United States. Received 08/05/1993.

PI 618095. *Vaccinium vitis-idaea* L.

Cultivar. Developed in Germany. Pedigree - lingonberry selection.

The following were collected by Argyll Ardetinny. Donated by Clive Simms, Woodhurst, 6 Stamford Rd., Essendine, Stamford, Stamford, England PE9 4LQ, United Kingdom. Received 08/25/1993.

PI 618096. *Vaccinium myrtilloides* L.

Wild. Collected 08/18/1993 in Scotland, United Kingdom. Collected from Puck's Glen, Southwest Scotland. Pedigree - Seed collected from the wild in Scotland.

The following were developed by George M. Darrow, USDA-ARS, Plant Industry Station, Plant Introduction Section, Crops Research Division, Beltsville, Maryland 20705-2350, United States; Frederick V. Coville, USDA - Bureau of Plant Industry, Washington, District of Columbia, United States; Freeman; J.H. Clark, New Jersey State University, Agricultural Research Station, New Brunswick, New Jersey, United States. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 08/18/1993.

PI 618097. *Vaccinium corymbosum* L.

Cultivar. "Bluecrop". Pedigree - GM-37 (Jersey x Pioneer) x CU-5 (Stanley x June). Very consistent producer, drought resistant, widely adapted. True to type (Dr. Hancock); Virus free.

The following were developed by D.H. Scott, Crops Research Division, USDA-ARS, Plant Industry Station, Beltsville, Maryland 20705-2350, United States; G. Jelenkovic; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 08/18/1993.

PI 618098. *Vaccinium corymbosum* L.

Cultivar. "Bluegold". Pedigree - Bluehaven x Me-US 5 (Ashworth x Bluecrop). Recommended as a late season cultivar for both commercial packing and pick-your-own in high-chilling areas. True to type (Dr. Hancock). Virus free.

The following were donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 08/18/1993.

PI 618099. *Vaccinium corymbosum* L.

Cultivar. "Sierra"; G-640. Developed in United States. Pedigree - US 169 x G-156. Fruit: medium; medium blue; firm; small scar; very good quality; midseason. Bush: vigorous; productive; up-right. High chilling. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 186.

PI 618100. *Vaccinium corymbosum* L.

Cultivar. "Nelson"; G-351. Developed in United States. Pedigree - Bluecrop x G107 (F-72 x Berkeley). Fruit: light blue; firm; high

quality; late-ripening. Bush: vigorous; productive. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 184. Late midseason. Vigorous upright bush, berries very large, similar to it quality excellent with exceptional flavor Nelson was released to help fill the need for a quality variety that would ripen after Bluecrop and be more adaptable than Berkeley. Nelson was selected from crosses of Bluecrop and Berkeley. Nelson has been evaluated in New Jersey and Michigan. Yields have been quite high. Initial tests show Nelson to be tolerant of cold winter temperatures. Mechanical harvesting suitability is not yet known.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/27/1993.

PI 618101. *Vaccinium cespitosum* Michx.

Wild. Hatcher-4. Collected 08/10/1993 in Alaska, United States. Latitude 61° 45' N. Longitude 149° 15' W. Elevation 610 m. About 15 miles on Hatcher Pass Road before Independence Mine State Park. Tundra, no trees, willow, shrubs, many vaccinium. Pedigree - Collected from the wild in Alaska.

PI 618102. *Vaccinium ovalifolium* Sm.

Wild. Hatcher-2. Collected 08/10/1993 in Alaska, United States. Latitude 61° 45' N. Longitude 149° 15' W. Elevation 610 m. About 15 miles on Hatcher Pass Road before Independence Mine State Park. Tundra, no trees, willow, shrubs, many vaccinium. Pedigree - Collected from the wild in Alaska.

PI 618103. *Vaccinium oxycoccos* L.

Wild. Ninilchik-3. Collected 08/08/1993 in Alaska, United States. Latitude 60° 5' N. Longitude 151° 40' W. Elevation 15 m. Just E of old Russian Church in Ninilchik, S side of road 1/8 mile from coast. Dry bog, clearing in spruce forest. Pedigree - Collected from the wild in Alaska.

PI 618104. *Vaccinium oxycoccos* L.

Wild. Leila-2. Collected 08/11/1993 in Alaska, United States. Latitude 61° 55' N. Longitude 147° 20' W. Elevation 915 m. Milepost 118 Glenn Hwy, E side of road, W side of Leila Lake Boggy, scattered spruce trees, much willow and other shrubs. Pedigree - Collected from the wild in Alaska.

PI 618105. *Vaccinium uliginosum* L.

Wild. Collected 08/07/1993 in Alaska, United States. Latitude 59° 43' N. Longitude 151° 15' W. Elevation 305 m. 9 mi E of Homer, N side of East End Road. Dry bog, clearing in spruce forest. Pedigree - Collected from the wild in Alaska. Photos 2-25 (habitat), 3-1,3-1 (plant). Collector's #: Homer-3.

PI 618106. *Vaccinium uliginosum* L.

Wild. Collected 08/10/1993 in Alaska, United States. Latitude 61° 45' N. Longitude 149° 15' W. Elevation 610 m. About 15 miles on Hatcher Pass Road before Independence Mine State Park. Tundra, no trees, willow, shrubs, many vaccinium. Pedigree - Collected from the wild in Alaska. May be a few *V. ovalifolium* berries in sample.

PI 618107. *Vaccinium uliginosum* L.

Wild. Toklat-1. Collected 08/15/1993 in Alaska, United States. Latitude 63° 30' N. Longitude 150° 5' W. Elevation 915 m. Denali Park Road about 2 miles W of Toklat River. Tundra S of road several hundred feet above stream. Pedigree - Collected from the wild in Alaska.

PI 618108. *Vaccinium uliginosum* L.

Wild. Collected 08/17/1993 in Alaska, United States. Latitude 63° 10' N. Longitude 145° 30' W. Elevation 975 m. Richardson Hwy N of Paxon along E side of Summit Lake, E side of road. Hillside tall tundra. Pedigree - Collected from the wild in Alaska. Fruit from wide area, clone was particularly productive.

PI 618109. *Vaccinium uliginosum* L.

Wild. Collected 08/17/1993 in Alaska, United States. Latitude 62° 30' N. Longitude 145° 30' W. Elevation 610 m. Richardson Hwy about 25 mi N of Gakona Junction at Sourdough State Campground. Boggy area above Gulkana River. Pedigree - Collected from the wild in Alaska. Attractive light blue berries from heavy bloom.

PI 618110. *Vaccinium vitis-idaea* L.

Wild. Homer-1. Collected 08/07/1993 in Alaska, United States. Latitude 59° 43' N. Longitude 151° 15' W. Elevation 305 m. 8 mi E of Homer, N side of East End Road. Edge of spruce forest. Pedigree - Collected from the wild in Alaska.

PI 618111. *Vaccinium vitis-idaea* L.

Wild. Collected 08/13/1993 in Alaska, United States. Latitude 61° 37' N. Longitude 150° 0' W. Elevation 120 m. About 6 mi W of Nancy on Nancy Lake Pkwy, by Canoe Trailhead S side of road. Boggy clearing in spruce forest near lake. Pedigree - Collected from the wild in Alaska. Fruit larger than others seen to date (photo).

PI 618112. *Vaccinium vitis-idaea* L.

Wild. Toklat-2. Collected 08/15/1993 in Alaska, United States. Latitude 63° 30' N. Longitude 150° 5' W. Elevation 915 m. Denali Park Road about 2 miles W of Toklat River. Tundra S of road several hundred feet above stream. Pedigree - Collected from the wild in Alaska.

PI 618113. *Vaccinium vitis-idaea* L.

Wild. Collected 08/16/1993 in Alaska, United States. Latitude 64° 45' N. Longitude 147° 10' W. Elevation 150 m. W of Richardson Hwy near entrance to Eielson Air Force Base. Boggy area in open spruce forest. Pedigree - Collected from the wild in Alaska. Fruit larger than usual on collected plants.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 10/13/1993.

PI 618114. *Vaccinium macrocarpon* Aiton

Clone. Collected in North Carolina, United States. Latitude 35° 39' N. Longitude 83° W. Elevation 1524 m. Blue Ridge Mountains, Haywood County, North Carolina. Pedigree - collected from the wild in North Carolina.

PI 618115. *Vaccinium simulatum* Small

Wild. Collected in North Carolina, United States. Latitude 35° N.
Longitude 83° 30' W. Mt. Satulah, Macon County, North Carolina.
Pedigree - Open-pollinated seedling collected wild in North Carolina.

PI 618116. *Vaccinium corymbosum* L.

Wild. Collected in North Carolina, United States. Latitude 35° N.
Longitude 83° W. Whiteside Mountain, Jackson County, North Carolina.
Pedigree - collected from the wild in North Carolina. Representative
plant from another population.

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 10/13/1993.

PI 618117. *Vaccinium hybrid*

Breeding. Pedigree - NC 3048 amphidiploid sdlg (see notes). Evergreen in North Carolina. Would make a nice ornamental.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 10/13/1993.

PI 618118. *Vaccinium arboreum* Marshall

Wild. Collected in North Carolina, United States. Latitude 35° 48' N. Longitude 80° W. Uwharrie Mountains, Davidson County, North Carolina. Pedigree - collected from the wild in North Carolina.

PI 618119. *Vaccinium arboreum* Marshall

Wild. Collected in North Carolina, United States. Latitude 35° 50' N. Longitude 80° 13' W. Elevation 200 m. Lexington County, North Carolina. Pedigree - collected from the wild in North Carolina.

PI 618120. *Vaccinium arboreum* Marshall

Wild. Collected in Texas, United States. Latitude 35° 40' N. Longitude 96° 27' W. Elevation 1 m. College Station, Texas. Pedigree - collected from the wild in Texas. Glaucous leaves and fruit, would make a nice ornamental.

The following were developed by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 10/13/1993.

PI 618121. *Vaccinium cylindraceum* Sm.

Wild. Collected in Azores, Portugal. Pedigree - Seedling from intercross of 2 clones. Species originally from Azores. Beautiful ornamental. Evergreen in North Carolina. Survived minus 10 C in Lacombe, Oregon, winter 1999 (L. Hunt).

The following were donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 10/13/1993.

PI 618122. *Vaccinium corymbodendron* Dunal
Wild. Collected in Colombia. Pedigree - Luteyn 13311 Open-pollinated.
Species originally from Colombia.

PI 618123. *Vaccinium corymbodendron* Dunal
Uncertain. Collected in Colombia. Pedigree - Luteyn 13311
Open-pollinated. Species originally from Colombia.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/08/1993.

PI 618124. *Vaccinium stamineum* L.
Breeding. *V. stamineum* B-76. Collected in United States. Lexington County, South Carolina. Pedigree - Elite selection of species. Elite selection, non-bitter skin, good flavor edible fruit.

The following were donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/08/1993.

PI 618125. *Vaccinium darrowii* Camp
Breeding. *V. darrowii* NC 3283. Collected in Georgia, United States. Lexington County, South Carolina. Developed in United States. Pedigree - Selection from cross of 2 clones from Georgia.

The following were collected by Sam P. Vander Kloet, Acadia University, Biology Department, Wolfville, Nova Scotia B0P 1X0, Canada. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/08/1993.

PI 618126. *Vaccinium padifolium* Sm.
Wild. *V. maderiense*; *V. padifolium*. Collected in Canary Islands, Spain. Canary Islands, Spain. Pedigree - Selection collected from the wild in Canary Islands.

PI 618127. *Vaccinium arctostaphylos* L.
Wild. Collected in Turkey. Pedigree - Selection collected from the wild in Turkey. Vander Kloet 63100.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/08/1993.

PI 618128. *Vaccinium virgatum* Aiton
Wild. *V. amoenum* Clone C. Collected in Georgia, United States. Pedigree - Elite clone from Georgia. Tall plant like *Vaccinium ashei*.

The following were collected by Paul Lyrene, University of Florida, Department of Fruit Crops, 2135 Fifield Hall, Gainesville, Florida 32611,

United States. Developed by Paul Lyrene, University of Florida, Department of Fruit Crops, 2135 Fifield Hall, Gainesville, Florida 32611, United States. Received 02/09/1994.

PI 618129. *Vaccinium virgatum* Aiton

Cultivated. Collected 1968 in Florida, United States. Latitude 30° 15' N. Longitude 80° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618130. *Vaccinium virgatum* Aiton

Cultivated. Collected 1984 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618131. *Vaccinium virgatum* Aiton

Cultivated. Collected 06/27/1978 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618132. *Vaccinium virgatum* Aiton

Cultivated. Collected 06/27/1978 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618133. *Vaccinium virgatum* Aiton

Cultivated. Collected 1978 in Florida, United States. Latitude 31° 12' N. Longitude 82° 25' W. Elevation 200 m. Satilla River at sand mine on Hwy 82 near Waycross, Georgia. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618134. *Vaccinium virgatum* Aiton

Cultivated. Collected 06/27/1978 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618135. *Vaccinium virgatum* Aiton

Breeding. Collected in Florida, United States. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618136. *Vaccinium virgatum* Aiton

Cultivated. Collected 07/08/1978 in Florida, United States. Latitude 30° 45' N. Longitude 118° 58' W. Elevation 200 m. Interstate 10 near Crestview (2km east of Harold, FL) at old seedling plantation. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618137. *Vaccinium virgatum* Aiton

Cultivated. Collected 06/27/1978 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Hexaploid, compact growth.

PI 618138. *Vaccinium virgatum* Aiton

Cultivated. Collected 06/27/1978 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618139. *Vaccinium virgatum* Aiton

Cultivated. Collected 1978 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618140. *Vaccinium virgatum* Aiton

Cultivated. Collected 1978 in Florida, United States. Latitude 30° 45' N. Longitude 85° 32' W. Elevation 200 m. Old seedling plantation in Bondifay, Florida. Observation data from University of Florida Horticultural. Unit in login notes.

PI 618141. *Vaccinium virgatum* Aiton

Cultivated. Collected 1984 in Florida, United States. Latitude 30° 15' N. Longitude 82° 0' W. Elevation 200 m. St. Marys River between McClenny, FL and St. George, GA. Earliest ripening plant.

The following were collected by Michael D. Remmick, North American Plants, P.O. Box 743, Lafayette, Oregon 97127, United States. Received 04/15/1994.

PI 618142. *Vaccinium* sp.

Wild. Collected in Oregon, United States.

PI 618143. *Vaccinium* sp.

Wild. Collected in Oregon, United States.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/13/1994.

PI 618144. *Vaccinium myrtilloides* L.

Wild. Collected 07/08/1994 in Italy. Latitude 44° 48' N. Longitude 7° 5' E. Elevation 1200 m. Bobbio Pellice, 55 km SW of Torino, W of the town of Torre Pellice. Rich clay-loam, understory beneath Chestnut forest, steep rocky hillside above the home of Aldo Charbonier. Aldo Charbonier is mayor of Bobbio Pellice.

The following were donated by Jennifer L. Windus, Ohio Department of Natural Resources, Division of Natural Areas & Preserves, Fountain Square, Bldg. F-1, Columbus, Ohio 43224-1331, United States. Received 09/09/1994.

PI 618145. *Vaccinium macrocarpon* Aiton

Wild. Collected 09/01/1994 in Ohio, United States. Latitude 41° 20' N. Longitude 81° 10' W. Elevation 0 m. Glacial sphagnum bog in Triangle Lake Bog State Nature Preserve, Portage County, Ohio. Growing with leatherleaf, pitcher-plant, sphagnum, swamp loosestrife, tamarack. Pedigree - collected from the wild in Ohio.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/29/1994.

PI 618146. *Vaccinium ovalifolium* Sm.

Cultivated. Collected 08/24/1994 in British Columbia, Canada.

The following were developed by Elizabeth White, United States. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road, Lowell, Oregon 97452, United States. Received 02/02/1995.

PI 618147. *Vaccinium corymbosum* L.

Breeding. "Hardyblue"; 1613A. Adapted to mechanical harvesting, grown extensively in Washington.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 618148. *Vaccinium dependens* (G. Don) Sleumer

Wild. WM 439. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild in Bolivia.

The following were donated by Laura Poggio, Ente Parco Nazionale Gran Paradiso, Giardino Botanico Alpino "Paradisia", Valnontey, Cogne, Valle d'Aosta 11012, Italy. Received 04/21/1995.

PI 618149. *Vaccinium uliginosum* L.

Cultivated. Collected in Italy. Pedigree - collected from the wild in Italy.

PI 618150. *Vaccinium vitis-idaea* L.

Cultivated. Collected in Italy. Pedigree - collected from the wild in Italy.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Jerry A. Payne, Wildlife Biology Department, Rt. 5, Box 180, Forsyth, Georgia 31029, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 08/31/1995.

PI 618151. *Vaccinium corymbosum* L.

Wild. *V. corymbosum* (4x); NC 95-1-1. Collected 06/11/1995 in South Carolina, United States. Latitude 35° 46' 7" N. Longitude 78° 47' 2" W. Elevation 0 m. Ecotone along road through the park from US 1 and US 52, about 1/4 mi off US 1. Cheraw State Park, Chesterfield county, South Carolina. Uplands - open longleaf pines. Growing in and around the edge at a small depression. Associated w/ *Liquidambar stryciflusa*, *Ilex coriacea*, *Ilex glabra*, *Aronia arbutifolia*.

- PI 618152. *Vaccinium corymbosum* L.**
 Wild. *V. corymbosum* (2x); NC 95-1-2. Collected 06/11/1995 in South Carolina, United States. Latitude 35° 46' 7" N. Longitude 78° 47' 2" W. Elevation 0 m. Ecotone along road through the park from US 1 and US 52, about 1/4 mi off US 1. Cheraw State Park, Chesterfield county, South Carolina. Uplands - open longleaf pines. Growing in and around the edge at a small depression. Associated w/ *Liquidambar styraciflua*, *Ilex coriacea*, *Ilex glabra*, *Aronia arbutifolia*.
- PI 618153. *Vaccinium corymbosum* L.**
 Wild. *V. corymbosum* (4x); NC 95-3-1. Collected 06/12/1995 in South Carolina, United States. Latitude 34° 22' 4" N. Longitude 79° 45' 23" W. Elevation 0 m. South Carolina, Dillon county, Little Pee Dee River State Park. US 9 east from Dillon to city road 22. Right on 22 for about 4.5 mi to the park. Found around pocosin. Associated w/ various genus and species (refer to login sheet for list).
- PI 618154. *Vaccinium corymbosum* L.**
 Wild. *V. corymbosum* (4x); NC 95-7-1. Collected 06/14/1995 in South Carolina, United States. Latitude 33° 56' 49" N. Longitude 79° 58' 39" W. Elevation 0 m. South Carolina, Aiken county, Aiken State Park. Overall, the location appears to be either too dry, moist pocosin with dense vegetation, or heavily-shaded flatwoods.
- PI 618155. *Vaccinium stamineum* L.**
 Wild. *V. stamineum*; NC 95-8-3. Collected 06/14/1995 in South Carolina, United States. Latitude 33° 45' 19" N. Longitude 82° 12' 13" W. Elevation 0 m. South Carolina, McCormick county, Modoc, Hamilton Branch State Park. Overgrown old fields in the piedmont - essentially all dry uplands - pine overstory. Roadside w/ *R. flagellans*, *R. argutus*, *Potentilla canadensis* fairly abundant. Pedigree - collected from the wild in South Carolina.
- PI 618156. *Vaccinium stamineum* L.**
 Wild. *V. stamineum*; NC 95-13-1. Collected 07/07/1995 in Mississippi, United States. Latitude 34° 11' 22" N. Longitude 88° 57' 55" W. Elevation 0 m. Mississippi, Forrest county, Ragland Hills. Hwy 98, 10.9 mi east of I-59. Mixed pine and hardwood forest, both mesic and dry to alluvial woods above the Leaf River. Alluvial woods area logged about 1 yr ago and completely overgrown w/ grasses and broadleaf weeds. Pedigree - collected from the wild in Mississippi.
- PI 618157. *Vaccinium stamineum* L.**
 Wild. *V. stamineum*; NC 95-14-1. Collected 07/07/1995 in Mississippi, United States. Latitude 31° 12' 41" N. Longitude 89° 9' 13" W. Elevation 0 m. Mississippi, Green county. Old River Road, 6 mi off Hwy 63 south, south of Leaksville. Sandy mixed woodland, mainly *Quercus*, along and unpaved field road. Scattered *V. elliottii* and crown-forming *V. stamineum* on the site. Pedigree - collected from the wild in Mississippi.
- PI 618158. *Vaccinium stamineum* L.**
 Wild. *V. stamineum*; NC 95-23-3. Collected 07/14/1995 in Mississippi, United States. Latitude 34° 36' 25" N. Longitude 88° 12' 17" W. Elevation 0 m. Mississippi, Lafayette county, Holly Springs National Forest. FS Rd 841, 1.1 mi south of jct with city road 244 (244 turns off

Hwy 7 between Oxford and Holly Springs). Open woodland in the National Forest, control-burned 3 yrs ago. Dry uplands. Pedigree - collected from the wild in Mississippi.

The following were collected by Sam P. Vander Kloet, Acadia University, Biology Department, Wolfville, Nova Scotia B0P 1X0, Canada. Received 11/18/1995.

PI 618159. *Vaccinium boreale* I. V. Hall & Aalders

Wild. Collected 09/17/1995 in Newfoundland, Canada. Latitude 47° 32' N. Longitude 52° 39' W. Elevation 0 m. Canada, Newfoundland, Blackhead headland of Avalon Peninsula. Pedigree - collected from the wild in Newfoundland.

The following were collected by C. Ferris Miller, Chollipo Arboretum, 344-16 Yonhui-dong, Sodaemun-kuSosan Gun, Seoul, Seoul 120-113, Korea, South. Received 05/08/1996.

PI 618160. *Vaccinium koreanum* Nakai

Wild. *V. koreanum*; 85 (1996); CVAC 1305. Collected 1995 in Kangwon, Korea, South. Latitude 37° 2' N. Longitude 129° 11' E. Elevation 1000 m. Mt. Taebaek, Taebaek, Kangwon-Do. Pedigree - collected from the wild.

The following were developed by USDA-ARS-PIO, 10300 Baltimore Ave., Bldg. 003, Rm. 400, Beltsville. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 05/01/1997.

PI 618161. *Vaccinium hybrid*

Cultivar. "Little Giant"; US57; CVAC 1306. Pedigree - *V. constablaei* x *V. ashei* clone T65)T65= Walker x (Myers x Black Giant) hexaploid hybrid. Berry: small; dark blue; scar very good; flavor good; ripening concentrated, typically about 2 weeks later than Bluecrop in northern production areas. Probably best suited for northern highbush production areas. Plant: medium height, about 2 m tall; medium productivity; should be interplanted with highbush cultivars for pollination. Well suited for freezing and processing, which is the use for which it was principally intended. Fruit: small, dark blue, with good flavor and very small picking scar. Fruit ripening is concentrated and occurs in late July to Early August in northern growing area, typically two weeks later than Bluecrop. Plants: medium in height, about 1.5 m, and medium in productivity. Intended primarily for the processed market. Requires cross pollination for best yields. - Brooks and Olmo Register of New Fruit and Nut Varieties. ASHS Press 1997. p. 183.

The following were developed by James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 05/01/1997.

PI 618162. Vaccinium hybrid

Cultivar. "Chippewa"; MN 393; CVAC 1307. Pedigree - B18A (G65 x Ashworth) x US3 (Dixi x Michigan lowbush No. 1). Berry: large (about the same as Northblue); firm; sweet; light blue. Plant: more upright than Northblue; productive; ripens midseason. It is somewhat self-fruitful, but benefits from cross-pollination. Midseason. Compact, upright bush. Fruit is medium large, very light blue, firm, and very sweet. Chippewa is a 1996 release from Minnesota. Parentage incorporates some of the most cold hardy selections known. Production and fruit size has been similar to Northblue; Chippewa is larger than Polaris, lighter blue, with milder flavor. Recommended in all areas where a super cold hardy variety is desired.

PI 618163. Vaccinium corymbosum L.

Cultivar. "Polaris"; MN408; CVAC 1309. Pedigree - B15(G-65 x Ashworth) x Bluetta. Fruit: size medium; light blue; scar moderately small; very firm; excellent flavor; ripens early. Flowers at about the same time as Bluetta and about 5 days earlier than Bluecrop. Plant: upright; slightly small than Bluetta, but taller and less spreading than Northblue; reaches 1.3 m in height and spread; highly self-unfruitful and must be planted with other varieties for cross-pollination; yield equal to Northblue. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p 185.

The following were developed by USDA-ARS-PIO, 10300 Baltimore Ave., Bldg. 003, Rm. 400, Beltsville. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 05/01/1997.

PI 618164. Vaccinium hybrid

Cultivar. "Legacy"; G-290; CVAC 1310. Pedigree - Elizabeth x US 75 (V. darrowi Fla.4B x Bluecrop). Berry: size medium; scar and flavor superior; firmness good; ripens late midseason, after Bluecrop. Flowers somewhat earlier than optimum for Michigan and New Jersey. Plant: vigorous; upright; yield high. Best adapted to the warmer parts of the northern highbush production area. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 183. Late midseason, after second pick Bluecrop. Upright, open, vigorous to 6-7ft. Berries medium size, light blue, very firm, superior scar and flavor. Legacy is a 1993 USDA release from New Jersey. We have been carefully watching this variety's performance at our farm and numerous test sites around the country. Through this decade, Legacy has steadily improved its standing to become one of the highest producing varieties tested. In 1998, Legacy out yielded all but one variety in the NWREC Oregon trial plot, producing an equivalent of 12 tons per acre. Equally intriguing is the top ranking Legacy has received for fruit quality and flavor. Mechanical harvest suitability should be good as the ripe berries detach easily and green berries seem to hold well. Legacy is a northern-southern cross, including *V4 V *darrowi. It will keep its leaves through most of the winter. We recommend Legacy for planting in mild climates and for trial in colder areas.

The following were donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 05/01/1997.

PI 618165. *Vaccinium hybrid*

Cultivar. "Gulfcoast"; MS-90; CVAC 1311. Pedigree - G-180 (*V. corymbosum*) x US75 (*V. darrowii* x Bluecrop) southern highbush, mainly *Vaccinium corymbosum*. Fruit: good color, firmness, and flavor; scar medium; pedicel tends to adhere to harvested berry. Early ripening. Low chilling. - Brooks and Olmo Register of Fruit and Nut Varieties, ASHS Press. 1997. p. 181 Originated at Poplarvillpi by J.M. Spiers and A.D. Draper. Southern highbush, mainly *Vaccinium corymbosum*. Introduced in 1987. G-180 (*V. corymbosum*) x US 75 (*V. darrowii* x Bluecrop). Tested as MS-90. Fruit: good color, firmness, and flavor; scar medium; pedicel tends to adhere to harvested berry. Early ripening. Low chilling. Gulf Coast was released by the USDA in 1987. It is not patented and may be propagated without restrictions. Plants are vigorous, semi-upright with medium to high productivity. Fruit are medium in size and firm with good flavor. Gulf Coast has been widely used as a pollinizer for Sharpblue and Misty. It has performed better than most varieties in southwest Florida. A major problem associated with Gulf Coast is a tendency for stems to remain attached to fruit during harvest. This can cause additional expense during picking and grading. Gulf Coast remains one of the more widely grown varieties south of I-4 - University of Florida extension.

PI 618166. *Vaccinium corymbosum* L.

Cultivar. "Brigitta Blue"; Knoxfield 11 A; Brigitta; CVAC 1312. Developed in Australia. Pedigree - open pollinated Lateblue (at Michigan State Univ.) selected in Australia. Berry; large; medium blue; very firm; flavor good; scar small and dry; ripens late, between Bluecrop and Lateblue in Victoria; ships and stores well. Bush: upright; vigorous; highly productive; easy to propagate by softwood and hardwood cuttings. As of 1966, Brigitta was the most important blueberry variety developed in Australia. Has been introduced into the U.S. and Chile. Season: late Fruit: large, medium blue, sweet, good scar Bush: very good vigor, upright, suitable for mechanical harvest. In 1980 the Victoria Department of Agriculture in Australia released a group of highbush cultivars selected from seedlings grown from seed supplied by Stanley Johnston. Selections were made by Ridley Bell and Karel Kroon, scientific officer at the Horticulture Research Institute, Knoxfield, and reflect the growing conditions of southern Victoria. Brigitta Blue was one of these selections. - Eck, Pau. 1988. Blueberry Science. Rutgers Univ. Press. New Brunswick, NJ.

PI 618167. *Vaccinium hybrid*

Cultivar. "Marimba"; CVAC 1313. Pedigree - selection of southern highbush blueberry.

PI 618168. *Vaccinium corymbosum* L.

Cultivar. "Reka"; E118-4; CVAC 1314. Developed in New Zealand. Developed in New Zealand. Pedigree - E 118 (Ashworth x Earliblue) x Bluecrop. Fruit: size medium; ripens with Earliblue. Yield very high. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 186 Early. Ripens between Earliblue and Bluecrop, upright, very vigorous bush, extremely productive. Fruit is medium blue, medium size, small scar, and firm. This introduction from New Zealand is really starting to gain attention. Reka is one of the fastest growing, most adaptable varieties we have ever evaluated. It is growing well in light sandy soils, peat, and heavier clay loams. Reka seems to tolerate wetter

ground than many other varieties. Growers are especially enthused over Reka's production. The yield curve is quite steep, out producing most others in the early years and keeping up with Bluecrop at maturity. While Reka is successful in the fresh market, process growers like Reka for its superior machine harvest characteristics and high yields.

The following were developed by USDA-ARS-PIO, 10300 Baltimore Ave., Bldg. 003, Rm. 400, Beltsville. Donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States. Received 05/01/1997.

PI 618169. *Vaccinium virgatum* Aiton

Cultivar. "Austin"; T 339; CVAC 1315. Pedigree - T110 (Woodard x Gardenblue) x Brightwell. 'Austin', previously tested as T-339, was selected at Alapaha, Ga., in 1978 by Arlen D. Draper and Max E. Austin from a cross of T110 ('Woodard' x 'Garden Blue') x 'Brightwell' (Fig. 1) and was evaluated there in replicated yield trials. It has also been tested in the Southern Regional Blueberry Evaluation Trials and observed in growers' fields in southern Georgia. Results indicate that 'Austin' is adapted to those areas where rabbiteye blueberries are successfully grown. Fruit: large, lightblue, scar, firmness, and flavor good. Plant: at Poplarville, Miss and Tifton, Georgia, it flowers and ripens about the same time as Climax. Plant: upright, yield high. Yields well and leafs out well as far south as Gainesville, Florida. - Register of New Fruit and Nut Varieties, Brooks and Olmo, ASHS Press 1997. p. 174.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/21/1997.

PI 618170. *Vaccinium angustifolium* Aiton

Wild. Blue Hill 1; CVAC 1316. Collected in Maine, United States. Latitude 44° 26' 5" N. Longitude 68° 35' 41" W. Elevation 110 m. Summit of Blue Hill about 2 km NNW of the town of Blue Hill, Hancock county, Maine. Open rocky area surrounded by mixed deciduous forest. Pedigree - collected from the wild in Maine.

PI 618171. *Vaccinium macrocarpon* Aiton

Wild. Blue Hill 2; CVAC 1317. Collected in Maine, United States. Latitude 44° 26' 3" N. Longitude 68° 35' 25" W. Elevation 110 m. Summit of Blue Hill about 2 km NNW of the town of Blue Hill, Hancock county, Maine. About 30 m SE of fire lookout tower. Open rocky area surrounded by mixed deciduous forest. Growing in moist area beside rock outcropping. Pedigree - collected from the wild in Maine.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Jerry A. Payne, USDA, ARS, Southeastern Fruit & Nut Research Lab, P.O. Box 87, Byron, Georgia 31008, United States; Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 09/09/1997.

PI 618172. *Vaccinium stamineum* L.

Wild. NC96-31-1; CVAC 1318. Collected in Alabama, United States. Latitude 31° 55' 43" N. Longitude 85° 54' 49" W. Roadsides and woods edges along county road 7 at Tick Hill Cemetary, 8 miles north of U.S. 29. Very dry sandy uplands (were topsoil remains). Much of the vegetation typical for the southern U.S. inner coastal plain. *Quercus stellata* var. *margareta* (running post oak) found on top of the hill. Ironstone layer in siol profile. Collected 07/12/1996 in Alabama, United States. Latitude 31° 55' 43" N. Longitude 85° 54' 49" W. Roadsides and woods edges along county road 7 at Tick Hill Cemetary, 8 miles north of U.S. 29. Very dry sandy uplands (were topsoil remains). Much of the vegetation typical for the southern U.S. inner coastal plain. *Quercus stellata* var. *margareta* (running post oak) found on top of the hill. Ironstone layer in siol profile. Pedigree - collected from the wild in Alabama.

PI 618173. *Vaccinium stamineum* L.

Wild. NC96-38-1; CVAC 1319. Collected in Alabama, United States. Latitude 32° 43' 18" N. Longitude 86° 40' 17" W. Chilton county road 24, 2.7 miles east of city road 37. Mostly dry uplands along roadsides and powerline right-of-way. Scattered *V. stamineum* and *V. arboreum*. Collected 07/17/1996 in Alabama, United States. Latitude 32° 43' 18" N. Longitude 86° 40' 17" W. Chilton county road 24, 2.7 miles east of city road 37. Mostly dry uplands along roadsides and powerline right-of-way. Scattered *V. stamineum* and *V. arboreum*. Pedigree - collected from the wild in Alabama.

The following were collected by Rickard Trojan, 1575 Brooklane Dr., Corvallis, Oregon 97330, United States. Received 11/06/1997.

PI 618174. *Vaccinium parvifolium* Sm.

Wild. *V. parvifolium*; CVAC 1320. Collected 1997 in Alaska, United States. Latitude 55° 28' N. Longitude 133° 15' W. Elevation 33 m. In the city of Craig, Prince of Wales Island, Alaska. Undeveloped area just beyond residential area, swampy, surrounded by deep moss, open. Pedigree - collected from the wild in Alaska.

The following were donated by Gunter Staudt, Bachelhurst 10A, Merzhausen, Germany. Received 12/02/1997.

PI 618175. *Vaccinium padifolium* Sm.

Wild. CVAC 1322. Collected in Madeira Islands, Portugal. Latitude 32° 47' N. Longitude 16° 53' W. Elevation 1200 m. Ribeiro Frio, about 20 minutes down the Levada da Serra do Faial to Portela. Pedigree - Collected from the wild on the island of Maderia.

The following were donated by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States; Ross Penhallegon, Oregon State University, Lane County Extension, 950 W 13th Avenue, Eugene, Oregon 97402-3913, United States. Received 11/26/1997.

PI 618176. *Vaccinium vitis-idaea* L.

Cultivar. CVAC 1323. Originated in Wisconsin from open pollinated seed collected in southwest Finland. Evaluated as selection number WI-108 and released in 1994.

PI 618177. *Vaccinium vitis-idaea* L.

Cultivar. CVAC 1324. Originated in Wisconsin from open pollinated seed collected in southwest Finland. Evaluated as selection number WI-102, released in 1994.

The following were donated by Shawn Belt, USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Glenn Dale, Maryland 20769-9157, United States. Received 12/29/1997.

PI 618178. *Vaccinium uliginosum* L.

Wild. CVAC 1325. Collected in Jilin, China. Latitude 42° 7' 20" N. Longitude 128° 22' 44" E. Elevation 1280 m. Near Round Lake, Antu county, Jilin, China. Moist open forest with *Larix olgensis*, *Betula plaryphylla*, *Ledum palustre*, *Vaccinium vitis-idaea* and *Ledum palustre*. Organic mossy mat over volcanic ash. Collected 09/16/1997 in Jilin, China. Latitude 42° 7' 20" N. Longitude 128° 22' 44" E. Elevation 1280 m. Near Round Lake, Antu county, Jilin, China. Moist open forest with *Larix olgensis*, *Betula plaryphylla*, *Ledum palustre*, *Vaccinium vitis-idaea* and *Ledum palustre*. Organic mossy mat over volcanic ash. Pedigree - Collected from the wild in Jilin, China.

PI 618179. *Vaccinium vitis-idaea* L.

Wild. CVAC 1326. Collected in Jilin, China. Latitude 42° 7' 20" N. Longitude 128° 22' 44" E. Elevation 1280 m. Near Round Lake, Antu county, Jilin, China. Moist open forest with *Larix olgensis*, *Betula plaryphylla*, *Ledum palustre*, *Vaccinium uliginosum* and *Ledum palustre*. Organic mossy mat over volcanic ash. Collected 09/16/1997 in Jilin, China. Latitude 42° 7' 20" N. Longitude 128° 22' 44" E. Elevation 1280 m. Near Round Lake, Antu county, Jilin, China. Moist open forest with *Larix olgensis*, *Betula plaryphylla*, *Ledum palustre*, *Vaccinium uliginosum* and *Ledum palustre*. Organic mossy mat over volcanic ash. Pedigree - Collected from the wild in Jilin, China.

The following were collected by Donna Rae McKay, USDA Forest Service, Forest Resources Bldg, Corvallis, Oregon 97331, United States. Received 03/19/1998.

PI 618180. *Vaccinium parvifolium* Sm.

Wild. CVAC 1328. Collected 08/13/1986 in Oregon, United States.

The following were developed by Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States. Donated by William O. (Bill) Cline, Hort. Crops Research Station, NC Cooperative Extension Serv., 3800 Castle Hayne Road, Castle Hayne, North Carolina 28429, United States. Received 04/22/1998.

PI 618181. *Vaccinium corymbosum* L.

Cultivar. "G-616"; "Summit"; CVAC 1329. Pedigree - G-144 x FL4-76. North Carolina Agricultural Research Service North Carolina State University Arkansas Agricultural Experiment Station The United States Departmental of Agriculture Notice to Nurserymen and Blueberry Growers of the Naming

and Release of the 'Summit' Southern Highbush Blueberry. The North Carolina Agricultural Research Service, the Arkansas Agricultural Experiment Station, and the United States Department of Agriculture announce the release of the southern highbush blueberry cultivar 'Summit' for trial by growers and nurserymen. 'Summit', labeled G-616, originated from the cross G-144 x F14-76 made in 1976 at Beltsville, MD., by A.D. Draper. It was tested in replicated trials at Waynesville and Castle Hayne, NC, and observation trails at Jackson Springs, NC, Hammonton, NJ, and Clarksville, AR. 'Summit' is recommended as a high quality hand harvest type cultivar for fresh market outlets or homeowner use. It is a mid-late season southern highbush blueberry that blooms about the same time as 'Croatan' in North Carolina and slightly earlier than 'Bluecrop' in Arkansas. Ripening season is approximately two weeks after 'Croatan'. It is consistent in production, with fruit size larger than 'Croatan' and 'Bluecrop'. Fruit color and flavor are excellent, fruit picking scar and firmness are superior to 'Croatan'. Fruit cracking and stemming were not a significant factor at the Castle Hayne, N.C. location. 'Summit' performed better than 'Bluecrop' and 'Climax' in post-harvest studies in Oklahoma. The flowers of 'Summit' are self-fruitful based on greenhouse selfing trials in Raleigh, N.C. Plant habit is semi-upright with moderate vigor. It is not resistant to stem blight (*Botryosphaeria dothidea*) or anthracnose fruit rot (*Colletotrichum* sp.) though these have not been shown to be a severe problem over the last 10 years. A limited number of rooted cuttings of 'Summit' will be available through the North Carolina Foundation Seed Producers, Inc., for spring, 1998. For information on availability, contact the Manager, North Carolina Foundation Seed Producers, Inc., 8220 Riley Hill Road, NC, 27597. Director, N.C. Agricultural Research Service, Raleigh, North Carolina Date 11-25-97 Director, Arkansas Experiment Station, Fayetteville, Arkansas Date 1-13-98 Administrator, Ag. Res. Service, USDA Date Feb. 10, 1998.

The following were donated by Chollipo Arboretum, 344-16 Yonhui-Dong, Sodaemun-KuSosan Gun, Seoul, Seoul 120-113, Korea, South. Received 05/22/1998.

PI 618182. *Vaccinium oldhamii* Miq.

Wild. 1-2-93; CVAC 1330. Collected in Chungchong Nam, Korea, South. Latitude 36° 52' N. Longitude 126° 13' E. Elevation 0 m. Chollipo, Sowon-Myon, Tae-an-Gun. Pedigree - Collected from the wild in South Korea.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; William O. (Bill) Cline, Hort. Crops Research Station, NC Cooperative Extension Serv., 3800 Castle Hayne Road, Castle Hayne, North Carolina 28429, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 06/01/1998.

PI 618183. *Vaccinium elliottii* Chapm.

Wild. CVAC 1334. Collected 05/29/1998 in North Carolina, United States. Latitude 34° 26' N. Longitude 78° 7' W. Elevation 0 m. Pender county, Moore's Creek National Battlefield, at the edge of a shaded trail near parking lot. Long leaf pine, oak and *Vaccinium arboreum*

present. Soil: organic duff over black peat, with good drainage.
Pedigree - Collected from the wild in North Carolina.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 09/10/1997.

PI 618184. *Vaccinium tenellum* Aiton

Wild. NC 96-2-2; CVAC 1335. Collected 05/13/1997 in North Carolina, United States. Latitude 34° 15' 34" N. Longitude 78° 28' 39" W. Elevation 0 m. Lake Waccamaw State Park, Columbus county. Mostly vicinity of parking lot and restrooms. Pocosin type vegetation, around woods edges. Pedigree - Collected from the wild in North Carolina.

PI 618185. *Vaccinium tenellum* Aiton

Wild. NC 96-2-4; CVAC 1336. Collected 05/13/1997 in North Carolina, United States. Latitude 34° 15' 34" N. Longitude 78° 28' 39" W. Elevation 0 m. Lake Waccamaw State Park, Columbus county. Mostly vicinity of parking lot and restrooms. Pocosin type vegetation, around woods edges. Pedigree - Collected from the wild in North Carolina.

PI 618186. *Vaccinium crassifolium* Andrews

Wild. NC 96-2-5; CVAC 1337. Collected 05/13/1997 in North Carolina, United States. Latitude 34° 15' 34" N. Longitude 78° 28' 39" W. Elevation 0 m. Lake Waccamaw State Park, Columbus county. Mostly vicinity of parking lot and restrooms. Pocosin type vegetation, around woods edges. Pedigree - Collected from the wild in North Carolina.

PI 618187. *Vaccinium tenellum* Aiton

Wild. NC 96-3-1; CVAC 1338. Collected 05/14/1997 in North Carolina, United States. Latitude 34° 55' 47" N. Longitude 78° 4' 7" W. Elevation 0 m. Elite clone; covering approximately 20 square meters. Cuttings and herbarium vouchers. Dry roadside with *Rubus cuneifolius*, *R. trivialis*, *occas. R. flagellaris*. Abundant *Potentilla canadensis*. Scattered *V. tenellum* and occasional *V. corymbosum*. Pedigree - Collected from the wild in North Carolina.

PI 618188. *Vaccinium pallidum* Aiton

Wild. NC 96-11-2; CVAC 1339. Collected 05/15/1997 in North Carolina, United States. Latitude 35° 31' 19" N. Longitude 76° 48' 50" W. Elevation 0 m. Junction of US 264 and city road 1339. Power line right-of-way on right, by highway 264, just past the junction. Site varies from moist to dry upland, with mixed mature forest adjacent. Ericaceous species fairly abundant, including *Vaccinium* ssp., *Gaylussacia frondosa*, and *Rhododendron atlanticum*. Pedigree - Collected from the wild in North Carolina.

PI 618189. *Vaccinium tenellum* Aiton

Wild. NC 96-11-4; CVAC 1340. Collected 05/15/1997 in North Carolina, United States. Latitude 35° 31' 19" N. Longitude 76° 48' 50" W. Elevation 0 m. Junction of US 264 and city road 1339. Power line right-of-way on right, by highway 264, just past the junction. Site varies from moist to dry upland, with mixed mature forest adjacent. Ericaceous species fairly abundant, including *Vaccinium* ssp., *Gaylussacia frondosa*, and *Rhododendron atlanticum*. Pedigree - Collected from the wild in North Carolina.

The following were collected by Sam P. Vander Kloet, Acadia University, Biology Department, Wolfville, Nova Scotia B0P 1X0, Canada. Received 06/19/1998.

PI 618190. *Vaccinium chunii* Merr. ex Sleumer
Wild. 2181197; CVAC 1341. Collected 11/18/1997 in Vietnam. Pedigree - Collected from the wild in Vietnam.

The following were collected by Marian Zinck, Acadia University, Department of Biology, Wolfville, Nova Scotia B0P 1X0, Canada. Donated by Sam P. Vander Kloet, Acadia University, Biology Department, Wolfville, Nova Scotia B0P 1X0, Canada; Jane Harrington, Acadia University, K. C. Irving Environmental Science Center, 32 University Ave., Wolfville, Nova Scotia B4P2R6, Canada. Received 06/19/1998.

PI 618191. *Symphysia poasana* (Donn. Sm.) Vander Kloet
Uncertain. MZ7786; CVAC 1342. Collected 07/20/1990 in Alajuela, Costa Rica. Latitude 10° 15' N. Longitude 84° 36' W. Elevation 0 m.
Mt. Poas, Costa Rica. Pedigree - Collected from the wild in Costa Rica. Cultivated at Acadia University, Nova Scotia, Canada.

The following were developed by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States; Creighton L. Gupton, USDA-ARS Small Fruits Research Station, 705 North Columbia St., Poplarville, Mississippi 39470, United States. Donated by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States. Received 07/15/1998.

PI 618192. *Vaccinium* hybrid
Cultivar. "Pearl River"; MS149; CVAC 1343. Pedigree - [G-67(Earliblue x US11-93) x E-55(Berkeley x F-72)] x Beckyblue (pentaploid). Berry: size medium; dark blue; scar, firmness and flavor good. Flowers late at Poplarville, but ripens 1 week earlier than the earliest rabbiteye cultivars (Climax and Premier). Plant: vigorous, upright; productive; must be planted with southern highbush cultivars for pollination. PEARL RIVER, tested as MS149, was selected in 1982 from a cross of G-136 x Beckyblue made by A. D. Draper at Beltsville, Maryland. G-136 is a tetraploid highbush (*Vaccinium corymbosum*) blueberry selectcross of G-67 (Earliblue x US 11-93) x E-55 (Berkeley x F-72). Beckyblue is a hexaploid rabbiteye (*V. ashei*) cultivar from the Florida breeding program. The seedlings were grown in south Mississippi and was selected by J. M. Spiers, C. L. Gupton and A. D. Draper. Plants are vigorous, grow upright, and are productive. PEARL RIVER is a hybrid of highbush and rabbiteye blueberries. Fruit is medium in size, has good flavor and small scar, is firm and though darker blue than cultivars presently grown, is commercially acceptable. Plants bloom late and the fruit ripens about one week before the earliest ripening rabbiteye cultivars. Should be interplanted with other southern highbush cultivars to facilitate fruit set, early ripening, and maximum yield. No virus symptoms have been observed.

PI 618193. *Vaccinium* hybrid

Cultivar. "Biloxi"; MS318; CVAC 1344. Pedigree - Sharpblue x [US210(US67 x US132) x Florida 4-76(Bluecrop x13-236)]. BILOXI, tested as MS318, was selected from a cross of Sharpblue X US329 made by C. L. Gupton at Poplarville, Mississippi. The seedling progeny from which BILOXI was selected in 1986 by J. M. Spiers, C. L. Gupton, and A. D. Draper was grown in south Mississippi. The male parent of BILOXI, US329, came from a cross of US210 X Florida 4-76 made at Beltsville, Maryland by A. D. Draper in 1978. US210 originated from a cross of US67 [(Florida 9A, *V. darrowii*) X (G-101, *V. corymbosum*)] X [US132 (Florida 4B, *V. darrowii*) X (*V. atrococcum*)]. Florida 4-76 came from a cross of Bluecrop, *V. corymbosum* X 13-236, a seedling from (Florida 4B X *V. ashei*) X (a northern highbush X *V. darrowii*). Thus, two diploid, one tetraploid, and one hexaploid *Vaccinium* species contributed genes to the genotype of BILOXI. Plants grow upright, are vigorous and productive. Fruit is medium in size, has good color, flavor, and firmness, with small picking scar. Fruit ripens early, a few days earlier than Jubilee, but the bloom period is also early. This puts it at risk in years of late spring freezes. Should be interplanted with other southern highbush cultivars to facilitate fruit set, early ripening, and maximum yield. No virus symptoms have been observed on this cultivar. It is recommended that BILOXI be planted in areas where southern highbush blueberries are grown successfully, roughly corresponding to the Gulfcoast Region of USDA plant hardiness zone 8.

The following were developed by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States; Paul Lyrene, University of Florida, Department of Fruit Crops, 2135 Fifield Hall, Gainesville, Florida 32611, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States; Creighton L. Gupton, USDA-ARS Small Fruits Research Station, 705 North Columbia St., Poplarville, Mississippi 39470, United States. Donated by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States. Received 07/15/1998.

PI 618194. *Vaccinium* hybrid

Cultivar. "Magnolia"; MS162; CVAC 1345. Pedigree - (Harrison x Avonblue) x Florida 2-5. Berry: size medium; scar small; color, firmness, and flavor good. Flowers later than the earliest rabbiteye varieties at Poplarville, but ripens 2 weeks earlier. Plant: vigorous; productive; spreading; medium height; should be planted with other southern highbush cultivars for pollination. Adapted to U.S. Dept. of Agriculture plant hardiness zone 8. MAGNOLIA, tested as MS162, originated from a cross of (Harrison x Avonblue) x Florida 2-5 made by Paul Lyrene at the University of sent seedlings to the USDA-ARS blueberry breeders at Poplarville, Mississippi. The seedlings were established in the field in south Mississippi and was selected in 1982 by J. M. Spiers, C. L. Gupton and A. D. Draper. Plants have a spreading growth habit and are medium in height, productive and vigorous after field establishment. Small plants require good management in planting to ensure a good stand. Fruit is medium in size, and has good flavor, color and firmness with small picking scar. Plants bloom later and ripen their fruit about two weeks before the earliest rabbiteye cultivars. Should be interplanted with other southern highbush cultivars to facilitate fruit set, early ripening, and maximum yield. No virus symptoms have been observed.

The following were developed by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States; Creighton L. Gupton, USDA-ARS Small Fruits Research Station, 705 North Columbia St., Poplarville, Mississippi 39470, United States. Donated by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States. Received 07/15/1998.

PI 618195. *Vaccinium hybrid*

Cultivar. "Jubilee"; MS351; CVAC 1346. Pedigree - Sharpeblue x [MS60(E-118[Ashworth x Earliblue] x Bluecrop) xUS-75]. Berry: size medium; scar small; color, firmness, and flavor good. Flowers later than the earliest rabbiteye varieties at Poplarville, but ripens 2 weeks earlier. Adapted to USDA plant hardiness zone 8. Plant: vigorous; upright; very productive; should be interplanted with other southern highbush cultivars. - Brooks and Olmo Register of Fruit and Nut Varieties. 1997. ASHS Press. p. 182. JUBILEE, tested as MS351, came from a cross made by C. L. Gupton of Sharpeblue x MS60 (G-132 x is a highbush (*V. corymbosum*) blueberry selection that came from a cross of E-118 (Ashworth x Earliblue) x Bluecrop. The seedling progeny was grown in the field in south Mississippi and selected in 1986 by C. L. Gupton, J. M. Spiers, and A. D. Draper. Plants grow upright, are vigorous and productive. Fruit is medium in size, has good color, flavor, and firmness with small picking scar. Plants bloom later and ripen their fruit about two weeks before the earliest rabbiteye cultivars. Should be interplanted with other southern highbush cultivars to facilitate fruit set, early ripening, and maximum yield. No virus symptoms have been observed.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/11/1998.

PI 618196. *Vaccinium vitis-idaea* L.

Wild. CVAC 1347. Collected 08/07/1998 in Alaska, United States. Latitude 61° 26' 16" N. Longitude 150° 10' 5" W. Elevation 12 m. Little Susitna River Park, Alaska. About 28 miles south of Wasilla, Alaska. Under Black Cottonwood, Sitka Spruce, Populus sp. with Ribes sp., grasses and Lady Fern. Pedigree - OP seed collected from the wild in Alaska.

The following were collected by Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/20/1998.

PI 618197. *Vaccinium membranaceum* Douglas ex Torr.

Wild. CVAC 1348. Collected 08/15/1998 in Oregon, United States. Latitude 44° 18' N. Longitude 119° 41' W. Elevation 1828 m. Strawberry Wilderness in Malheur Nation Forest; T14S R34E Sec. 30; Strawberry Lake Campground at end of Forest Road 6001. From Prairie City take Highway 60 (Strawberry Road) south, which becomes Forest Road 6001. In understory on hillsides with *Fragaria*.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/22/1998.

PI 618198. *Vaccinium ovalifolium* Sm.

Wild. KH98-11; CVAC 1349. Collected 08/10/1998 in Alaska, United States. Latitude 63° 40' N. Longitude 148° 45' W. Elevation 700 m. Milepost xx on George Parks Highway (Highway 3) Grizzly Bear Campground, McKinley Village, Alaska. Open pollinated population sample collected from many plants scattered throughout campground. Associated plants: middle story plants with lingons underneath the shrubby blueberries and White spruce above the blueberries. Open woods.

PI 618199. *Vaccinium ovalifolium* Sm.

Wild. KH98-17; CVAC 1350. Collected 08/10/1998 in Alaska, United States. Latitude 62° 53' 4" N. Longitude 145° 31' 30" W. Elevation 883 m. Paxson Lake Campground, Milepost xx Richardson Highway, Route 2. Associated plants: willow, marsh fivefinger, horsetail, white spruce, lycopodium and sphagnum.

Unknown source. Received 09/22/1998.

PI 618200. *Vaccinium ovatum* Pursh

Cultivated. Morris-1; CVAC 1352. Developed in United States. Developed by Morris X. Smith, Chitwood, Oregon; now deceased. Received as cuttings in July 1998. These were never officially released. Seedlot CVAC 1212 is open pollinated seed from these selections. Morris had made seven selections from a long abandoned commercial planting in the coast range near his home in Chitwood. It is believed the planting was made in the 1920's and 1930's from superior plants collected in the wild up and down the coast range by a former neighbor of Smith.

Unknown source. Received 09/22/1998.

PI 618201. *Vaccinium ovatum* Pursh

Cultivated. Morris-2; CVAC 1353. Developed in United States. Developed by Morris X. Smith, Chitwood, Oregon; now deceased. Received as cuttings in July 1998. These were never officially released. Seedlot CVAC 1212 is open pollinated seed from these selections. Morris had made seven selections from a long abandoned commercial planting in the coast range near his home in Chitwood. It is believed the planting was made in the 1920's and 1930's from superior plants collected in the wild up and down the coast range by a former neighbor of Smith.

Unknown source. Received 09/22/1998.

PI 618202. *Vaccinium ovatum* Pursh

Cultivated. Morris-3; CVAC 1354. Developed in United States. Developed by Morris X. Smith, Chitwood, Oregon; now deceased. Received as cuttings in July 1998. These were never officially released. Seedlot CVAC 1212 is open pollinated seed from these selections. Morris had made seven selections from a long abandoned commercial planting in the coast range near his home in Chitwood. It is believed the planting was made in the 1920's and 1930's from superior plants collected in the wild up and down

the coast range by a former neighbor of Smith.

Unknown source. Received 09/22/1998.

PI 618203. *Vaccinium ovatum* Pursh

Cultivated. Morris-4; CVAC 1355. Developed in United States. Developed by Morris X. Smith, Chitwood, Oregon; now deceased. Received as cuttings in July 1998. These were never officially released. Seedlot CVAC 1212 is open pollinated seed from these selections. Morris had made seven selections from a long abandoned commercial planting in the coast range near his home in Chitwood. It is believed the planting was made in the 1920's and 1930's from superior plants collected in the wild up and down the coast range by a former neighbor of Smith.

The following were collected by Dan L. Barney, University of Idaho, Research and Extension Center, 2105 N. Boyer, Sandpoint, Idaho 83864-9454, United States. Received 12/08/1995.

PI 618204. *Vaccinium membranaceum* Douglas ex Torr.

Wild. CVAC 1357. Collected 07/20/1995 in Idaho, United States. Latitude 48° 12' 16" N. Longitude 116° 35' 15" W. Elevation 670 m. In the town of Sagle, Bonner county. Pedigree - Collected from the wild in Idaho.

PI 618205. *Vaccinium membranaceum* Douglas ex Torr.

Wild. CVAC 1358. Collected 08/31/1995 in Idaho, United States. Latitude 48° 19' 48" N. Longitude 116° 14' 29" W. Elevation 1600 m. At milepost 9 on the Trestle Creek Road in Bonner county. Pedigree - Collected from the wild in Idaho.

The following were collected by David I. Bienn, Baltic Cranberry Corporation, P.O. Box 8, Lappeenranta, Kymi SF 53501, Finland. Donated by Robert Holt, Vacu-Dry, P.O.Box 2418, 7765 Healdsburg Ave., Sebastopol, California 95473-2418, United States; Demetri Koston, Made in Nature, 4340 Redwood Highway #236, San Rafael, California 94903, United States. Received 11/06/1998.

PI 618206. *Vaccinium oxycoccos* L.

Wild. CVAC 1359. Collected 10/1998 in Leningrad, Russian Federation. Latitude 59° 55' N. Longitude 30° 20' E. Elevation 0 m. The Lodeynopolskii region in the northeast of Leningrad Oblast, in northwest Russia. Pedigree - Collected from the wild in Russia.

The following were developed by David Brazelton, Fall Creek Farm and Nursery, Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States; Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/17/1998.

PI 618207. *Vaccinium hybrid*

Cultivated. CVAC 1360. Pedigree - dwarf sport of Top Hat obtained from tissue cultured off type.

The following were collected by University of Oulu, Botanical Garden, Linnanmaa, Oulu, Oulu SF-90570, Finland. Donated by Kari Laine, University of Oulu, Botanical Gardens, Linnanmaa PO Box 400, Oulu, Oulu SF-90570, Finland. Received 1994.

PI 618208. *Vaccinium oxycoccos* L.

Wild. *V. microcarpum*; 282; *V. oxycoccos*; CVAC 1361. Collected 09/17/1993 in Lappi, Finland. Latitude 68° 44' N. Longitude 21° 52' E. Elevation 0 m. Enontekion Lappi, Enontekio, Pattikka. Pedigree - Collected from the wild in Finland.

PI 618209. *Vaccinium myrtillus* L.

Wild. *V. myrtillus*; CVAC 1362. Collected 09/17/1992 in Lappi, Finland. Latitude 69° 11' N. Longitude 21° 8' E. Elevation 0 m. Enontekion Lappi, Enontekio, Kilpisjarvi. Pedigree - Collected from the wild in Finland.

PI 618210. *Vaccinium myrtillus* L.

Wild. 284; *V. myrtillus*; CVAC 1363. Collected 09/28/1992 in Oulu, Finland. Latitude 65° 18' N. Longitude 26° 32' E. Elevation 0 m. Oulun Pohjanmaa, Kiiminki, Hirvisuo. Pedigree - Collected from the wild in Finland.

PI 618211. *Vaccinium myrtillus* L.

Wild. 285; *V. myrtillus*; CVAC 1364. Collected 09/28/1992 in Oulu, Finland. Latitude 65° 16' N. Longitude 26° 22' E. Elevation 0 m. Oulun Pohjanmaa, kiiminki, Isonhalmeenmaa. Pedigree - Collected from the wild in Finland.

PI 618212. *Vaccinium myrtillus* L.

Wild. 286; *V. myrtillus*; CVAC 1365. Collected 09/14/1993 in Troms, Norway. Latitude 69° 5' N. Longitude 20° 6' E. Elevation 0 m. Storfjord, Paras. Pedigree - Collected from the wild in Norway.

PI 618213. *Vaccinium oxycoccos* L.

Wild. 287; *V. oxycoccos*; CVAC 1366. Collected 09/23/1993 in Oulu, Finland. Latitude 65° 22' N. Longitude 26° 23' E. Elevation 0 m. Oulun Pohjanmaa, Kiiminki, Pitkaaho. Pedigree - Collected from the wild in Finland.

PI 618214. *Vaccinium oxycoccos* L.

Wild. 288; *V. oxycoccos*; CVAC 1367. Collected 09/23/1993 in Oulu, Finland. Latitude 64° 37' N. Longitude 26° 43' E. Elevation 0 m. Oulun Pohjanmaa, Munhos, Keikkokangas. Pedigree - Collected from the wild in Finland.

The following were collected by Sam P. Vander Kloet, Acadia University, Biology Department, Wolfville, Nova Scotia B0P 1X0, Canada. Received 01/29/1999.

PI 618215. *Vaccinium cylindraceum* Sm.

Cultivated. 6251097; *V. cylindraceum* 6251097; CVAC 1368. Collected 10/25/1997 in Azores, Portugal. Latitude 37° 48' N. Longitude 25° 10' W. Elevation 800 m. Pico do Bartholomeu, Soa Miguel, Azores.

Pedigree - From seeds collected in the Azores of Portugal.

The following were collected by Dan L. Barney, University of Idaho, Research and Extension Center, 2105 N. Boyer, Sandpoint, Idaho 83864-9454, United States. Received 02/04/1999.

PI 618216. *Vaccinium cespitosum* Michx.

Wild. VACP 002; *V. cespitosum*; CVAC 1369. Collected 09/03/1997 in Washington, United States. Latitude 46° 5' 45" N. Longitude 121° 46' 34" W. Elevation 1221 m. Several hundred yards southwest of junction of FS 20 and FS 30, along trail leading east from Frog Lake. Sawtooth Berry Fields, NE corner of Indian Heaven Wilderness Area, Gifford Pinchot National Forest. Numerous colonies, often in rings around trees in dry bog area. *V. delicosum* and *V. membranaceum* abundant. *V. caespitosum* present. *Tsuga heterophylla* and *Abies amabilis* were most often at center of berry colonies. Pedigree - Collected from the wild in Washington.

PI 618217. *Vaccinium deliciosum* Piper

Wild. VADE 005; *V. deliciosum*; CVAC 1370. Collected 08/31/1997 in Washington, United States. Latitude 47° 48' 6" N. Longitude 121° 3' 26" W. Elevation 1302 m. Around small pond at crest of ridge on FS 6700, 3.9 miles NW of WA 12 near Stevens Pass, WA. Extensivve colony, promarily *V. deliciosum* and possibly some *V. cespitosum* around edge of pond. *V. membranaceum* on drier sites above pond, extending back under canopy. Pedigree - Collected from the wild in Washington.

PI 618218. *Vaccinium deliciosum* Piper

Wild. VADE 006; *V. deliciosum*; CVAC 1371. Collected 09/04/1997 in Washington, United States. Latitude 46° 5' 45" N. Longitude 121° 46' 28" W. Elevation 1221 m. Frog Lake at junction of FS 30 and FS 24 at edge of Sawtooth Berry Fields, Gifford Pinchott National Forest. Numerous colonies of *V. deliciosum*, *V. membranaceum* and *V. cespitosum*, often in rings around fir and hemlock trees in dry bog area. Pedigree - Collected from the wild in Washington.

PI 618219. *Vaccinium membranaceum* Douglas ex Torr.

Wild. *V. membranaceum*; VAME 049; CVAC 1372. Collected 08/25/1997 in Idaho, United States. Latitude 48° 46' 8" N. Longitude 116° 58' 47" W. Elevation 1394 m. From a clearcut on uphill side of FS 401, 7.0 miles from turnoff from FS 302, 15 miles north of Nordman, ID. Extensive colony of *V. membranaceum*. No *V. ovalifolium* noted. Crop light, berries generally small. Collected from numerous plants. Pedigree - Collected from the wild in Idaho.

PI 618220. *Vaccinium membranaceum* Douglas ex Torr.

Wild. *V. membranaceum*; VAME 052; CVAC 1373. Collected 08/30/1997 in Washington, United States. Latitude 47° 48' 41" N. Longitude 121° 2' 52" W. Elevation 1302 m. From along road FS 6700, 4.8 miles northwest of WA 2 near Stevens Pass, WA. Extensive clearcut covering square miles and heavily colonized with *V. membranaceum*. Plant heights to 2 m. Pedigree - Collected from the wild in Washington.

PI 618221. *Vaccinium membranaceum* Douglas ex Torr.

Wild. *V. membranaceum*; VAME 057; CVAC 1374. Collected 09/05/1997 in Oregon, United States. Latitude 44° 13' N. Longitude 121° 53' W.

Elevation 1447 m. Scott Lake near OR 126 west of McKenzie Pass in Oregon. Mixed colonies of *Vaccinium*. Pedigree - Collected from the wild in Oregon.

PI 618222. *Vaccinium ovalifolium* Sm.

Wild. *V. ovalifolium*; VAOF 018; CVAC 1375. Collected 07/18/1997 in Washington, United States. Latitude 47° 58' N. Longitude 124° 18' W. Elevation 131 m. Soleduc Ranger district in Olympia National Park. South of concrete bridge on FS 29, six miles east of Highway 101, north of Forks, Washington. T28N R12W Sec. 6. Part of extensive colony. In partial shade 50 yards south of Soleduc River in heavy alder blowdown. Pedigree - Collected from the wild in Washington.

PI 618223. *Vaccinium ovalifolium* Sm.

Wild. *V. ovalifolium*; VAOF 032; CVAC 1376. Collected 07/31/1997 in Idaho, United States. Latitude 48° 40' 26" N. Longitude 116° 53' 18" W. Elevation 840 m. From edge of old growth forest and clearcut opening along FS 2249A west of Distillary Bay on Priest Lake, Bonner county, Idaho. In partial to full shade. Area is a clearcut surrounded by second growth forest dominated by *Thuja plicata*; sparse understory dominated by *V. ovalifolium*. Clear cut areas dominated by forbs and grasses. Pedigree - Collected from the wild in Idaho.

PI 618224. *Vaccinium ovalifolium* Sm.

Wild. *V. ovalifolium*; VAOF 040; CVAC 1377. Collected 08/25/1997 in Idaho, United States. Latitude 48° 46' 8" N. Longitude 117° 0' 50" W. Elevation 1282 m. From alongside FS 401 at junction with FS 401A, 3.4 miles from turnoff at FS 302, 15 miles north of Nordman, Idaho. Numerous bushes along side of road. *V. membranaceum* and possible hybrids also present. Pedigree - Collected from the wild in Idaho.

PI 618225. *Vaccinium ovalifolium* Sm.

Wild. *V. ovalifolium*; VAOF 044; CVAC 1378. Collected 09/03/1997 in Washington, United States. Latitude 46° 16' 3" N. Longitude 121° 36' 22" W. Elevation 1231 m. Along FS 23, 31 miles south of WA 12 between Randall and Trout Lake, Washington. Along stream bank. Pedigree - Collected from the wild in Washington.

PI 618226. *Vaccinium ovalifolium* Sm.

Wild. *V. ovalifolium*; VAOF 045; CVAC 1379. Collected 09/04/1997 in Washington, United States. Latitude 46° 3' 59" N. Longitude 121° 45' 18" W. Elevation 1227 m. Along FS 24 in Sawtooth Berry Fields, Gifford Pinchott National Forest. Along east side of road. Mostly in partial to dense shade under canopy. Pedigree - Collected from the wild in Washington.

PI 618227. *Vaccinium scoparium* Leiberg

Wild. *V. scoparium*; VASC 001; CVAC 1380. Collected 09/05/1997 in Oregon, United States. Latitude 44° 13' N. Longitude 121° 53' W. Elevation 1447 m. Scott Lake near Oregon highway 126, west of McKenzie Pass, Oregon. Mixed colonies of *Vaccinium*. Edge of forest, south edge of lake. Pedigree - Collected from the wild in Oregon.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Barbara Fick, Oregon State University, Extension Service, Marion

County, 3180 Center NE, Room 1361, Salem, Oregon 97301, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 04/02/1999.

PI 618228. *Vaccinium vitis-idaea* subsp. *minus* (Lodd. et al.) Hulten
Wild. *V. vitis-idaea* ssp. *minus*; CVAC 1381. Collected 08/1995 in Maine, United States. Latitude 44° 21' 8" N. Longitude 68° 13' 34" W.
Elevation 460 m. Top of Cadillac mountain, Acadia National Park, Maine.
Pedigree - Plants from wild seed collected in Maine, United States.

PI 618229. *Vaccinium angustifolium* Aiton
Wild. *V. angustifolium*; CVAC 1382. Collected 08/1995 in Nova Scotia, Canada. Latitude 44° 27' N. Longitude 65° 12' W. Elevation 20 m.
Kejimikujik National Park. Pedigree - Plants from wild seed collected in Nova Scotia, Canada.

PI 618230. *Vaccinium angustifolium* Aiton
Wild. *V. angustifolium*; CVAC 1383. Collected 08/1995 in Nova Scotia, Canada. Latitude 44° 31' 12" N. Longitude 63° 56' 24" W.
Elevation 10 m. Peggy's Cove, along coastal road route 333 about 2 km north of town. On the seaward (west) side of the road there was a boulder strewn meadow to the ocean. Pedigree - Plants from wild seed collected in Nova Scotia, Canada.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Barbara Fick, Oregon State University, Extension Service, Marion County, 3180 Center NE, Room 1361, Salem, Oregon 97301, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 11/16/1995.

PI 618231. *Vaccinium macrocarpon* Aiton
Wild. *V. macrocarpon*; CVAC 1384. Collected 08/1995 in Nova Scotia, Canada. Latitude 44° 31' 12" N. Longitude 63° 56' 24" W.
Elevation 10 m. Peggy's Cove, along coastal road route 333 about 2 km north of town. Pedigree - Collected from the wild in Nova Scotia, Canada.

The following were developed by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States; Creighton L. Gupton, USDA-ARS Small Fruits Research Station, 705 North Columbia St., Poplarville, Mississippi 39470, United States. Donated by Creighton L. Gupton, USDA-ARS Small Fruits Research Station, 705 North Columbia St., Poplarville, Mississippi 39470, United States. Received 03/24/1999.

PI 618232. *Vaccinium* hybrid
Cultivar. "Biloxi"; MS-318; CVAC 1385. Pedigree - Sharpblue x US329.
Biloxi; A vigorous and productive southern highbush blueberry. Origin: USDA Small Fruit Research Station, Poplarville, Miss. Sharpblue x US329.
Tested as MS318. An interspecific hybrid containing *V. corymbosum*, *V.*

darrowii, and other species. Selected in 1986 in southern Mississippi by J.M. Spiers, C.L. Gupton, and A.D. Draper. Introduced in 1998. Berry: medium size, good color, flavor, and firmness, with small picking scar. Flowers and ripens early. Plant: vigorous, productive, upright growth habit. Should be interplanted with other southern highbush cultivars for cross-pollination. Relatively low chilling requirement; adapted to coastal plain areas of southeastern U.S.

The following were developed by Jim Spiers, USDA-ARS, Small Fruit Research Station, P. O. Box 287, Poplarville, Mississippi 39470, United States; Arlan D. Draper, 604 E. Park Dr., Payson, Arizona 85541, United States. Donated by Creighton L. Gupton, USDA-ARS Small Fruits Research Station, 705 North Columbia St., Poplarville, Mississippi 39470, United States. Received 03/24/1999.

PI 618233. Vaccinium hybrid

Cultivar. "Gulfcoast"; MS-90; CVAC 1386. Pedigree - G-180 (V. corymbosum) x US75 (V. darrowii x Bluecrop) southern highbush, mainly Vaccinium corymbosum. Fruit: good color, firmness, and flavor; scar medium; pedicel tends to adhere to harvested berry. Early ripening. Low chilling. - Brooks and Olmo Register of Fruit and Nut Varieties, ASHS Press. 1997. p. 181 Originated at Poplarville by J.M. Spiers and A.D. Draper. Southern highbush, mainly Vaccinium corymbosum. Introduced in 1987. G-180 (V. corymbosum) x US 75 (V. darrowii x Bluecrop). Tested as MS-90. Fruit: good color, firmness, and flavor; scar medium; pedicel tends to adhere to harvested berry. Early ripening. Low chilling. Gulf Coast was released by the USDA in 1987. It is not patented and may be propagated without restrictions. Plants are vigorous, semi-upright with medium to high productivity. Fruit in size and firm with good flavor. Gulf Coast has been widely used as a pollinizer for Sharpblue and Misty. It has performed better than most varieties in southwest Florida. A major problem associated with Gulf Coast is a tendency for stems to remain attached to fruit during harvest. This can cause additional expense during picking and grading. Gulf Coast remains one of the more widely grown varieties south of I-4 - University of Florida extension.

PI 618234. Vaccinium hybrid

Cultivar. "Pearl River"; MS-149; CVAC 1387. Pedigree - G-136 (highbush) x Beckyblue (rabbiteye). Pearl River; Pentaploid northern highbush x rabbiteye hybrid from the cross G-136 (highbush) x Beckyblue (rabbiteye). Tested as MS149; released in 1994 by the U.S. Dept. of Agriculture Small Fruit Sta., Poplarville, Miss. Berry: size medium; dark blue; scar, firmness, and flavor good. Flowers late at Poplarville, but ripens one week earlier than the earliest rabbiteye cultivars (Climax and Premier). Plant: vigorous, upright; productive; must be planted with southern highbush cultivars for pollination.

PI 618235. Vaccinium hybrid

Cultivar. "Cooper"; MS-78; CVAC 1388. Pedigree - G-180 (V. corymbosum) x US75 (V. darrowii Florida 4B x Bluecrop). Cooper; Originated at Poplarville, Miss., by J.M. Spiers and A.D. Draper. Southern highbush, mainly Vaccinium corymbosum. Introduced in 1987. G-180 (V. corymbosum) x US 75 (V. darrowii Florida 4B x Bluecrop). Selected in 1977; tested as MS-78. Fruit: good color, firmness, scar, and flavor; early ripening. Low chilling requirement. Moderately productive. - Brooks and Olmo

Register of Fruit and Nut Cultivars. ASHS Press. p. 179.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 11/16/1995.

- PI 618236. *Vaccinium ovalifolium* Sm.**
Wild. CVAC 1389. Pedigree - Collected from the wild in British Columbia, Canada.
- PI 618237. *Vaccinium membranaceum* Douglas ex Torr.**
Wild. CVAC 1390. Pedigree - Collected from the wild in British Columbia, Canada.
- PI 618238. *Vaccinium deliciosum* Piper**
Wild. CVAC 1391. Pedigree - Collected from the wild in Washington.
- PI 618239. *Vaccinium deliciosum* Piper**
Wild. CVAC 1392. Pedigree - Collected from the wild in Washington.
- PI 618240. *Vaccinium membranaceum* Douglas ex Torr.**
Wild. CVAC 1393. Pedigree - Collected from the wild in Washington.
- PI 618241. *Vaccinium membranaceum* Douglas ex Torr.**
Wild. CVAC 1394. Pedigree - Collected from the wild in Washington.
- PI 618242. *Vaccinium membranaceum* Douglas ex Torr.**
Wild. CVAC 1395. Pedigree - Collected from the wild in Washington.
- PI 618243. *Vaccinium deliciosum* Piper**
Wild. CVAC 1396. Pedigree - Collected from the wild in Oregon.
- PI 618244. *Vaccinium membranaceum* Douglas ex Torr.**
Wild. CVAC 1397. Pedigree - Collected from the wild in Idaho.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States; Barbara Fick, Oregon State University, Extension Service, Benton County, 1849 NW 9th Street, Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/19/1994.

- PI 618245. *Vaccinium ovatum* Pursh**
Wild. CVAC 1398. Collected 08/23/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.
- PI 618246. *Vaccinium ovatum* Pursh**
Wild. CVAC 1399. Collected 08/29/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.
- PI 618247. *Vaccinium membranaceum* Douglas ex Torr.**
Wild. CVAC 1400. Collected 08/23/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

PI 618248. *Vaccinium uliginosum* L.

Wild. CVAC 1401. Collected 08/24/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

The following were collected by Chris Heider, USDA-ARS-HCRL, 3420 Orchard St., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/19/1994.

PI 618249. *Vaccinium* sp.

Wild. CVAC 1402. Collected 08/1993 in Alaska, United States. Pedigree - Collected from the wild in Alaska.

The following were collected by Tim Hohn, Washington Park Center for, Urban Horticulture, University of Washington, Seattle, Washington 98195, United States. Donated by University of Washington, Center for Urban Horticulture, Washington Park Arboretum, Seattle, Washington 98195, United States. Received 08/1995.

PI 618250. *Vaccinium scoparium* Leiberg

Wild. *V. scoparium*; 35; CVAC 1404. Collected 1995 in Washington, United States. Elevation 820 m. Kittitas county, Washington. Pedigree - Collected from the wild in Washington.

The following were donated by University of Washington, Center for Urban Horticulture, Washington Park Arboretum, Seattle, Washington 98195, United States. Received 08/1995.

PI 618251. *Vaccinium virgatum* Aiton

Wild. *V. virgatum*; 145; CVAC 1405.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States; Ian Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/14/1999.

PI 618252. *Vaccinium membranaceum* Douglas ex Torr.

Wild. *V. membranaceum*; ORUS 82; CVAC 1406. Collected 08/1999 in Oregon, United States. Latitude 43° 15' N. Longitude 122° 20' W. Elevation 1150 m. Whitehorse Falls Nation Forest Service Campground. Along North Umpqua River and State Highway 138 in Umpqua National Forest. Associated with *Pseudotsuga menziesii* and *Rubus parviflorus*. Pedigree - Collected from the wild in Oregon.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; David Yarborough, University of Maine, 5722 Deering Hall, Orono, Maine 04469-5722, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/14/1999.

PI 618253. *Vaccinium uliginosum* L.

Wild. *V. uliginosum*; 99003; CVAC 1407. Collected 09/1999 in Jilin, China
Pedigree - Collected from the wild in China.

PI 618254. *Vaccinium uliginosum* L.

Uncertain. *V. uliginosum*; 99005; CVAC 1408. Collected 09/1999 in Jilin, China. Winery sample. If seeds germinate, this will be an outstanding broad sample. Seed gathered from the base of a 40,000 liter tank used to make *Vaccinium uliginosum* wine. Li Yiang Lin winery in San Lin, Jilin, China.

PI 618255. *Vaccinium uliginosum* L.

Wild. *V. uliginosum*; 99008; CVAC 1409. Collected 09/1999 in Jilin, China
Pedigree - Collected from the wild in China.

PI 618256. *Vaccinium uliginosum* L.

Wild. *V. uliginosum*; 99012; CVAC 1411. Collected 09/1999 in Jilin, China
Latitude 42° 25' N. Longitude 128° 10' E. Elevation 0 m.

Fields in the vicinity of Chang Bai Mountains near Baihe. Fruit combined from two fields about 10 km apart. Fairly dry fields, although sphagnum growing throughout the field. *Vaccinium vitis-idaea* and *Larix* sp. common. Pedigree - Collected from the wild in China.

Unknown source. Received 05/24/1999.

PI 618257. *Vaccinium delavayi* Franch.

Cultivated. *V. delavayi*; vade036; CVAC 1412. Source uncertain. Has been in the nursery trade for some time. Evergreen, small shrub to 2 1/2 ft.; crimson/purple fruit; said to grow on cliffs and trees in native habitat; adapted to partial shade, zone 7.

Unknown source. Received 05/24/1999.

PI 618258. *Vaccinium moupinense* Franch.

Cultivated. *V. moupinense*; vamo040; CVAC 1413. Forest Farm Nursery obtained plants from Mitsch Nursery, Aurora, Oregon. Evergreen shrub, dwarf, dense, bright green, 1-2 ft. mound; mahogany-red urn shaped flowers; adapted to sun, zone 7.

The following were donated by Mark Ehlenfeldt, USDA, ARS, Rutgers Blueberry and Cranberry, Research Center, Chatsworth, New Jersey 08019, United States. Received 11/19/1999.

PI 618259. *Vaccinium* hybrid

Cultivar. "Goldtraube 74"; CVAC 1414.

PI 618260. *Vaccinium* hybrid

Cultivar. "Ascorba"; CVAC 1415. Pedigree - Selection of *Vaccinium corymbosum* with high vitamin C.

PI 618261. *Vaccinium* hybrid

Cultivar. "Polen 38"; CVAC 1416.

PI 618262. *Vaccinium corymbosum* L.
Cultivar. "Caroline Blue"; CVAC 1417. Developed in Australia. Pedigree
- Lateblue open pollinated.

Unknown source. Received 10/23/1996.

PI 618263. *Vaccinium floribundum* Kunth
Cultivated. CVAC 1418. Collected in Ecuador. Elevation 0 m. Market in
Ibarra.

Unknown source. Received 10/23/1996.

PI 618264. *Vaccinium floribundum* Kunth
Cultivated. CVAC 1419. Collected in Ecuador. Elevation 0 m. Near
Cotacachi.

Unknown source. Received 10/23/1996.

PI 618265. *Vaccinium floribundum* Kunth
Cultivated. CVAC 1420.

Unknown source. Received 03/08/2000.

PI 618266. *Vaccinium ovalifolium* Sm.
Uncertain. CVAC 1421.

Unknown source. Received 03/08/2000.

PI 618267. *Vaccinium crassifolium* Andrews
Uncertain. CVAC 1422.

Unknown source. Received 03/08/2000.

PI 618268. *Vaccinium membranaceum* Douglas ex Torr.
Uncertain. CVAC 1423.

Unknown source. Received 03/08/2000.

PI 618269. *Vaccinium myrtilloides* Michx.
Uncertain. CVAC 1424.

The following were donated by David Brazelton, Fall Creek Farm and Nursery,
Inc., 39318 Jasper-Lowell Road Road, Lowell, Oregon 97452, United States.
Received 12/06/2000.

PI 618270. *Vaccinium hybrid*
Cultivar. CVAC 1425. Pedigree - [(Ivanhoe x Earliblue) x Collins] x
(*V. myrsinites* x *V. angustifolium*).

PI 618271. *Vaccinium hybrid*

Cultivar. CVAC 1426. Pedigree - (*V. myrsinites* x *V. angustifolium*) x [(Ivanhoe x Earliblue)x Collins].

Unknown source. Received 11/16/1996.

PI 618272. *Rubus glaucus* Benth.

Wild. CRUB 2085. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 11/16/1996.

PI 618273. *Rubus niveus* Thunb.

Wild. CRUB 2086. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 11/16/1996.

PI 618274. *Rubus glaucus* Benth.

Wild. CRUB 2089. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 11/16/1996.

PI 618275. *Rubus glaucus* Benth.

Wild. CRUB 2095. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 05/16/2000.

PI 618276. *Rubus hispidus* L.

Wild. NC 98-11-6; CRUB 2107. Collected in Tennessee, United States. Latitude 36° 4' 50" N. Longitude 85° 12' 32" W. Elevation 723 m. Western Cumberland County, wooded area between I 40 and truck parking area, 5.1 mile east of Monterey, Tn exit (at US70). Understory cut to ground every several years, mixed pinus and hardwood overstory, site seasonally wet, acid, silty soils, with deciduous *Rhododendron* sp., *Vaccinium pallidum*, *Vaccinium stamineum* scattered. Pedigree - Collected from the wild in Tennessee.

Unknown source. Received 05/25/2000.

PI 618277. *Rubus sprengelii* Weihe

Cultivated. CRUB 2124. Collected in Poznan, Poland. Latitude 52° 25' N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden, Ponznan.

The following were collected by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 01/06/2000.

PI 618278. *Rubus enslenii* Tratt.

Wild. *R. enslenii* 47; Enslen Dewberry; CRUB 2097. Collected 01/02/2000 in Louisiana, United States. Pedigree - Collected from the wild in Louisiana.

Unknown source. Received 03/08/2000.

PI 618279. *Rubus allegheniensis* Porter

Cultivated. CRUB 2098.

Unknown source. Received 11/16/1996.

PI 618280. *Rubus glaucus* Benth.

Wild. CRUB 2093. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 05/16/2000.

PI 618281. *Rubus hispidus* L.

Wild. NC 98-9-2; CRUB 2108. Collected in Tennessee, United States. Latitude 35° 52' 52" N. Longitude 84° 48' 38" W. Elevation 578 m. Cumberland County, Hwy 70, Ozone, TN, Grassy trailside near entrance to Ozone Natural Area and rocky outcrop near the bl bluff along the trail into the natural area. Near entrance, thin but dark loamy soil, very dry at present *Rubus hispidus* scattered in thin soil areas scatter on rock outcrops, *Fragaria virginiana* accession of fund in grassy area near entrance. Pedigree - Collected from the wild in Tennessee.

Unknown source. Received 05/16/2000.

PI 618282. *Rubus flagellaris* Willd.

Wild. NC 98-29-5; CRUB 2109. Collected in North Carolina, United States. Latitude 35° 6' 36" N. Longitude 83° 9' 28" W. Elevation 1189 m. Jackson County, Intersection of US 64 and hwy 107 in Cashiers, US 64 west for 3.3 miles to Norton Creek rd., righ right on Norton Creek rd for .9 miles to an unpaved field ro road to the left at Norton Creek farm. With pasture, field and roadbanks and wood edges, scattered *Fragaria virfiniana* and probable introgressants with *F. ananassa*, along with *Rubus* species. Pedigree - Collected from the wild in North Carolina.

Unknown source. Received 05/16/2000.

PI 618283. *Rubus occidentalis* L.

Wild. NC 98-8-1; CRUB 2110. Collected in Tennessee, United States. Latitude 35° 53' 3" N. Longitude 84° 49' 25" W. Elevation 550 m. Cumberland County, Roadside above cove forest along US70, 1 mile west of Ozone. edge of the Cove forest, with *Rubus flagellanis*. Pedigree - Collected from the wild in Tennessee.

Unknown source. Received 01/11/2000.

PI 618284. *Rubus hybrid*

Cultivar. CRUB 2083. Pedigree - Hilton x VPI 5 (Taylor x St. Regis).
Orig. in Blacksburg, Va., by G.D. Oberle, Virginia Agr. Ext. Serv.,
Virginia Polytechnical Inst. & State Univ. Introduced in 1972. Hilton x
VPI 5 (Taylor x St. Regis); cross made in 1958; selected in 1972; tested
as VPI 13. Fruit: large; round conic to medium conic; medium to bright
red; firm; seeds prominent; fruit well exposed; season extends from late
June to mid July on floricanes and mid September to frost on primocanes.
Plant: productive; good vigor; tolerant to fluctuating winter temperatur-
es. Tolerant to root rot. Susceptible to the common strain of the North
American aphid vector of the raspberry mosaic virus complex.

Unknown source. Received 11/16/1996.

PI 618285. *Rubus glaucus* Benth.

Wild. CRUB 2084. Collected in Ecuador. Pedigree - Collected from the
wild in Ecuador.

Unknown source. Received 05/16/2000.

PI 618286. *Rubus occidentalis* L.

Wild. NC 98-12-1; CRUB 2111. Collected in Tennessee, United States.
Latitude 35° 57' 27" N. Longitude 85° 43' 18" W. Elevation 410
m. Dekalb county, US 70, .9 miles west of Center Hill Lake (headed
toward Smithville). Seepage slope on left with occasional *Rubus*
occidentalis Further down the road the left roadside is blufflike with
V. simulatum and deciduous *Rhododendron* scattered on the face and top,
Occasional *Kalmia latifolia* and *Hydrangea* sp. also. Pedigree -
Collected from the wild in Tennessee.

Unknown source. Received 05/16/2000.

PI 618287. *Rubus occidentalis* L.

Wild. NC 98-7-1; CRUB 2112. Collected in Tennessee, United States.
Latitude 35° 49' 23" N. Longitude 84° 32' 51" W. Elevation 330
m. Roane County, Hwy 58, 1.8 miles North of junction with 72. Roadbank
on both sides (morning sun on left, evening sun on right), *Pinus-Quercus*
forest above roadbanks on both sides, heavy clay soil, very dry site at
this time. Pedigree - Collected from the wild in Tennessee.

Unknown source. Received 05/25/2000.

PI 618288. *Rubus* sp.

Cultivated. CRUB 2113. Collected in Poznan, Poland. Latitude 52° 25'
N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden,
Poznan.

Unknown source. Received 05/25/2000.

PI 618289. *Rubus bavaricus* (Focke) Hruby

Cultivated. CRUB 2114. Collected in Poznan, Poland. Latitude 52° 25'

N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden,
Poznan. Developed in United States.

Unknown source. Received 05/25/2000.

PI 618290. *Rubus camptostachys* G. Braun
Cultivated. CRUB 2115. Collected in Poznan, Poland. Latitude 52° 25'
N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden,
Poznan.

Unknown source. Received 05/25/2000.

PI 618291. *Rubus fabrimontanus* (Sprib.) Sprib.
Cultivated. CRUB 2117. Collected in Poznan, Poland. Latitude 52° 25'
N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden,
Poznan.

Unknown source. Received 05/25/2000.

PI 618292. *Rubus* sp.
Cultivated. CRUB 2119. Collected in Poznan, Poland. Latitude 52° 25'
N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden,
Poznan.

Unknown source. Received 11/16/1996.

PI 618293. *Rubus glaucus* Benth.
Wild. CRUB 2094. Collected in Ecuador. Pedigree - Collected from the
wild in Ecuador.

Unknown source. Received 05/25/2000.

PI 618294. *Rubus ostroviensis* Sprib.
Cultivated. CRUB 2120. Collected in Poznan, Poland. Latitude 52° 25'
N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden,
Poznan.

Unknown source. Received 05/25/2000.

PI 618295. *Rubus pedemontanus* Pinkw.
Cultivated. CRUB 2121. Collected in Poznan, Poland. Latitude 52° 25'
N. Longitude 16° 53' E. Elevation 70 m. Dendrological Garden,
Poznan.

Unknown source. Received 03/08/2000.

PI 618296. *Rubus* hybrid
Cultivar. CRUB 2099. Pedigree - *R.rolfei* and *R.tricolor*. Garden
Origin.*Cross between *R.rolfei* and *R.tricolor*.*Excellent ground cover,
very fast spreading.* Glossy, crinkled, heart-shaped leaves.*Small white

flowers and occasional red
fruits. <http://www.rubusspecies.com/5.html>.

Unknown source. Received 03/08/2000.

PI 618297. *Rubus nepalensis* (Hook. f.) Kuntze
Cultivated. CRUB 2101.

Unknown source. Received 03/08/2000.

PI 618298. *Rubus odoratus* L.
Cultivated. CRUB 2102.

Unknown source. Received 03/08/2000.

PI 618299. *Rubus pectinellus* Maxim.
Cultivated. CRUB 2103.

The following were collected by James F. Hancock, Michigan State University, Department of Horticulture, Plant and Soil Science A 342, East Lansing, Michigan 48824-1325, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chris Heider, USDA-ARS-HCRL, 3420 Orchard St., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/23/1996.

PI 618300. *Rubus* sp.

Cultivated. *R. sp.* (*R. robustus*?); NAH 112; CRUB 2069. Collected in Imbabura, Ecuador. Latitude 0° 21' N. Longitude 78° 7' W. Elevation 0 m. Fruit purchased from a vendor in the Ibarra market. Collected 03/1996 in Imbabura, Ecuador. Latitude 0° 21' N. Longitude 78° 7' W. Elevation 0 m. Fruit purchased from a vendor in the Ibarra market.

Unknown source. Received 11/16/1996.

PI 618301. *Rubus glaucus* Benth.
Wild. CRUB 2090. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 11/16/1996.

PI 618302. *Rubus glaucus* Benth.
Wild. CRUB 2091. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 03/08/2000.

PI 618303. *Rubus buergeri* Miq.

Cultivated. CRUB 2104.

Unknown source. Received 03/08/2000.

PI 618304. *Rubus setchuenensis* Bureau & Franch.
Cultivated. CRUB 2105.

Unknown source. Received 11/16/1996.

PI 618305. *Rubus niveus* Thunb.
Wild. CRUB 2092. Collected in Ecuador. Pedigree - Collected from the wild in Ecuador.

Unknown source. Received 04/06/2000.

PI 618306. *Rubus trivialis* Michx.
Wild. CRUB 2106. Collected in Georgia, United States. Pedigree - Collected from the wild in Georgia.

The following were collected by James F. Hancock, Michigan State University, Department of Horticulture, Plant and Soil Science A 342, East Lansing, Michigan 48824-1325, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chris Heider, USDA-ARS-HCRL, 3420 Orchard St., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/23/1996.

PI 618307. *Rubus* sp.
Cultivated. *R. sp.* (*R. robustus*?); NAH 113; CRUB 2070. Collected 03/1996 in Imbabura, Ecuador.

PI 618308. *Rubus glaucus* Benth.
Cultivated. *R. glaucus*; NAH 115; CRUB 2071. Collected 03/1996 in Tungurahua, Ecuador. Fruiting sporadic as a single cane will produce fruit heavily and then another cane on the plant will produce fruit. So the entire plant is never fruiting. Fruit ripens throughout the year. The source of the plant stock was unknown.

The following were developed by D.L. Jennings, Scottish Crop Research Inst., Invergowrie, Scotland, United Kingdom; Graeme R. McGregor, Victoria Dept. of Agriculture, Institute for Horticultural Development, Private Bag 15, Knoxfield, Victoria 3176, Australia. Donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States. Received 04/04/2000.

PI 618309. *Rubus idaeus* L.
Cultivar. "Dinkum"; A83-31-G5; CRUB 2073. Pedigree - Autumn Bliss x Glen Moy. Dinkum. Originated in Toolangi, Australia, by G. McGregor, Institute for Horticultural Development, Melbourne, Victoria. Autumn Bliss x Glen Moy; cross made in 1983 by D.L. Jennings, Scottish Crop Research Institute; selected by G. McGregor in 1985; tested as

A-83-31-G5; introduced in 1992. Propagated under an agreement with the Australian Rubus Growers Association. Fruit: medium size; firm with medium size drupelets; medium dark red and slightly more glossy than Autumn Bliss; excellent flavor; easy to harvest; main production on primocanes; over-wintered floricanes produce early summer fruit on lower portions; some resistance to postharvest Botrytis rot; ripens as much as 19 days earlier than Heritage and at the same time or 3 days earlier than Autumn Bliss; fresh market use. Plant: yield similar to Autumn Bliss but usually has more condensed ripening season and higher yield at each harvest; upright primocanes with relatively short fruiting laterals. Susceptible to root rot and to infection by pollen transmission of raspberry bushy dwarf virus.

The following were developed by Gustav Redalen, Agricultural University, Dept. Pomology, PO Box 18, Aas, Akershus N-1432, Norway. Donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States. Received 04/04/2000.

PI 618310. *Rubus idaeus* L.

Cultivar. "Balder"; H4-10-07; CRUB 2074. Pedigree - Norna x Malling Jewel. Balder. Originated in Aas-NLH, Norway, by G. Redalen, Agricultural University of Norway. Norna x Malling Jewel; cross made in 1975; selected in 1980; tested as H4-10-07; introduced in 1988. Fruit: medium size; dark, dull red color; relatively soft; medium sweet; high acidity, separates readily from the receptacle; early, relatively concentrated season; processing use. Plant: productive; primocanes numerous, erect, and vigorous, with dark-purple spines largely restricted to the basal portions, slightly waxy and glabrous; floricanes erect and vigorous, light brownish gray; large leaves may hide fruit, making hand harvest difficult; very winter hardy; susceptible to cane spot.

The following were donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States; Chaim Kempler, Agassiz Research Station, P.O. Box 1000, Agassiz, British Columbia V0M 1A0, Canada. Received 04/04/2000.

PI 618311. *Rubus idaeus* L.

Cultivar. "Kitsilano"; BC 85-18-16; CRUB 2075.

The following were developed by R. McNicol, Scottish Crop Research Inst., Dundee, Scotland, United Kingdom; Scottish Crop Research Institute, Invergowrie, Dundee, Scotland DD25DA, United Kingdom; D.L. Jennings, Scottish Crop Research Inst., Invergowrie, Scotland, United Kingdom. Donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States. Received 04/04/2000.

PI 618313. *Rubus idaeus* L.

Cultivar. "Glen Magna"; SCRI 8032A3; CRUB 2077. Pedigree - Meeker x SCRI 7719B11. Glen Magna. A very high-yielding, late ripening raspberry. Originated in Invergowrie, Scotland, by R.J. McNicol and D.L. Jennings, Scottish Crop Research Institute. Meeker x SCRI 7719B11; cross made in

1980; tested as SCRI 8032A3; introduced in 1994. Worldwide marketing rights held by NSA Plants, East Malling, Kent, U.K. Fruit: very large; deep red color; long conic shape; medium firm; excellent uniform appearance; removal from receptacle may not be sufficiently easy in some environments for machine harvest; excellent flavor with similarities to Meeker and Glen Moy; fresh market and processing, especially freezing. Plant: upright, vigorous canes with few spines. Gene Algives resistance to two strains of the European aphid vector of the raspberry mosaic virus complex; gene Bu gives resistance to raspberry bushy dwarf virus.

PI 618314. *Rubus idaeus* L.

Cultivar. "Glen Rosa"; SCRI 7815A12; CRUB 2078. Pedigree - Complex parentage, includes Glen Prosen and Meeker. Glen Rosa. A raspberry with easily harvested fruit, well adapted to the cool growing conditions of Scotland. Originated in Invergowrie, Scotland, by R.J. McNicol and D.L. Jennings, Scottish Crop Research Institute. Sibling of Glen Ample; complex parentage includes Glen Prosen and Meeker; cross made in 1978; tested as SCRI 7815A12; introduced in 1994. Worldwide marketing rights held by NSA Plants, East Malling, Kent, U.K. Fruit: medium size; bright medium-red color; firm with good collar adhesion; easily removed from receptacle; adapted to machine harvest; midseason ripening; fairly good flavor; for processing, less well adapted to fresh market. Plant: production moderate; spine-free, relatively upright canes with medium vigor. Gene H gives resistance to spur blight and cane Botrytis; gene Al0 gives resistance to the four known strains of the European aphid vector of the raspberry mosaic virus complex; gene Bu gives resistance to raspberry bushy dwarf virus.

PI 618315. *Rubus idaeus* L.

Cultivar. "Glen Shee"; SCRI 8044C9; CRUB 2079. Pedigree - Complex parentage with no named cultivar in its pedigree for four generations. Glen Shee. A large-fruited raspberry probably best suited to home gardens and pick-your-own in Britain. Originated in Invergowrie, Scotland, by R.J. McNicol and D.L. Jennings,, Scottish Crop Research Institute. Complex parentage with no named cultivar in its pedigree for four generations; cross made in 1980; tested as SCRI 8044C9; introduced in 1994. Worldwide marketing rights held by NSA Plants, East Malling, Kent, U.K. Fruit: slightly pale; firm; fleshy; slightly weak skin prone to win rub; not adapted to machine harvest; moderate flavor. Plant: moderate yield; spine-free; canes relatively upright, strong, vigorous. Susceptible to midge blight; gene Al gives resistance to two strains of the European aphid vector of the raspberry mosaic virus complex; susceptible to infection by pollen transmission of raspberry bushy dwarf virus.

The following were donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States. Received 04/04/2000.

PI 618316. *Rubus idaeus* L.

Cultivar. "Maroseyka"; CRUB 2080.

PI 618317. *Rubus idaeus* L.

Cultivar. "Mirage"; CRUB 2081.

The following were donated by Rengong Meng, USDA-ARS-HCRL, 3420 NW Orchard Ave., Corvallis, Oregon 97330, United States. Received 11/16/1996.

PI 618318. *Rubus flosculosus* Focke

Uncertain. *R. flosculosus*; CRUB 2056. Seeds obtained from the Beijing Botanical Garden collection.

PI 618319. *Rubus flosculosus* Focke

Uncertain. *R. flosculosus*; CRUB 2057. Seeds obtained from the Beijing Botanical Garden collection.

PI 618320. *Rubus* sp.

Uncertain. CRUB 2058; *R. sp.*. Seeds obtained from the Beijing Botanical Garden collection.

PI 618321. *Rubus* sp.

Uncertain. CRUB 2059; *R. sp.*. Seeds obtained from the Beijing Botanical Garden collection.

PI 618322. *Rubus phoenicolasius* Maxim.

Uncertain. *R. phoenicolasius*; CRUB 2060. Seeds obtained from the Beijing Botanical Garden collection.

The following were collected by Kristine Naess, 2586 Prairie Ridge Rd., Verona, Wisconsin 53593, United States. Received 06/12/1997.

PI 618323. *Rubus chamaemorus* L.

Wild. CRUB 1956. Collected 08/1997 in New Brunswick, Canada. Pedigree - collected from the wild in Canada.

The following were collected by Robert Skirvin, University of Illinois, Dept of Horticulture, 258 Plant and Animal Biotech. Lab., Urbana, Illinois 61801, United States. Received 05/05/1986.

PI 618324. *Rubus* sp.

Wild. Collected 04/24/1986 in New South Wales, Australia. Latitude 33° 53' S. Longitude 151° 10' E. Gowlburn, New South Wales. Pedigree - Collected from the wild in Australia.

The following were collected by James F. Hancock, Michigan State University, Department of Horticulture, Plant and Soil Science A 342, East Lansing, Michigan 48824-1325, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chris Heider, USDA-ARS-HCRL, 3420 Orchard St., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/23/1996.

PI 618325. *Rubus glaucus* Benth.

Cultivated. *R. glaucus*; NAH 100; CRUB 2063. Collected in Pichincha, Ecuador. Latitude 0° 13' S. Longitude 78° 30' W. Elevation 0 m. Fruit purchased from a vendor in the Floriesta market area of Quito. Collected 03/1996 in Pichincha, Ecuador. Latitude 0° 13' S. Longitude 78° 30' W. Elevation 0 m. Fruit purchased from a vendor in

the Floriesta market area of Quito.

PI 618326. *Rubus glaucus* Benth.

Cultivated. *R. glaucus*; NAH 101; CRUB 2064. Collected in Pichincha, Ecuador. Latitude 0° 13' S. Longitude 78° 30' W. Elevation 0 m. Fruit purchased from a vendor in the Santa Clara market area of Quito. Collected 03/1996 in Pichincha, Ecuador. Latitude 0° 13' S. Longitude 78° 30' W. Elevation 0 m. Fruit purchased from a vendor in the Santa Clara market area of Quito.

PI 618327. *Rubus glaucus* Benth.

Cultivated. *R. glaucus*; NAH 102; CRUB 2065. Collected in Tungurahua, Ecuador. Latitude 1° 15' S. Longitude 78° 37' W. Elevation 0 m. Fruit purchased from main market in Ambato. Collected 03/1996 in Tungurahua, Ecuador. Latitude 1° 15' S. Longitude 78° 37' W. Elevation 0 m. Fruit purchased from main market in Ambato.

PI 618328. *Rubus glaucus* Benth.

Cultivated. *R. glaucus*; NAH 103; CRUB 2066. Collected in Tungurahua, Ecuador. Latitude 1° 18' S. Longitude 78° 38' W. Elevation 2900 m. Fruit collected from the commercial fields adjacent to the fields of Victor and Manuel Salinas. Field was 2 km east of Huachi Grande. Plants were growing in a volcanic sandy soil at 2900 m Area receives approximately 35 cm rainfall annually and the plants receive irrigation via a ditch when needed. Collected 03/1996 in Tungurahua, Ecuador. Latitude 1° 18' S. Longitude 78° 38' W. Elevation 2900 m. Fruit collected from the commercial fields adjacent to the fields of Victor and Manuel Salinas. Field was 2 km east of Huachi Grande. Plants were growing in a volcanic sandy soil at 2900 m Area receives approximately 35 cm rainfall annually and the plants receive irrigation via a ditch when needed. Fruiting is sporadic, as a single cane will produce fruit heavily while another cane on the plant will produce no fruit. So the entire plant is never totally fruiting. Fruit ripens throughout the year. The source of the planting stock was unknown.

PI 618329. *Rubus niveus* Thunb.

Wild. *R. niveus*; NAH 104; CRUB 2067. Collected in Tungurahua, Ecuador. Latitude 1° 24' S. Longitude 78° 22' W. Elevation 1800 m. Fruit collected from road side on Fernando Vargas' property. In Ulba, east of Banos. Roadside agricultural land on level area above the Rio Pastaza. Cultivated plants in the area include mandarin orange, babaco and avacado. Collected 03/1996 in Tungurahua, Ecuador. Latitude 1° 24' S. Longitude 78° 22' W. Elevation 1800 m. Fruit collected from road side on Fernando Vargas' property. In Ulba, east of Banos. Roadside agricultural land on level area above the Rio Pastaza. Cultivated plants in the area include mandarin orange, babaco and avacado. Pedigree - Collected from the wild near Banos, Ecuador.

PI 618330. *Rubus glaucus* Benth.

Cultivated. *R. glaucus*; NAH 111; CRUB 2068. Collected in Imbabura, Ecuador. Latitude 0° 21' N. Longitude 78° 7' W. Elevation 0 m. Fruit purchased from a vendor in the Ibarra market. Collected 03/1996 in Imbabura, Ecuador. Latitude 0° 21' N. Longitude 78° 7' W. Elevation 0 m. Fruit purchased from a vendor in the Ibarra market.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small

Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/01/1995.

PI 618331. *Rubus leucodermis* Douglas ex Torr. & A. Gray
Wild. *R. leucodermis*; GP-27; CRUB 2046. Collected in Oregon, United States. Latitude 44° 34' 29" N. Longitude 121° 44' 12" W.
Elevation 0 m. Deschutes National Forest, Mt. Jefferson Wilderness, Carl Lake Trail. Pedigree - Collected from the wild in Oregon.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/14/1999.

PI 618332. *Rubus strigosus* Michx.
Wild. *R. strigosus* Lake Altoona WI; CRUB 2047. Collected 08/1999 in Wisconsin, United States. Latitude 44° 48' 37" N. Longitude 91° 25' 25" W. Elevation 0 m. Along North Beach Road, Park Road and Lake Road adjacent to Lake Altoona in Altoona, Wisconsin. Pedigree - Collected from the wild in Wisconsin.

PI 618333. *Rubus occidentalis* L.
Wild. *R. occidentalis* Lake Altoona WI; CRUB 2048. Collected 08/1999 in Wisconsin, United States. Latitude 44° 48' 37" N. Longitude 91° 25' 25" W. Elevation 0 m. Along North Beach Road, Park Road and Lake Road adjacent to Lake Altoona in Altoona, Wisconsin. Pedigree - Collected from the wild in Wisconsin.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States; Ian Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/14/1999.

PI 618334. *Rubus* sp.
Wild. *R. sp.* Lake Altoona WI; CRUB 2049. Collected 08/1999 in Wisconsin, United States. Latitude 44° 48' 37" N. Longitude 91° 25' 25" W.
Elevation 0 m. Along North Beach Road, Park Road and Lake Road adjacent to Lake Altoona in Altoona, Wisconsin. Pedigree - Collected from the wild in Wisconsin.

PI 618335. *Rubus* sp.
Wild. *R. sp.* Lake Altoona WI 1; CRUB 2050. Collected 08/1999 in Wisconsin, United States. Latitude 44° 48' 35" N. Longitude 91° 17' 1" W. Elevation 0 m. From Altoona take 'Country Road Ss' 6 or 7 miles east. Go north on 'Country Road K'. Just before it crosses the Eau Claire River take road west to falls. Fruit collected along trail to falls. Pedigree - Collected from the wild in Wisconsin.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United

States. Received 10/14/1999.

PI 618336. *Rubus ursinus* Cham. & Schltldl.

Wild. *R. ursinus* Thorn Prairie; ORUS 2671; CRUB 2051. Collected 08/1999 in Oregon, United States. Latitude 43° 20' N. Longitude 122° 20' W. Elevation 1150 m. At junction of FS 200 and FS 3401 (Thorn Prairie Road) in Umpqua National Forest. Dry site, *Pinus ponderosa* on loose volcanic soil. Pedigree - Collected from the wild in Oregon.

PI 618337. *Rubus ursinus* subsp. *macropetalus* (Douglas ex Hook.) Roy L. Taylor & MacBryde

Wild. *R. ursinus* subsp. *macropetalus*; GP-8; CRUB 2055. Collected 1993 in Oregon, United States. Pedigree - Collected from the wild in Oregon.

The following were collected by Katsuaki Hashimoto, Shanbohl Hamanako 626, Mikkabi, Hisa-Gun, Shizuoka 417-0851, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618338. *Rubus peltatus* Maxim.

Wild. *R. peltatus*; CRUB 2033; 010-014. Collected 08/03/1995 in Nagano, Japan. Latitude 36° 39' N. Longitude 138° 10' E. Elevation 0 m. Nagano-ken, Kiso-gun, Ohtaki-mura, Takikoshi/Shirasu-toge. Pedigree - Collected from the wild in Japan.

The following were collected by Yasuo Katayama, Jinryo, Kamiyama-cho, Nazai-Gun, Tokushima 771-3311, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618339. *Rubus peltatus* Maxim.

Wild. *R. peltatus*; CRUB 2034; 010-016. Collected 08/20/1995 in Tokushima, Japan. Latitude 34° 3' N. Longitude 134° 34' E. Elevation 0 m. Tokushima-ken, Mima-gun, Ichiu-mura, Marusasa-yama. Pedigree - Collected from the wild in Japan.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618340. *Rubus phoenicolasius* Maxim.

Wild. *R. phoenicolasius*; CRUB 2035; 030-054. Collected 08/06/1995 in Gifu, Japan. Latitude 35° 27' N. Longitude 136° 46' E. Elevation 0 m. Gifu-ken, Yoshiki-gun, Kami-takara-mura, Nakao-onsen. Pedigree - Collected from the wild in Japan.

The following were collected by Tokiyasu Iwatsubo, Minamitane-cho, Kagoshima 891-3705, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618341. *Rubus sieboldii* Blume

Wild. *R. sieboldii*; CRUB 2036; 006-031. Collected 06/03/1995 in

Kagoshima, Japan. Latitude 31° 37' N. Longitude 130° 32' E.
Elevation 0 m. Kagoshima-ken, Kumage-gun, Minamatiane-cho, Nishino.
Pedigree - Collected from the wild in Japan.

The following were collected by Naohiro Naruhashi, Toyama University,
Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan.
Received 08/21/1996.

PI 618342. *Rubus vernus* Focke

Wild. *R. vernus*; CRUB 2037; 021-035. Collected 09/19/1995 in Toyama,
Japan. Latitude 36° 42' N. Longitude 137° 14' E. Elevation 0 m.
Toyama-ken, Naka-niikawa-gun, Tateyama-cho, Mt. Tateyama, Midagahara.
Pedigree - Collected from the wild in Japan.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small
Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United
States. Received 11/16/1995.

PI 618343. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. CRUB 2005. Collected 1995 in Oregon, United States. Pedigree -
Collected from the wild in Oregon.

PI 618344. *Rubus ursinus* Cham. & Schltldl.

Wild. CRUB 2006. Collected 08/24/1994 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

PI 618345. *Rubus ursinus* Cham. & Schltldl.

Wild. CRUB 2007. Collected 09/08/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

PI 618346. *Rubus ursinus* Cham. & Schltldl.

Wild. CRUB 2008. Collected 09/09/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

PI 618347. *Rubus ursinus* Cham. & Schltldl.

Wild. CRUB 2009. Collected 09/12/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

PI 618348. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. CRUB 2010. Collected 08/23/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

PI 618349. *Rubus ursinus* Cham. & Schltldl.

Wild. CRUB 2011. Pedigree - Collected from the wild in British Columbia,
Canada.

The following were collected by Barbara Esposito, 6230 Old Lake Road, Rock
Stream, New York 14878, United States. Donated by Peter H. Tallman, 5690
Steeplechase Dr., Longmont, Colorado 80503, United States. Received
08/10/1999.

PI 618350. *Rubus occidentalis* L.

Breeding. Esposito Gold; CRUB 2038. Collected in New York, United States
Pedigree - Open Pollinated Esposito Gold, black raspberry mutant

Maternal parent has yellow gold to orange fruit. Berry color is a yellow-gold to dusty gold-light-orange. Seed from clonal material of wild plants originally found in Rock Stream, NY. Exceptionally strong plant.

The following were donated by Peter H. Tallman, 5690 Steeplechase Dr., Longmont, Colorado 80503, United States. Received 08/10/1999.

PI 618351. *Rubus occidentalis* L.

Breeding. WS07.1.x; CRUB 2039. Berry color is an attractive light garnet to garnet (orange red). Seed from plant regrown from seed originally collected by me from the wild in Poughkeepsie, NY.

PI 618352. *Rubus occidentalis* L.

Breeding. WS03.0.x; CRUB 2040. Berry color is garnet to dark garnet (deep orange-red). Seed from plant regrown from seed originally collected by me from the wild in Poughkeepsie, NY.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/01/1995.

PI 618353. *Rubus ursinus* Cham. & Schltldl.

Wild. *R. ursinus*; GP-25; CRUB 2041. Collected in Oregon, United States. Latitude 44° 34' 29" N. Longitude 121° 44' 12" W. Elevation 0 m. Deschutes National Forest, Mt. Jefferson Wilderness, Carl Lake Trail. Pedigree - Collected from the wild in Oregon.

The following were collected by Michael D. Remmick, North American Plants, P.O. Box 743, Lafayette, Oregon 97127, United States; A. Plotto, Oregon State University, Corvallis, Oregon, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/01/1995.

PI 618354. *Rubus spectabilis* Pursh

Wild. *R. spectabilis*; CRUB 2042. Collected 06/1994 in Washington, United States. Latitude 47° 43' N. Longitude 124° 25' W. Elevation 0 m. Hoh River Head. Pedigree - Collected from the wild in Washington.

PI 618355. *Rubus spectabilis* Pursh

Wild. *R. spectabilis*; CRUB 2043. Collected 06/1994 in Washington, United States. Latitude 48° 12' N. Longitude 122° 37' W. Elevation 0 m. Whidby Island. Pedigree - Collected from the wild in Washington.

PI 618356. *Rubus spectabilis* Pursh

Wild. *R. spectabilis*; CRUB 2044. Collected 06/1994 in Washington, United States. Latitude 47° 28' N. Longitude 123° 53' W. Elevation 0 m. Quinault, Jefferson county. Pedigree - Collected from the wild in Washington.

PI 618357. *Rubus spectabilis* Pursh

Wild. *R. spectabilis*; CRUB 2045. Collected 06/1994 in Washington, United States. Latitude 47° 25' N. Longitude 122° 29' W. Elevation 0 m. Vashon Island, King county. Pedigree - Collected from the wild in

Washington.

The following were donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 11/16/1995.

PI 618358. *Rubus ursinus* Cham. & Schltndl.

Wild. CRUB 2012. Pedigree - Collected from the wild in British Columbia, Canada.

PI 618359. *Rubus ursinus* Cham. & Schltndl.

Wild. CRUB 2013. Pedigree - Collected from the wild in Oregon.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States; Barbara Fick, Oregon State University, Extension Service, Benton County, 1849 NW 9th Street, Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/19/1994.

PI 618360. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Wild. CRUB 2014. Collected 08/23/1993 in Oregon, United States.
Pedigree - Collected from the wild in Oregon.

The following were collected by Osamu Kume, Ohta, Kamimachi, Takamatsu, Kagawa 761-8074, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618361. *Rubus buergeri* Miq.

Wild. *R. buergeri*; CRUB 2015; 007-050. Collected 11/26/1995 in Kagawa, Japan. Latitude 34° 15' N. Longitude 134° 2' E. Elevation 0 m.
Kagawa-ken, Mitoyo-gun, Saita-cho, Saita-naka, Hainokura. Pedigree - Collected from the wild in Japan.

The following were collected by Hiroshi Masaki, Manpukujji, Kudamatsu, Yamaguchi 744-0002, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618362. *Rubus chingii* Hu

Wild. *R. chingii*; CRUB 2016; 012-017. Collected 06/03/1995 in Yamaguchi, Japan. Pedigree - Collected from the wild in Japan.

The following were donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618363. *Rubus coreanus* Miq.

Cultivated. *R. coreanus*; CRUB 2017; 102-117. Elevation 0 m. From cultivated plant at Toyama University, originally collected from

Challapuk Do, Changeli, South Korea. Pedigree - Open-pollinated from botanical collection.

The following were collected by Osamu Kume, Ohta, Kamimachi, Takamatsu, Kagawa 761-8074, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618364. *Rubus crataegifolius* Bunge

Wild. CRUB 2018. Collected 07/01/1995 in Kagawa, Japan. Latitude 34° 15' N. Longitude 134° 2' E. Elevation 0 m. Kagawa-ken, Mitoyo-gun, Saita-cho, Saita-naka, Shishinohana-toge. Pedigree - Collected from the wild in Japan.

The following were donated by Harvey K. Hall, Crop Research Division, DSIR, Riwaka Research Station, Rd 3, Motueka, South Island, New Zealand. Received 12/15/1995.

PI 618365. *Rubus hispidus* L.

Wild. CRUB 2019.

PI 618366. *Rubus hispidus* L.

Wild. CRUB 2020.

PI 618367. *Rubus hispidus* L.

Wild. CRUB 2022.

PI 618368. *Rubus palmatus* Thunb.

Wild. CRUB 2023.

PI 618369. *Rubus* sp.

Wild. CRUB 2025.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618370. *Rubus crataegifolius* Bunge

Wild. CRUB 2026. Collected 08/06/1995 in Gifu, Japan. Latitude 35° 27' N. Longitude 136° 46' E. Elevation 0 m. Gifu-ken, Yoshiki-gun, Kami-takara-mura, Nakao-onsen. Pedigree - Collected from the wild in Japan.

The following were collected by Tokiyasu Iwatsubo, Minamitane-cho, Kagoshima 891-3705, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618371. *Rubus grayanus* Maxim.

Wild. *R. grayanus*; CRUB 2027; 015-016. Collected 05/11/1995 in Kagoshima, Japan. Latitude 31° 37' N. Longitude 130° 32' E. Elevation 50 m. Kagoshima-ken, Kumage-gun, Minamitane-cho, Nishino. Pedigree - Collected from the wild in Japan.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan; Katsuaki Hashimoto, Shanbohl Hamanako 626, Mikkabi, Hisa-Gun, Shizuoka 417-0851, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618372. *Rubus illecebrosus* Focke

Wild. *R. illecebrosus*; CRUB 2028; 023-037. Collected 08/23/1995 in Gifu, Japan. Latitude 35° 27' N. Longitude 136° 46' E. Elevation 0 m. Gifu-ken, Oono-gun, Asahi-mura, Akijin-onsen. Pedigree - Collected from the wild in Japan.

The following were collected by Tokiyasu Iwatsubo, Minamitane-cho, Kagoshima 891-3705, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618373. *Rubus croceacanthus* H. Lev.

Wild. *R. okinawensis* (synonym); CRUB 2029; 027-016. Collected 04/21/1995 in Kagoshima, Japan. Latitude 31° 37' N. Longitude 130° 32' E. Elevation 0 m. Kagoshima-ken, Kumage-gun, Minamatiane-cho, Nishino. Pedigree - Collected from the wild in Japan.

The following were collected by Katsuaki Hashimoto, Shanbohl Hamanako 626, Mikkabi, Hisa-Gun, Shizuoka 417-0851, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618374. *Rubus palmatus* Thunb.

Wild. *R. palmatus*; CRUB 2030; 014-133. Collected 06/05/1995 in Toyama, Japan. Latitude 36° 42' N. Longitude 137° 14' E. Elevation 0 m. Toyama-ken, Takaoka-shi, Futagamai-san. Pedigree - Collected from the wild in Japan.

The following were collected by Osamu Kume, Ohta, Kamimachi, Takamatsu, Kagawa 761-8074, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/21/1996.

PI 618375. *Rubus parvifolius* L.

Wild. CRUB 2031. Collected 07/02/1995 in Okayama, Japan. Latitude 34° 40' N. Longitude 133° 54' E. Elevation 0 m. Okayama-ken, Kurashiki-shi, Kojima, Unotsu. Pedigree - Collected from the wild in Japan.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan; Katsuaki Hashimoto, Shanbohl Hamanako 626, Mikkabi, Hisa-Gun, Shizuoka 417-0851, Japan. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received

08/21/1996.

PI 618376. *Rubus pectinellus* Maxim.

Wild. CRUB 2032. Collected 08/23/1995 in Gifu, Japan. Latitude 35° 27' N. Longitude 136° 46' E. Elevation 0 m. Gifu-ken, Yoshiki-gun, Kami-takara-mura, Nakao-onsen. Pedigree - Collected from the wild in Japan.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/20/1998.

PI 618377. *Rubus strigosus* Michx.

Wild. CRUB 1978. Collected 08/15/1998 in Oregon, United States. Latitude 44° 18' N. Longitude 119° 41' W. Elevation 1828 m. Strawberry Wilderness in Malheur Nation Forest; T14S R34E Sec. 30; Strawberry Lake Campground at end of Forest Road 6001. From Prairie City take Highway 60 (Strawberry Road) south, which becomes Forest Road 6001. Small clumps in full sunshinie near creek. Less abundant than *Fragaria* and *Vaccinium*.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/22/1998.

PI 618378. *Rubus chamaemorus* L.

Wild. CRUB 1980. Collected 08/10/1998 in Alaska, United States. Latitude 62° 53' 4" N. Longitude 145° 31' 30" W. Elevation 883 m. Paxson Lake Campground, Milepost xx Richardson Highway, Route 2. Plants were in low lying marshy areas or on sphagnum tussics. Associated plants: sphagnum moss and horsetail.

PI 618379. *Rubus* sp.

Wild. CRUB 1982. Collected 08/30/1998 in Himachal Pradesh, India. Latitude 30° 14' N. Longitude 77° 30' E. Elevation 2589 m. On slopes between cultivated rows of potatoes which were planted in terraces at the Central Potato Research Institute, Kufri, India. Open field exposed to sun. Soil very heavy brown clay, no black organic matter. Steep slopes. Frequently cloudy or misty during July and August mososon season. Snow cover in winter. Pedigree - Collected from the wild in India.

The following were collected by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 09/29/1998.

PI 618380. *Rubus strigosus* Michx.

Wild. CRUB 1984. Collected 08/15/1998 in Minnesota, United States. Latitude 47° 56' 38" N. Longitude 89° 43' 9" W. Elevation 185 m. Grand Portage, Minnesota. Pedigree - Collected from the wild in Minnesota.

The following were collected by Bruce Bartlett, USDA, ARS, National Germplasm

Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States.
Received 10/05/1998.

PI 618381. *Rubus multibracteatus* H. Lev. & Vaniot

Cultivated. *R. multibracteatus* CRUB 1642 OP seed; CRUB 1985. Collected 10/05/1998 in Oregon, United States.

The following were collected by Phil Hosick, Rural Route 2, Addison, Ontario KOE 1A0, Canada. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 10/23/1996.

PI 618382. *Rubus occidentalis* L.

Wild. CRUB 1988; *R. occidentalis*. Collected 09/1996 in Ontario, Canada. Latitude 44° 40' N. Longitude 75° 48' W. Elevation 0 m. On the farm of Phil Hosick near Addison, northwest of Brockville in eastern Ontario. Pedigree - Collected in the wild of Ontario, Canada. I live in Eastern Ontario near Brockville and have a seventy acre farm. The seeds I have enclosed are not red, but a rather small black raspberry. Which my wife and I think is wonderful. We have some red raspberries on the property, but they never bear enough to be worth picking. However these black ones on certain bushes are extremely prolific (the majority though are not). The few bushes that do produce well are located either along cedar fences (or rail piles) or along an old building (south exposure). We picked roughly seven quarts from these four bushes this summer. They are small and seedy, but the juice is wonderful. They also make great cheesecake topping. The brambles are quite long, up to eight or ten feet. The branch is whitish in color and the thorns are second to none. The leaves are darker green than red raspberries. The fruit is very tight, the seed pockets do not come apart like a red raspberry will. I have enclosed a package of seed, it is primarily off these four bushes. Although I did try to get some of the less productive bushes for diversity.

The following were collected by University of Oulu, Botanical Garden, Linnanmaa, Oulu, Oulu SF-90570, Finland. Donated by Kari Laine, University of Oulu, Botanical Gardens, Linnanmaa PO Box 400, Oulu, Oulu SF-90570, Finland. Received 1994.

PI 618383. *Rubus idaeus* L.

Wild. *R. idaeus*; 500; CRUB 1990. Collected 09/14/1993 in Troms, Norway. Latitude 69° 5' N. Longitude 20° 6' E. Elevation 0 m. Storfjord, Paras. Pedigree - Collected from the wild in Norway.

The following were donated by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States; North Alabama Nursery, P.O. Box 67, County Road 1777, Joppa, Alabama 35087-0067, United States. Received 01/11/1984.

PI 618384. *Rubus hybrid*

Cultivar. "Eldorado"; CRUB 467. Pedigree - Chance seedling. This sort has several notable virtues which made it for many years a standard blackberry. It is still much prized for home and local markets in most of the blackberry regions of eastern America. The qualities which

commend it are great hardiness and great immunity from the orange-rust which seldom attacks it. The fruits are large, handsome in appearance, and exceptionally high in quality. Eldorado is usually considered the first main crop variety to ripen. This variety originated about 1880 as chance seedling near the village of Eldorado, Ohio. In 1899 the variety was added to the fruit list of the American Pomological Society. Plants tall, vigorous, upright-spreading, hardy, productive, healthy, seldom attacked by orange-rust, usually furrowed, glossy, greenish red becoming dark red at maturity, glabrous, with small, almost sessile glands; prickles long, slender, numerous, reddish at the base; leaflets usually 5, oval, dull, somewhat smooth, pubescent, with serrate margins; petiole reddish, slender, nearly glabrous, with few small glands. Flowers self-fertile, early, in loose, leafy clusters; petals white, oblong; pedicels long, slender, glandular. Fruit early midseason, ripening period long; large, roundish, slightly elongated, jet black; drupelets large, round, few; core soft; flesh juicy, firm, sweet, rich, pleasantly flavored; quality good to very good.

The following were donated by Indiana Berry and Fruit Co., 5218 West 500 S., Huntingburg, Indiana 47542, United States; Indiana Berry and Fruit Co., 5218 West 500 S., Huntingburg, Indiana 47542, United States. Received 02/25/1999.

PI 618385. *Rubus* hybrid

Cultivar. "K81-6"; CRUB 1994. Pedigree - (Muskoka(selfed) x Ottawa Latham) x (Creston x Willamette). Late season berry introduced in Kentville, Nova Scotia, Canada. Hardy to minus 34 degrees F, vigorous and tall plants have excellent taste. A very large firm berry. Winter hardy for the upper mid-west and the east coast. Very large fruit, well constructed small drupelets, attractive and good flavor. Plant has an upright and vigorous growth habit. High yielding Summer bearing Mid-late season. This produced the largest summer berry with great flavor. The plant is vigorous and quite upright but requires trellising with its large fruit load. - Nourse Catalog, 2006. Late season. Berries are very large, medium firm with a good flavour and are produced on vigorous plants. It has good winter-hardiness. Grower experience with K81-6 has been mixed. Some growers have removed their plantings because of difficulties with fire blight. Leaf curl virus has also been a problem for some. Pick-your-own customers have favoured this selection because of its fruit size and quality.

The following were donated by Indiana Berry and Fruit Co., 5218 West 500 S., Huntingburg, Indiana 47542, United States. Received 02/25/1999.

PI 618386. *Rubus* hybrid

Cultivar. "Estate"; CRUB 1995.

PI 618387. *Rubus occidentalis* L.

Cultivar. "Mac Black"; CRUB 1997. Pedigree - Unknown cross of *R. occidentalis* cross made in Ontario, released in Michigan.

The following were donated by Tim Nourse, Nourse Farms, Inc., Box 444485, RFD, South Deerfield, Massachusetts 01373, United States. Received 04/07/1997.

PI 618388. Rubus hybrid

Cultivar. "Triple Crown"; US 1638; CRUB 1946; A-92. Pedigree - Carbondale 47 x Arkansas 545. Fruit: large, firm, glossy black, slightly longer than broad shape, balanced subacid, sweet and aromatic flavor, early ripening. Plant: relatively high yield, vigorous, forms growths, spineless canes, fruit well distributed. W. R. Okie, ed. 1997.

The following were developed by H. Ness, Texas Agricultural Experiment Station, College Station, Texas, United States. Donated by Louisiana Nursery, 5853 Highway 182, Opelousas, Louisiana 70570, United States. Received 02/26/1999.

PI 618389. Rubus hybrid

Cultivar. "Ness"; Nessberry; CRUB 1998. Pedigree - F3 of (Rubus rubrisetus x Rubus strigosus).

The following were collected by Joseph Kurtz, Boulder, Colorado, United States. Donated by Peter H. Tallman, 5690 Steeplechase Dr., Longmont, Colorado 80503, United States. Received 04/08/1999.

PI 618390. Rubus sp.

Cultivated. CRUB 2001; Tallman. Collected in Colorado, United States.

The following were donated by Helen Ovenell, 2725 East Fir St. Unit 106, Mount Vernon, Washington 98273-6404, United States. Received 05/13/1999.

PI 618391. Rubus hybrid

Cultivar. CRUB 2003.

The following were developed by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 05/19/1999.

PI 618392. Rubus idaeus L.

Cultivar. "Coho"; ORUS 958-10; CRUB 2002. Pedigree - Lewis x ORUS 520-48 (ORUS 1586 x ORUS 1655). 'Coho' is a new floricanne fruiting red raspberry (*Rubus idaeus* L.) from the U.S. Dept. of Agriculture-Agricultural Research Service (USDA-ARS) breeding program in Corvallis, Ore., released in cooperation with the Oregon State Agricultural Experiment Station, the Washington State Univ. Agricultural Research Center, and the Idaho Agricultural Experiment Station. 'Coho' is high yielding and late-ripening, and produces large, bright red, very firm fruit that separate easily from the receptacle. The cultivar is best suited for fresh markets, although it has been reported to be excellent when individually quick frozen (IQF; commercial processor, personal communication). The 'Coho' ripening season is later than 'Tulameen' and slightly earlier than 'Kitsilano' and it produces larger fruit than the latter. 'Coho' is named after the salmon (*Oncorhynchus kisutch* Walbaum) that is renowned for its brilliant red body coloration and late spawning runs. The fruit are bright red; not

nearly as dark as 'Willamette' nor as light-colored as 'Chilcotin'. Fruit flavor was rated excellent. Fruit are similar to 'Tulameen' in firmness and were rated the firmest of all compared cultivars. The combination of firmness, flavor, and bright red, nondarkening color suggests that 'Coho' should be excellent for the fresh market. 'Coho' has not been tested for suitability to mechanical harvesting, but in subjective evaluations based on ease of separation, it seems similar to 'Chilliwack', which is considered to be easily mechanically harvested.

The following were developed by E.T. Graham; H.H. Bowen. Donated by Daniel P. Hartmann, Hartmann's Plant Company, 310 60th Street, Grand Junction, Michigan 49056, United States; Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 03/23/1981.

PI 618393. *Rubus hybrid*

Cultivar. "Rosborough". Pedigree - (Brainerd x Brazos) x Brazos. IDX. Sibling of Brison and Womack.

The following were donated by Chollipo Arboretum, 344-16 Yonhui-Dong, Sodaemun-KuSosan Gun, Seoul, Seoul 120-113, Korea, South. Received 05/22/1998.

PI 618394. *Rubus ribisoideus* Matsum.

Cultivated. 1-1-246; *R. ribisoideus*; CRUB 1969. Collected in Chungchong Nam, Korea, South. Latitude 36° 52' N. Longitude 126° 13' E. Elevation 0 m. Chollipo Arboretum, Sowon-Myon, Tae-an-Gun. Pedigree - Collected from the Chollipo Arboretum in South Korea.

The following were collected by Douglas Cook, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/12/1998.

PI 618395. *Rubus nivalis* Douglas

Wild. CRUB 1976. Collected 08/09/1998 in Oregon, United States. Latitude 42° 6' N. Longitude 123° 24' W. Elevation 1375 m. Along upper nature trail between exit of cave and gift shop. Oregon Caves National Monument. Open canopy old growth coniferous forest. With *Berberis*, *Rosa*, *Holodiscus* and *Achlys*. Pedigree - Collected from the wild in Oregon.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Elliott Finn, 28984 Blazer Dr., Corvallis, Oregon 97330, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/20/1998.

PI 618396. *Rubus strigosus* Michx.

Wild. CRUB 1977. Collected 08/12/1998 in Oregon, United States. Latitude 45° 6' N. Longitude 117° 0' W. Elevation 1370 m. Wallowa-Whitman National Forest; T5S R47E Sec.20; just upstream from Evergreen Campground on Forest Road 3960. Base of upturned tree on island in

middle of Innaha River. In association with *Ribes* and *Fragaria virginiana*.

The following were developed by Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu, China. Donated by Gu Yin, Jiangsu Institute of Botany, Nanjing Botanical Garden, Mem. Sun Yat-sen, Nanjing, Jiangsu 210014, China. Received 11/02/1992.

PI 618397. *Rubus amphidasys* Focke

Cultivated. Collected in Jiangsu, China. Pedigree - Uncertain.

The following were donated by J. S. Akin, Sherwood's Greenhouses, PO Box 6, Sibley, Louisiana 71073, United States. Received 01/27/1993.

PI 618398. *Rubus rugosus* Sm.

Breeding. Collected in New Zealand.

The following were developed by James N. Moore, University of Arkansas, Dept. of Horticulture and Forestry, 316 Plant Sciences Building, Fayetteville, Arkansas 72701, United States. Donated by Pat Miller, Sakuma Brothers Farms, Inc., PO Box 427, Burlington, Washington 98233, United States. Received 03/15/1993.

PI 618399. *Rubus* sp.

Breeding. Arapaho. Pedigree - Ark. 631 x Ark. 883 complex hybrid involving Cherokee, Brozos, Hillquist, and Thornfree. The outstanding characteristics of 'Arapaho' are its thornless, erect, self-supporting canes, good fruit quality, earliness of ripening, and its ability to establish a full fruiting row quickly. 'Arapaho' will compliment 'Navaho' in providing a long harvest season for high quality, thornless blackberries. 'Arapaho' is expected to perform well in areas in which 'Navaho' is adapted. Moore and Clark, 1993. Virus tested by Bob Martin in Vancouver, BC. Fruit: medium size; bright glossy black; firm; small seed size; short conic shape; earlier ripening than any other spineless blackberry cultivars; concentrated season of 4 weeks; high soluble solid concentration; stores well; excellent flavor fresh and processed. Plant: productivity similar to Navaho; moderately vigorous; very erect spineless canes; produces more primocanes from roots than navaho; good cold hardiness to -24 C. No symptoms of either orange rust or rosette have been observed despite high levels of inoculum of the respective causal organisms. Brooks and Olmo Register of Fruit and Nut Varieties, 1996.

The following were donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/08/1993.

PI 618400. *Rubus corchorifolius* L. f.

Breeding. *R. corchorifolius* NC 183. Collected in Sichuan, China. Pedigree - Open-pollinated seedling. Nicest fruit (salmon) from seedlings of OP seed from Sichuan, China.

The following were developed by H. Goude. Donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States. Received 08/17/1995.

PI 618401. *Rubus idaeus* L.

Cultivar. Late flowering and ripening, good for processing.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Jerry A. Payne, Wildlife Biology Department, Rt. 5, Box 180, Forsyth, Georgia 31029, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/15/1995.

PI 618402. *Rubus flagellaris* Willd.

Wild. CRUB 1824. Collected in North Carolina, United States. Pedigree - Collected from the wild in North Carolina.

The following were developed by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; Bernadine C. Strik, Oregon State University, Department of Horticulture, 4017 ALS, Corvallis, Oregon 97331, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 03/19/1996.

PI 618403. *Rubus hybrid*

Cultivar. "Black Butte"; ORUS 1129-1; CRUB 1861. Pedigree - ORUS 830-4 x ORUS 728-3 (*Rubus ursinus* is primary species in derivation but *R. armeniacus* [*R. procerus*] and *R. idaeus* also occur). Black Butte - A trailing, fresh market blackberry producing large, firm fruit. Orig. in Corvallis, Oregon by C.E. Finn and F.J. Lawrence, USDA-ARS and Oregon State University ORUS 830-4 x ORUS 728-3 (*Rubus ursinus* is primary species in derivation but *R. armeniacus* [*R. procerus*] and *R. idaeus* also occur); tested as ORUS 1129-1; introduced in 1995. Fruit: very large; firm; color similar to Marion but with occasional red drupelet; uniform shape with no indication of sterility; good flavor but lacks strong aromatic components of Marion; ripens earlier than Marion and similar to Kotata and with harvest season longer than either. Plant yield similar or slightly higher than Marion; vigorous, trailing, relatively open habit; spiny; relatively strong laterals; flower buds more winter hardy than Marion. Resistant to cane spot and leaf spot.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 04/18/1996.

PI 618404. *Rubus armeniacus* Focke

Cultivar. CRUB 1870. Pedigree - old blackberry selection.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/08/1996.

PI 618405. *Rubus arcticus* subsp. *stellatus* (Sm.) B. Boivin
Wild. CRUB 1941. Collected 07/31/1996 in Alaska, United States. Latitude 60° 28' N. Longitude 145° 25' W. 0.5 mile from Copper River Road on Alaganik Slough Road, about 22 miles from Cordova. Around base of interpretive sign describing moose habitat. Ground cover in open sun and in shade under alders. Pedigree - Selection of wild *R. arcticus* subsp. *stellatus*.

The following were donated by Forest Farm Nursery, 990 Tetherow Road, Williams, Oregon 97544-9599, United States. Received 08/20/1997.

PI 618406. *Rubus lineatus* Reinw. ex Blume
Cultivated. CRUB 1957. Pedigree - selection of *R. lineatus*.

The following were collected by Norman Pellett, University of Vermont, Dept. Plant and Soil Sci., Burlington, Vermont 05401, United States. Received 09/22/1997.

PI 618407. *Rubus odoratus* L.
Wild. CRUB 1958. Collected 09/09/1997 in Vermont, United States. Pedigree - collected from the wild.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuveli, Agricultural University of Tirana, Dept. of Agronomy, Rr. "Myslym Shyri", Tirana, Albania. Donated by Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/01/1996.

PI 618408. *Rubus* sp.
Wild. Al 006; CRUB 1906. Collected 08/24/1996 in Albania. Latitude 40° 57' 4" N. Longitude 19° 41' 4" E. Elevation 60 m. Ditch along road going to field plots of Wheat Institute, Lavdi Deshmoreye, Lushnje. Pedigree - collected from the wild. Shrub low growing. Leaves compound, 3 leaflets, lobed, margins serrate, upper side dark green, underside light green and pubescent. Flower petals white, many anthers. Inflorescence short, 3-4cm long, terminal. Fruit dull black, sour.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/27/1993.

PI 618409. *Rubus pedatus* Sm.
Wild. Collected 08/04/1993 in Alaska, United States. Latitude 60° 8' N. Longitude 149° 35' W. Elevation 120 m. Resurrection River Trailhead, 8 mi on exit glacier rd, NW of Seward. Spruce forest,

hillside by old avalanche. Pedigree - Collected from the wild in Alaska. Most berries had 3 drupelets (photos 1-25,2-2). Collector's #: Seward-4.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Yana K. Guteva, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Datcho P. Shamov, Institute of Introduction and Plant Genetic Resources, Sadovo, Plovdiv 4122, Bulgaria; Walter J. Kaiser, U.S. Peace Corps, Cuerpo de Paz, Casilla #749, Sucre, Chuquisaca, Bolivia. Donated by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 11/22/1996.

PI 618410. *Rubus* sp.

Wild. B96-257; CRUB 1909. Collected 07/12/1996 in Bulgaria. Latitude 42° 39' 34" N. Longitude 24° 42' 52" E. Elevation 442 m. Balkan mountains northeast of Plovdiv. Open meadow. Mostly *Lolium*, *Trifolium*, some *Lactuca*, *Daucus*, but not mature. Pedigree - Collected from the wild in Bulgaria. Complex derivation involving several red raspberry varieties and *Rubus arcticus*, *R. strigosus*, and *R. occidentalis*.

The following were developed by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 11/22/1996.

PI 618411. *Rubus* hybrid

Breeding. Melcher 89-14-7; CRUB 1935. Pedigree - *Brayos* x *trivialis*. Semi fertile, 12-15 drupelets. Resistant to double blossom blight.

The following were collected by Fred Gibson, Mcallen, Texas, United States. Developed by M. J. Lukefahr, Rio Farms, Inc., RR 1 Box 326, Monte Alto, Texas 78538, United States; W.R. Cowley, Texas, United States. Donated by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 11/22/1996.

PI 618412. *Rubus trivialis* Michx.

Cultivar. CRUB 1936. Collected in United States. Tolerates calcareous soil.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 06/06/1996.

PI 618413. *Rubus flagellaris* Willd.

Wild. NC 96-5-10; CRUB 1872. Collected 05/14/1996 in North Carolina, United States. Latitude 34° 56' 28" N. Longitude 77° 14' 20" W. Jones County, North Carolina. Roadside on right, headed north on US 17; 1.3 miles south of Chadwick.

PI 618414. *Rubus hispidus* L.

Wild. NC 96-10-1; CRUB 1873. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 31' 17" N. Longitude 76° 55' 52" W. Beaufort County, North Carolina. US 264 at NC Forest Service Office. Moist site w/ scattered *R. hispidus* and *occas*, *R. flagellaris*.

Ericaceous species were fairly abundant. Planted pines adjacent to roadside. Pedigree - Collected from the wild in North Carolina.

The following were collected by Qinghua Zhang, Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Wan Shou Shan, Beijing, Beijing 100091, China. Received 01/03/1997.

PI 618415. *Rubus biflorus* Buch.-Ham. ex Sm.

Wild. CRUB 1938. Collected 11/09/1996 in Yunnan, China. Latitude 27° 31' N. Longitude 99° 30' E. Elevation 3300 m. Developed in United States. Pedigree - Collected from the wild in China.

The following were donated by C. Ferris Miller, Chollipo Arboretum, 344-16 Yonhui-dong, Sodaemun-ku Sosan Gun, Seoul, Seoul 120-113, Korea, South. Received 05/08/1996.

PI 618416. *Rubus coreanus* Miq.

Wild. CRUB 1955; 181 (1996). Collected in Chungchong Puk, Korea, South. Latitude 36° 58' 45" N. Longitude 128° 21' 40" E. Elevation 540 m. Mt Sobaek, Tanyang-Gun, Chungchong Pukto.

The following were developed by Barney Douglass, Rt. 3 Box 279, Hillsboro, Oregon 97124, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 01/30/1997.

PI 618417. *Rubus hybrid*

Cultivar. Long Black; CRUB 1942. Pedigree - wild trailing x (Barney Berry (Boysen x OSU 978) x [Marion x (Lincoln x Lavaca)]). The pedigree for Long Black is 50% wild. A trail blackberry collected at Miller Peninsula, Clallam county, Washington x ([Boysen x OSU 978] x [Marion x (Lincoln x Lavaca)]).

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 06/27/1996.

PI 618418. *Rubus flagellaris* Willd.

Wild. CRUB 1951. Collected 05/17/1996 in North Carolina, United States. Latitude 36° 10' 14" N. Longitude 77° 30' 9" W. Near Scotland Neck, Halifax county, North Carolina. County road 1003 west, 0.2 mile off state road 903 north. Power line right-of-way on the left. Moist site, with young mixed forest adjacent. No *Fragaria*, *Rubus* scattered over the site (as usual). Pedigree - Collected from the wild in North Carolina.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/08/1996.

PI 618419. *Rubus pedatus* Sm.

Wild. CRUB 1940. Collected 07/31/1996 in Alaska, United States. Latitude 60° 30' N. Longitude 145° 20' W. Elevation 20 m. McKinley Lake Trail 1 - 2.5 miles up from Copper River Road. Along trail edge, ground cover. Pedigree - Selection of wild *R. pedatus*.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 06/27/1996.

PI 618420. *Rubus flagellaris* Willd.

Wild. CRUB 1950. Collected 05/15/1996 in North Carolina, United States. Latitude 35° 31' 17" N. Longitude 76° 55' 53" W. Beaufort County, North Carolina. US 264 at NC Forest Service Office. Powerline ROW on the right, by the roadside. Moist site with scattered *R. hispidus* and occasional *R. flagellaris*. Ericaceous species were fairly abundant. Planted pines adjacent to roadside. Pedigree - Collected from the wild in North Carolina.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/08/1996.

PI 618421. *Rubus pedatus* Sm.

Wild. CRUB 1939. Collected 07/31/1996 in Alaska, United States. Latitude 60° 30' N. Longitude 145° 30' W. Elevation 15 m. Cabin Lake, about 3.5 miles to the north of Cordova airport. Around open forest edge of parking lot, near lake outlet, ground cover. Pedigree - Selection of wild *R. pedatus*.

The following were collected by Robert Newman, American College of Traditional Chinese Medicine, Botanical Garden, 455 Arkansas Street, San Francisco, California 94107, United States. Received 04/02/1997.

PI 618422. *Rubus lambertianus* Ser.

Wild. CRUB 1943. Collected 1996 in Sichuan, China. Pedigree - Collected from the wild in China.

PI 618423. *Rubus lambertianus* Ser.

Wild. CRUB 1944. Collected 1996 in Guangxi, China. Pedigree - Collected from the wild in China.

The following were collected by Peter Bristol, The Holden Arboretum, 9500 Sperry Road, Kirtland, Ohio 44060-5172, United States. Donated by Shawn Belt, USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Glenn Dale, Maryland 20769-9157, United States. Received 01/30/1997.

PI 618424. *Rubus crataegifolius* Bunge

Wild. HLJ 56; CRUB 1948; NA 64192. Collected 09/08/1993 in Heilongjiang, China. Latitude 43° 52' 31" N. Longitude 129° 2' 28" E. Elevation 544 m. Jian Shan Jiao. In moist valleys only; woodland understory; in association with *Juglans mandshurica*, *Tilia amurensis*, *Betula platyphylla* var *mandshurica*, *Acer mono*, *Acer ukurunduense*, *Acer mandshuricum*. Pedigree - collected from the wild in Heilongjiang, China

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 06/27/1996.

PI 618425. *Rubus hybrid*

Wild. CRUB 1952. Collected 05/17/1996 in North Carolina, United States. Latitude 36° 10' 14" N. Longitude 77° 30' 9" W. Near Scotland Neck, Halifax county, North Carolina. County road 1003 west, 0.2 mile off state road 903 north. Power line right-of-way on the left. Moist site, with young mixed forest adjacent. No *Fragaria*, *Rubus* scattered over the site (as usual). Pedigree - prob. *Rubus cuneifolius* x *flagellaris* (alternately, escapedcultivated form, or cultivated x *R. cuneifolius*).

PI 618426. *Rubus hybrid*

Wild. CRUB 1953. Collected 05/17/1996 in North Carolina, United States. Latitude 36° 10' 14" N. Longitude 77° 30' 9" W. Near Scotland Neck, Halifax county, North Carolina. County road 1003 west, 0.2 mile off state road 903 north. Power line right-of-way on the left. Moist site, with young mixed forest adjacent. No *Fragaria*, *Rubus* scattered over the site (as usual). Pedigree - prob. *Rubus argutus* x *flagellaris*.

The following were donated by Daniel Murphy, North Star Gardens, 23 Empire Dr., Suite 1000, St. Paul, Minnesota 55103, United States. Received 05/16/1991.

PI 618427. *Rubus idaeus* L.

Cultivar. "Golden Queen". Developed in Canada. Pedigree - Seedling selection of cultivar Cuthbert. Beautiful, large golden yellow berries, surpassing its parent in size, beauty, quality and adaptability.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618428. *Rubus setchuenensis* Bureau & Franch.

Cultivated. Collected in China. Pedigree - Uncertain, from botanical collection.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown; Gong Deshen, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Shi Shengde, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; De Sheng Wei, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Cheng Xiang Wang, Guizhou Botanical Garden, Guizhou Academy of Science, Liuchongguan, Guiyang, Guizhou 550001, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 618429. *Rubus sumatranus* Miq.

Wild. 92127; *R. sumatranus*. Collected 06/03/1992 in Guizhou, China. Latitude 26° 4' N. Longitude 108° 42' E. Elevation 723 m. drove a few km from Lu SDi Zui village in vicinity of Feng Deng Zai village. so government official needed to help collect. collection along a trail up a creek valley dense vegetation : low shrubs, ferns, small trees. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618430. *Rubus tricolor* Focke

Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

The following were collected by Patricia Holloway, University of Alaska - Fairbanks, Georgeson Botanical Garden, 117 West Tanana Drive, Fairbanks, Alaska 99775, United States. Received 09/10/1993.

PI 618431. *Rubus chamaemorus* L.

Wild. Collected 08/09/1993 in Alaska, United States. Latitude 64° 50' N. Longitude 147° 43' W. Elevation 305 m. Collected along the Gilmore Trail, Fairbanks, Alaska. Black spruce bog. Pedigree - Collected from the wild in Alaska.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/27/1993.

PI 618432. *Rubus chamaemorus* L.

Wild. Collected 08/04/1993 in Alaska, United States. Latitude 60° 8' N. Longitude 149° 25' W. Elevation 30 m. Trail to Gold Finn Lake, 6 mi N of Seward. Spruce forest. Pedigree - Collected from the wild in Alaska. Salmon colored berries (photo). Collector's #: Seward-2.

The following were donated by Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu, China. Received 11/02/1992.

PI 618433. *Rubus assamensis* Focke

Wild. Collected 09/19/1992 in Guizhou, China. Latitude 28° 29' N. Longitude 105° 38' E. Elevation 300 m. Chishui County. Pedigree - Collected from the wild in China. Fruit black.

The following were collected by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Jerry A. Payne, Wildlife Biology Department, Rt. 5, Box 180, Forsyth, Georgia 31029, United States. Donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 11/15/1995.

PI 618434. *Rubus flagellaris* Willd.

Wild. CRUB 1825. Collected 07/13/1995 in Mississippi, United States. Latitude 34° 15' 37" N. Longitude 88° 53' 9" W. Mississippi, Tishomingo county, Tishomingo State Park. Upper piedmont vegetation on ridges and in deep shady ravines; closely resembling the Appalachians where rock outcrops occur. *V. arboreum*, *V. elliotii* fairly abundant. Scattering of *Rubus* spp. Pedigree - Collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie; characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

PI 618435. *Rubus flagellaris* Willd.

Wild. CRUB 1826. Collected 07/14/1995 in Mississippi, United States. Latitude 34° 36' 25" N. Longitude 88° 12' 17" W. Mississippi, Lafayette County, Holly Springs National Forest, FS Rd 841, 1.1 mi south of jct with Cty Rd 244 (244 turns off Hwy 7 between Oxford & Holly Springs). Open woodland in the National Forest, control burned 3 years ago. Dry uplands. Pedigree - Collected from the wild in Mississippi. South Carolina was extremely frustrating, by the middle of the week we had only verified the existence of one location for *Fragaria virginiana* in the Coastal Plain, so we moved over into the southern piedmont. Three accessions were located in the Edgefield District of Sumter National Forest and four in Greenwood State Park. The one verified Coastal Plain location is in a garden near Lexington, SC. Twelve accessions of *Vaccinium* spp., four of *Gaylussacia frondosa*, and one of *Rubus argutus* were also collected. Southeastern Louisiana and Mississippi were more successful, but not abundant in these areas either. No accessions were found south of Starkville, MS. Specific previous sites were visited near Hattisburg and Laurel, MS, but *F. virginiana* was no longer present. A total 33 accessions of *F. virginiana* were collected from east central and northeastern MS, occurring in small outcroppings of prairie;

characterized by a very thin layer of 'usually' sticky black soil over decaying limestone with scattered to dense overstory of *Juniperus virginiana*. *Fragaria virginiana* was often found growing directly under *J. virginiana* where little other vegetation occurred. Dr. Sidney McDaniel of Mississippi State University refers to these areas as 'cedar prairie woodlands'. In addition to *F. virginiana*, 14 accessions of *Vaccinium* spp. and two accessions *Rubus flagellaris* were also collected. These trips raise serious questions concerning the status of *Fragaria virginiana* in the southeastern US. Is it really as rare as it appears to be? In Greenwood State Park in South Carolina, the species was pioneering on bare ground two years after clearcutting. In Mississippi it was not found in such areas, although one herbarium specimen came from the edged of wildlife food plot. People in almost every area told us how abundant wild strawberries were on their property or in their region, but these almost always turned out to be either *Duchesnea indica*, or *Potentilla canadensis*.

The following were donated by C.T. Kennedy, California Rare Fruit Growers, 1315 33rd Ave., San Francisco, California 94122, United States. Received 03/15/1996.

PI 618436. *Rubus* sp.

Cultivar. CRUB 1864. Pedigree - selection of Boysenberry 7x.

PI 618437. *Rubus idaeus* L.

Cultivar. CRUB 1865. Pedigree - raspberry selection.

PI 618438. *Rubus idaeus* L.

Cultivar. CRUB 1866. Pedigree - (Ranere x Latham) x (Cuthbert x Latham).

PI 618439. *Rubus* sp.

Cultivar. CRUB 1867. Pedigree - albino fruited mutant of blackberry.

The following were developed by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada; Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada. Donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States; Chaim Kempner, Agassiz Research Station, P.O. Box 1000, Agassiz, British Columbia V0M 1A0, Canada. Received 04/19/1996.

PI 618440. *Rubus idaeus* L.

Cultivar. CRUB 1869. Pedigree - Glen Moy x Chilliwack. A high-yielding, midseason raspberry producing large, firm fruit with a good shelf life. Orig. in Vancouver, British Columbia, Canada, by H.A. Daubeny, Agr. and Agri-Food Canada, Pacific Agr. Res. Centre. Glen Moy x Chilliwack; cross made in 1983; selected in 1986; tested as BC 83-16-50; introd in 1995. Propagated under a royalty agreement by Sieglin Ent., Abbotsford, British Columbia. Fruit: large; conic; medium red, slightly less glossy than Chilliwack; easily removed from the receptacle; can be machine-harvested; relatively high soluble solids; pleasant fresh flavor; some resistance to pre- and postharvest fruit rots; fresh market and processing, including individual quick freeze. Plant: vigorous, upright habit; primocanes fairly numerous, light rosy-red color with

dark purple spines mostly at base; floricanes light brown with gray overlay and basal cracking; long, strongly attached laterals tend to droop; fruit spaced well apart along laterals; winter hardiness appears adequate in the Pacific Northwest. Some resistance to spur blight; resistant to powdery mildew; susceptible to cane Botrytis and cane spot; susceptible to Phytophthora-incited root rot in greenhouse screening test; susceptible to infection by pollen transmission of raspberry bushy dwarf virus; resistant to the common strain of the North American aphid vector of the raspberry mosaic virus complex.

The following were developed by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada; Angela Anderson, Agriculture Canada, Research Station, Canada. Donated by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada. Received 02/16/1996.

PI 618441. *Rubus idaeus* L.

Cultivar. "Tulameen"; CRUB 1868. Pedigree - Nootka x Glen Prosen.

The following were donated by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/21/1995.

PI 618442. *Rubus spectabilis* Pursh

Clone. Developed in Unknown. Pedigree - selection of *R. spectabilis* with double flowers. Received as *R. spectabilis* f. *flore pleno* - not acceptable for GRIN so changed to *R. spectabilis* (cv. *Flore Pleno*) 11/95.

The following were developed by Arnold Arboretum of Harvard University, 125 Arborway, Jamaica Plain, Massachusetts 02130-3500, United States. Received 02/22/1993.

PI 618443. *Rubus cockburnianus* Hemsl.

Cultivated. Collected in Unknown. Pedigree - Uncertain. Fruit black.

The following were collected by Hakan Schuberg, Gluntens Vag 9-807, Umea, Vasterbotten 903 31, Sweden. Received 11/04/1996.

PI 618444. *Rubus caesius* L.

Wild. CRUB 1907. Collected 1996 in Gotland, Sweden. Latitude 52° 20' N. Longitude 18° 40' E. Elevation 0 m. Near the home of the parents of Hakan Schuberg. Grows along ditches, fences and roadsides. Pedigree - collected from the wild in Sweden.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618445. *Rubus bambusarum* Focke

Cultivated. Collected in China. Pedigree - Uncertain, from botanical collection.

The following were developed by University of Oulu, Botanical Garden, Linnanmaa, Oulu, Oulu SF-90570, Finland. Donated by Kari Laine, University of Oulu, Botanical Gardens, Linnanmaa PO Box 400, Oulu, Oulu SF-90570, Finland. Received 05/25/1993.

PI 618446. *Rubus chamaemorus* L.

Uncertain. Pedigree - Assumed to be collected from the wild in Finland.

The following were collected by He Shan An, Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu 21004, China. Received 11/15/1991.

PI 618447. *Rubus coreanus* Miq.

Cultivated. Collected in Jiangsu, China. Pedigree - Uncertain, from botanical collection. No additional information provided.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618448. *Rubus rosifolius* Sm.

Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown; Gong Deshen, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Shi Shengde, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; De Sheng Wei, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Cheng Xiang Wang, Guizhou Botanical Garden, Guizhou Academy of Science, Liuchongguan, Guiyang, Guizhou 550001, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 618449. *Rubus coreanus* Miq.

Wild. 92212; *R. coreanus*. Collected 06/26/1992 in Guizhou, China. Latitude 25° 49' N. Longitude 106° 34' E. Elevation 1061 m. About 60 km north of Luodian near the border of Hui Shui and Luodian Counties in Ludodian County. Plants growing on slopes beside road. Pedigree - Collected from the wild in China. Across the road from plants with orange fruit or with purple fruit.

PI 618450. *Rubus coreanus* Miq.

Wild. 92213; *R. coreanus*. Collected 06/26/1992 in Guizhou, China. Latitude 25° 49' N. Longitude 106° 34' E. Elevation 1061 m. About 60 km north of Luodian near the border of Hui Shui and Luodian Counties in Luodian County. Growing on slopes above road. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618451. *Rubus coreanus* Miq.

Wild. 92214; *R. coreanus*. Collected 06/26/1992 in Guizhou, China. Latitude 25° 49' N. Longitude 106° 34' E. Elevation 1061 m. About 60 km north of Luodian near the border of Hui Shui and Luodian

Counties in Luodian County. Growing on slopes above road among other herbs and shrubs. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were developed by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/15/1991.

PI 618452. *Rubus* hybrid

Breeding. "Siskiyou"; ORUS 830-4. Pedigree - ORUS 2027 (Olallie x ORUS 1367) x ORUS 1826 (ORUS 1122 x Boysen). *Rubus ursinus* is the primary species in Siskiyou, but *R. idaeus* and *R. armeniacus* (*R. procerus*) are present in the pedigree. Similar in vigor to 'Marion' but more tolerant of environmental stress. Canes are more tolerant than 'Marion' and less so than 'Kotata'. Canes are more resistant to cane and leaf spot (*Septoria rubi* Westend) than 'Marion'; however, cane botrytis (*Botrytis cinerea* Pers.:Fr.) has been observed. No symptoms of yellow rust [*Kuehneola uredinis* (Link) Arth.] infection and in 1997 no symptoms of the pathogen causing drupelets of 'Kotata' and 'Marion' to turn brown and dry. Siskiyou has shown less winter injury to flower buds and canes than 'Marion'. Siskiyou produces very large, firm, and flavorful berries, early in the blackberry season. Siskiyou averaged 7.8 grams/fruit, larger than 'Kotata' (5.1 grams) or 'Marion' (5.1 grams), but less than 'Black Butte' (9.0 grams). Fresh berries are similar to 'Marion' in color but hold their color better under refrigerations. Siskiyou is firmer than 'Kotata' and 'Black Butte', and much firmer than 'Marion'. The fruit are uniformly shaped and have a large number of drupelets per fruit. Siskiyou tends to fruit on tertiary or late-season flowers that have the tip of the fruit poorly set. Fresh and processed fruit of Siskiyou have excellent flavor; they are not as intense and aromatic as 'Marion' and 'Olallie' but are more similar to 'Kotata'. When tested as a processed product, Siskiyou has been rated very good but not as outstanding as 'Marion'. Siskiyou is one of the earliest ripening trailing cultivars, ripening before 'Kotata' and with 'Black Butte'. Yields of Siskiyou have been similar to 'Kotata', less than 'Marion' and greater than 'Black Butte'. Siskiyou has tested negative for tomato ringspot, raspberry bushy dwarf, and tobacco streak viruses by ELISA and has indexed negative on grafting to *R. occidentalis*.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618453. *Rubus ichangensis* Hemsl. & Kuntze

Cultivated. Collected in China. Pedigree - Uncertain, from botanical collection.

The following were developed by Robert Erskine. Donated by Daniel Murphy, North Star Gardens, 23 Empire Dr., Suite 1000, St. Paul, Minnesota 55103, United States. Received 05/16/1991.

PI 618454. *Rubus idaeus* L.

Cultivar. "Honey Queen". Pedigree - OP seedling of cultivar Honey King. Reported to be a superior variety of yellow raspberry. Vigorous and high-yielding.

The following were developed by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/15/1991.

PI 618455. *Rubus idaeus* L.

Breeding. ORUS 980-4. Pedigree - (ORUS 1510 x Wyo. 68-21) x (ORUS 1835 x ORUS 1834). Fruit yellow to apricot colored, late season in Oregon. Primocane fruiting, very few spines.

The following were developed by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States; Bruce H. Barritt, Washington State University, Tree Fruit Research & Extension Ctr., 1100 N. Western Avenue, Wenatchee, Washington 98801, United States; Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada; Tom Sjulín, Driscoll Strawberry Associates, 404 San Juan Road, Watsonville, California 95076-5399, United States. Donated by Patrick P. Moore, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371-4998, United States. Received 02/11/1992.

PI 618456. *Rubus idaeus* L.

Cultivar. "Centennial". Pedigree - Meeker x Skeena. 'Centennial' was selected by B.H.B. in 1978 at Puyallup, Wash., from the 1974 cross made by H.A.D. of 'Meeker' x 'Skeena'. It has been tested throughout the Pacific Northwest as WSU 738. 'Meeker' was released from the Washington State Univ. breeding program in 1967 (Brooks and Olmo, 1972) and is one of the leading commercial cultivars in the Pacific Northwest. 'Skeena' was released from the Agriculture Canada breeding program in British Columbia (B.C.) in 1978 (Daubeny, 1978) and is also commercially important in the Pacific Northwest. 'Skeena' was also the male parent of two other 1974 crosses that resulted in the release of 'Chilliwick' and 'Comox' from the Agriculture Canada, B.C., program in 1987 (Daubeny, 1987). The fruasant, mild flavor. 'Centennial' appears to be well-adapted in southern portions of the Pacific Northwest (south of about 48°N). It has not been reliably cold hardy at Abbotsford, B.C., and is not recommended where 'Meeker' may be damaged by cold. The fruit should meet the requirements of both fresh-market and processing uses; however, it is not suited to machine-harvesting. Although it has not been rigorously tested outside the Pacific Northwest, 'Centennial' has yielded well an arge fruit at Raleigh, N.C. It also is being grown commercially around Watsonville, Calif. These indications suggest that 'Centennial' may be adapted to areas south of the location it was developed and tested. 'Centennial' is susceptible to *Agathomyia agathonica* Hottes, the aphid vector of the raspberry mosaic virus complex. However, in the Pacific Northwest, *A. agathonica* is most prevalent in British Columbia and northern Washington (Martin, 1988), where 'Centennial' would not be recommended because of potential winter damage. At Puyallup, where there is a high frequency of RBDV, 'Centennial' has tested positive for the virus using the ELISA technique. Appears to be well-adapted to the southern portions of the Pacific Northwest. Suitable for fresh market and processing.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown; Gong Deshen, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Shi Shengde, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; De Sheng Wei, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Cheng Xiang Wang, Guizhou Botanical Garden, Guizhou Academy of Science, Liuchongguan, Guiyang, Guizhou 550001, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 618457. *Rubus multibracteatus* H. Lev. & Vaniot

Wild. 92201; *R. multibracteatus*. Collected 06/24/1992 in Guizhou, China. Latitude 25° 7' N. Longitude 106° 1' E. Elevation 861 m. An Mao Ao village, 25 km SW of Wangmo Wangmo County We walked a short distance into the woods and then back down the road. Collected along the roadside. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were developed by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/20/1993.

PI 618458. *Rubus occidentalis* L.

Breeding. White Chimera. Pedigree - Seedling of Munger Black Raspberry, sectorial of a chimera. Seedling of virus free plant.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618459. *Rubus parviflorus* Nutt.

Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown; Gong Deshen, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Shi Shengde, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; De Sheng Wei, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Cheng Xiang Wang, Guizhou Botanical Garden, Guizhou Academy of Science, Liuchongguan, Guiyang, Guizhou 550001, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 618460. *Rubus parvifolius* L.

Wild. 92171; *R. parvifolius*. Collected 06/19/1992 in Guizhou, China. Latitude 25° 2' N. Longitude 105° 23' E. Elevation 1268 m. drive from Xingyi to Anlong, Anlong County near Wen Jia Po village, about 6 km west of Anlong. open rocky slope beside road with scattered shrubs. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618461. *Rubus parvifolius* L.

Wild. 92200; *R. parvifolius*. Collected 06/24/1992 in Guizhou, China. Latitude 25° 7' N. Longitude 106° 1' E. Elevation 861 m. An Mao Ao village, 25 km SW of Wangmo Wangmo County We walked a short distance into the woods and then back down the road. Collected along the roadside. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618462. *Rubus phoenicolasius* Maxim.

Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

The following were collected by Clive Simms, Woodhurst, 6 Stamford Rd., Essendine, Stamford, Stamford, England PE9 4LQ, United Kingdom. Received 09/06/1994.

PI 618463. *Rubus chamaemorus* L.

Wild. Collected 08/1994 in England, United Kingdom. Latitude 55° 30' N. Longitude 1° 30' W. Elevation 0 m. Kielder Water, Northumberland county, England. Pedigree - collected from the wild in England.

The following were developed by Gene Howard, Cheyenne Hort. Field Station, PO Box 1087, Cheyenne, Wyoming, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 12/13/1994.

PI 618464. *Rubus strigosus* Michx.

Cultivar. Notice to nurserymen relative to the naming and release for propagation of a new red raspberry, 'Plainsman' (dated February 17, 1993) : The Agricultural Research Service hereby releases to nurserymen for propagation PLAINSMAN, a new cold-hardy, productive red raspberry. PLAINSMAN, tested as selection 72-1, originated from a cross of September x Cheyenne seedling 62-17 (*Rubus idaeus strigosus*). Cheyenne 62-17 is a 3rd generation seedling from plants collected in the wild in Shell Canyon nea Greybull, Wyoming, in 1952 and selected for the new-wood, early, summer-fruiting character. Crosses resulting in the two varieties were made in 1964 and the seedlings were grown at Cheyenne, Wyoming, in 1965. It was grown, selected and tested by Gen S. Howard, a retired Agricultural Research Service horticulturist. Fruit of PLAINSMAN is conic in shape and up to 28 mm in diameter. Color for this variety is medium to deep red and the flesh is medium in firmness. Yield is medium to high. Flavor is as flavorful as standard raspberries. Fruit is borne on new-wood of the current season's growth and ripens in southeastern Wyoming by the first week of August. First ripe fruit averages 3 to 4 weeks earlier than August Red. The plants are everbearing in nature and the fruiting season lasts for about 6 weeks or until heavy frosts occurs. Plants of PLAINSMAN have excellent vigor and produce numerous canes. Plants are somewhat larger and more vigorous than either PATHFINDER or TRAILBLAZER. Plants will make solid beds unless cultivated and kept in rows. Above ground canes are frozen back or killed to near ground level over winter. They may be mowed with a rotary mower and

raked off before the new growth begins in spring thus eliminating hand pruning and reservoirs for diseases. Botanical characters more nearly resemble the taxonomic descriptions for *R. idaeus strigosus* than *R. idaeus* although characters of both are present. PLAINSMAN is recommended for trial plantings in Colorado, Wyoming, Montana, South Dakota, Idaho, North Dakota, Minnesota, Wisconsin, and Utah. Foliar diseases were not reported from cooperators in the areas recommended for trial. The plant material has not been tested for virus, but the plants have retained good production, growth, and suckering for over 20 years, suggesting it has virus tolerance. Plant material has been sent to the National Clonal Germplasm Repository for virus evaluation. A limited number of plants for propagation will be available to researchers and nurserymen. Written requests should be sent to Gerald E. Schuman, High Plains Grasslands Research Station, 8408 Hildreth Road, Cheyenne, WY 82009.

The following were developed by Tom Sjulín, Driscoll Strawberry Associates, 404 San Juan Road, Watsonville, California 95076-5399, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 01/31/1995.

PI 618465. *Rubus idaeus* L.
Breeding.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 618466. *Rubus floribundus* Kunth
Wild. WM339. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

PI 618467. *Rubus floribundus* Kunth
Wild. WM343. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Donated by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States; Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 618468. *Rubus floribundus* Kunth
Wild. WM358A, WM358B. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

PI 618469. *Rubus floribundus* Kunth
Wild. WM362. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 618470. *Rubus floribundus* Kunth

Wild. WM378. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Donated by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States; Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 618471. *Rubus megalococcus* Focke

Wild. WM390. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

PI 618472. *Rubus briareus* Focke

Wild. WM391. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild in Bolivia.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 03/24/1995.

PI 618473. *Rubus megalococcus* Focke

Wild. WM403. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

PI 618474. *Rubus nubigenus* Kunth

Wild. WM416B. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild.

PI 618475. *Rubus briareus* Focke

Wild. WM437. Collected 02/26/1995 in Bolivia. Pedigree - collected from the wild in Bolivia.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Developed by Luther Burbank, Santa Rosa, California, United States. Received 07/17/1995.

PI 618476. *Rubus hybrid*

Cultivar. Collected 07/15/1995 in California, United States. Another thornless blackberry selected by Luther Burbank in the 1890's. This is probably not Burbank Thornless. Fruit set was much less. Still growing in the city park that was once Burbank's home. Vigorous growth.

PI 618477. *Rubus hybrid*

Cultivar. Collected 07/15/1995 in California, United States. Albino fruit.

PI 618478. *Rubus hybrid*

Cultivar. Collected 07/15/1995 in California, United States. Very similar to Logan. Probably hexaploid (6x); probably 2n=42.

The following were collected by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States. Donated by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States. Received 09/25/1995.

PI 618479. *Rubus idaeus* L.

Wild. Collected 09/03/1995 in Kazakhstan. Latitude 45° 24' 25" N. Longitude 80° 24' 42" E. Elevation 1170 m. Kazakhstan, 15 km E of Topolevka, Djungarsky Mountain Range, 3 km E of Topolevka Forestry camp. Site 13, Collection no. 06. Fertile soil; 80 deg slope toward NW; open environment; edge of cliff. Growing on steep bank. Pedigree - collected from the wild in Kazakhstan.

PI 618480. *Rubus idaeus* L.

Wild. Collected 09/05/1995 in Kazakhstan. Latitude 45° 31' 14" N. Longitude 80° 43' 55" E. Elevation 1360 m. Kazakhstan, 9 km SE of Lepsinsk, 2 km SE of Lepsinsk Forestry camp. Site 14, Collection no. 04. Excellent drainage; 20 deg slope toward E; open environment; near ridge. Pedigree - collected from the wild in Kazakhstan.

The following were collected by Dan Parfitt, USDA, ARS, National Clonal Germplasm Repository, University of California, Davis, California 95616, United States; George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 10/30/1995.

PI 618481. *Rubus praecox* Bertol.

Wild. Collected 09/03/1995 in Turkmenistan. Latitude 38° 24' 11" N. Longitude 56° 44' 59" E. Elevation 0 m. Turkmenistan, Valley of Aydere, about 80 km E of Garrygala in the Kopet Dag Mountains. Bank side of stream next to footpath. Pedigree - collection from the wild.

The following were collected by Barbara Reed, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/12/1993.

PI 618482. *Rubus occidentalis* L.

Wild. Collected 07/1993 in Nebraska, United States. Latitude 40° 40' N. Longitude 95° 53' W. 2 miles west of Nebraska City on Hwy 2, Otoe Co. Gun Club. Pedigree - Collected from the wild in Nebraska.

PI 618483. *Rubus occidentalis* L.

Wild. Collected 07/1993 in Nebraska, United States. Latitude 40° 40' N. Longitude 95° 53' W. 2 miles west of Nebraska City on Hwy 2, Otoe Co. Gun Club. Pedigree - Collected from the wild in Nebraska.

PI 618484. *Rubus occidentalis* L.

Wild. Collected 07/1993 in Nebraska, United States. Latitude 40° 40' N. Longitude 95° 53' W. 2 miles west of Nebraska City on Hwy 2, Otoe Co. Gun Club. Pedigree - Collected from the wild in Nebraska.

The following were collected by Allan Klatt, Alaska Plant Materials Center, Div. of Agric., Dep. of Nat. Resources, Palmer, Alaska 99645, United States. Developed by USDA-SCS Plant Materials Center, Palmer, Alaska, United States. Donated by USDA-SCS Plant Materials Center, Palmer, Alaska, United States. Received 08/16/1993.

PI 618485. *Rubus arcticus* L. subsp. *arcticus*

Cultivar. "Kenai Carpet"; Nagoonberry. Collected 1976 in Alaska, United States. Latitude 60° 15' N. Longitude 151° 15' W. Elevation 30 m. Origin is from Kenai Peninsula, north side of Tustumena Lake Road, 6 miles south of Kasilof. Pedigree - Originally collected from the wild in Alaska.

The following were developed by USDA, ARS Tropical Agriculture Research Station, 2200 Pedro Albizu Campos Ave. Ste. 201, Mayaguez, Puerto Rico. Donated by Francisco Vazquez, USDA, ARS, Tropical Agric. Research Station, Box 70, Mayaguez, Puerto Rico. Received 08/27/1993.

PI 618486. *Rubus niveus* Thunb.

Cultivated. Collected in Dominican Republic. Collected in the Dominican Republic. Pedigree - collected from the wild. Not cold hardy.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/27/1993.

PI 618487. *Rubus arcticus* L. subsp. *arcticus*

Wild. Hatcher-3; Nagoonberry. Collected 08/10/1993 in Alaska, United States. Latitude 61° 45' N. Longitude 149° 15' W. Elevation 610 m. About 15 miles on Hatcher Pass Road before Independence Mine State Park. Tundra, no trees, willow, shrubs, many vaccinium. Pedigree - Collected from the wild in Alaska.

PI 618488. *Rubus arcticus* L. subsp. *arcticus*

Wild. Summit-3; Nagoonberry. Collected 08/17/1993 in Alaska, United States. Latitude 63° 10' N. Longitude 145° 30' W. Elevation 975 m. Richardson Hwy N of Paxon along E side of Summit Lake, along pipeline access road. Plants from moist area along drainage. Pedigree - Collected from the wild in Alaska.

PI 618489. *Rubus strigosus* Michx.

Wild. Nelchina-1. Collected 08/19/1993 in Alaska, United States. Latitude 61° 57' N. Longitude 146° 50' W. Elevation 700 m. Glenn Hwy mile 137.6 in campground at Little Nelchina State Recreation Area. Moist mixed forest area along river. Pedigree - Collected from the wild in Alaska.

The following were collected by Elizabeth Dickson, NYS Agricultural Experiment Station, Horticultural Sciences, Hedrick Hall, Geneva, New York 14456-0462, United States; Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States; Gaylord Mink, Washington State University, Irrigated Agricultural Res. & Ext.

Ctr., Route 2, Box 2953-A, Prosser, Washington 99350, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 10/05/1993.

PI 618490. *Rubus* sp.

Uncertain. KAZ 93-29-01. Collected 09/1993 in Kazakhstan. Latitude 45° 30' 41" N. Longitude 80° 42' 53" E. Elevation 1300 m. Lepsinsk, black river forestry camp. 10% east facing slope. Pedigree - collection of seed from the wild.

The following were donated by James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States. Received 10/13/1993.

PI 618491. *Rubus parvifolius* L.

Wild. Collected in Jiangsu, China. Latitude 33° 0' N. Longitude 120° 0' E. Seed collected from Jiangsu Province, China. Pedigree - collected from the wild. Only seedling germinated from seedlot.

PI 618492. *Rubus innominatus* S. Moore

Breeding. *R. innominatus* NC 176. Collected in Jiangxi, China. Pedigree - Open-pollinated seedling from Jiangxi. Large fruited breeding selection from OP seed from Jiangxi, China.

PI 618493. *Rubus innominatus* S. Moore

Breeding. *R. innominatus* NC 177. Collected in Jiangxi, China. Pedigree - Open-pollinated seedling from Jiangxi. Breeding selection from OP seed from Jiangxi, China.

PI 618494. *Rubus hirsutus* Thunb.

Breeding. *R. hirsutus* NC 185. Collected in Jiangsu, China. Pedigree - Open-pollinated seedling from Jiangsu. Largest fruit size from seedlings from OP seed from Jiangsu, China.

The following were collected by Joe Voges, Naturecraft Studio, 925 4th Corso, Nebraska City, Nebraska 68410-2864, United States. Received 12/03/1993.

PI 618495. *Rubus occidentalis* L.

Wild. Collected 11/1993 in Nebraska, United States. Latitude 40° 40' N. Longitude 95° 52' W. Elevation 200 m. Otoe County Wildlife Club, 1 1/2 miles west of Nebraska City. Pedigree - Collected from the wild in Nebraska.

The following were donated by Rick Valley, Northern Groves Nursery, P.O. Box 86291, Portland, Oregon 97286-0291, United States. Received 06/21/1993.

PI 618496. *Rubus irenaeus* Focke

Cultivated. Collected in China. Pedigree - selection of *R. irenaeus*. May be Identical to RUB 1607.001.

The following were donated by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 02/01/1994.

PI 618497. *Rubus caesius* L.

Cultivated. Developed in Unknown. This plant has been in tissue culture and used by Barbara Reed (NCGR-Corvallis) for various experiments. Reference CRUB 814 (IDX).

The following were developed by Imperial Sugarcane Breeding Station, Lawley Road, Coimbatore, Tamil Nadu, India. Donated by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 04/01/1994.

PI 618498. *Rubus* sp.

Cultivar. Pedigree - selection of Texas dewberry. Southern dewberry selected for SE climate.

The following were donated by James Glen Melcher, 3633 Rigolette Road, Pineville, Louisiana 71360, United States. Received 04/01/1994.

PI 618499. *Rubus* sp.

Cultivar. Developed in United States. Southern dewberry selected for SE climate.

The following were collected by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States; James Luby, University of Minnesota, Department of Horticultural Science, 342 Alderman Hall, St. Paul, Minnesota 55108, United States; Ted Mackey, Horticultural Crops Research Laboratory, 3420 Orchard St., Corvallis, Oregon 97330, United States; Herb Hoover, University of Minnesota, St. Paul, Minnesota, United States; Rick Harrison, University of Minnesota, Department of Horticultural Science, 1970 Folwell Avenue, St. Paul, Minnesota 55108-6007, United States. Donated by Chad Finn, USDA, ARS, NW Center for Small Fruits Research, 3420 NW Orchard Street, Corvallis, Oregon 97339, United States. Received 08/31/1993.

PI 618500. *Rubus spectabilis* Pursh

Wild. Collected 08/09/1993 in Washington, United States. Latitude 48° N. Longitude 124° W. Elevation 610 m. T30N R10W Sec. 15; Olympic National Forest, along FR 3040. Very steep hillside, clear cut. Collected on south (uphill) side of the road.

The following were collected by Thomas A. Lumpkin, Washington State University, Department of Crop and Soil Science, 261 Johnson Hall, Pullman, Washington 99164-6420, United States. Received 08/05/1992.

PI 618501. *Rubus parvifolius* L.

Wild. 9; raspberry = malina. Collected 07/27/1992 in Russian Federation. Latitude 44° 10' N. Longitude 146° E. Kunashiri Island. Pedigree - Collected from the wild in Russia. Coll. N. Probatova 2N = 14.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 08/17/1992.

PI 618502. *Rubus spectabilis* Pursh

Wild. Collected 08/01/1992 in Alaska, United States. Latitude 57° 2' N. Longitude 135° 18' W. Sitka, Alaska - along waterfront below Sheldon Jackson Coll. Pedigree - Collected from the wild in Alaska.

PI 618503. *Rubus pedatus* Sm.

Wild. Collected 08/09/1992 in Alaska, United States. Latitude 57° 2' N. Longitude 135° 18' W. Sitka, Alaska - woods around Sheldon Jackson College. Pedigree - collected from the wild.

The following were collected by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada. Received 10/14/1992.

PI 618504. *Rubus strigosus* Michx.

Wild. Collected 1992 in British Columbia, Canada. Latitude 55° 54' N. Longitude 129° 59' W. Elevation 2900 m. Near Stewart, BC at Black Water Lake. Pedigree - Collected from the wild in Canada.

The following were donated by John D. Jr. Avery, Southwest Missouri State University, Shepard Hall 012, 901 S. National Ave., Springfield, Missouri 65804-0087, United States. Received 10/02/1992.

PI 618505. *Rubus occidentalis* L.

Cultivar. "Somo". Collected in Missouri, United States. Pedigree - selection of black raspberry.

The following were donated by Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu, China. Received 11/02/1992.

PI 618506. *Rubus* sp.

Wild. Collected 09/15/1992 in Guizhou, China. Latitude 28° 24' N. Longitude 106° 15' E. Elevation 1500 m. Xishui County. Pedigree - Collected from the wild in China. Fruit black.

PI 618507. *Rubus* sp.

Wild. Collected 09/1992 in Sichuan, China. Latitude 28° 17' N. Longitude 105° 21' E. Elevation 1150 m. Xuyong County. Pedigree - Collected from the wild in China. Fruit black.

PI 618508. *Rubus setchuenensis* Bureau & Franch.

Wild. Collected 09/20/1992 in Guizhou, China. Latitude 27° 19' N. Longitude 105° 22' E. Elevation 1590 m. Bijie County. Pedigree - Collected from the wild in China. Fruit black.

PI 618509. *Rubus niveus* Thunb.

Wild. Collected 09/26/1992 in Guizhou, China. Latitude 26° 42' N. Longitude 104° 49' E. Elevation 1750 m. Shuicheng County. Pedigree - Collected from the wild in China. Fruit black.

PI 618510. *Rubus lambertianus* Ser.

Wild. Collected 09/28/1992 in Guizhou, China. Latitude 26° 50' N. Longitude 105° 17' E. Elevation 1350 m. Nayong County. Pedigree - Collected from the wild in China. Fruit orange.

PI 618511. *Rubus hunanensis* Hand.-Mazz.

Wild. Collected 10/03/1992 in Guizhou, China. Latitude 26° 23' N. Longitude 108° 4' E. Elevation 1350 m. Leishan County. Pedigree - Collected from the wild in China. Fruit orange red.

The following were developed by Pasquale Rosati, Universita degli Studi di Ancona, Dipartimento di Biotechnologie Agrarie, Via Brecce Bianche-Segreteria, Ancona, Marches 60131, Italy. Donated by Andrew R. Jamieson, Agriculture and Agri-Food Canada, Atlantic Food and Horticulture Research Centre, 32 Main St., Kentville, Nova Scotia B4N 1J5, Canada. Received 12/01/1992.

PI 618512. *Rubus* hybrid

Breeding. Rosati-Jamieson Logan Thornless. Pedigree - F2 of Rosati-Jamieson Logan Thornless. Interspecific *Rubus* O.P. of O.P. from Rosati. Said to be 6x.

PI 618513. *Rubus* hybrid

Breeding. Rosati-Jamieson Logan Thornless. Pedigree - Cold hardy Logan Thornless seedling selections. Interspecific *Rubus* O.P. of O.P. from Rosati. Said to be 6x.

The following were developed by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 11/09/1992.

PI 618514. *Rubus* hybrid

Breeding. ORUS 1683. Pedigree - Olallie x ORUS 1361 (ORUS 1083 x NC 37-35-M2). Thornless, black, crown gall susceptible, trailing.

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Developed by Toyama University, Department of Biology, Faculty of Science, Gokufu, Toyama 930, Japan. Received 02/11/1993.

PI 618515. *Rubus lambertianus* Ser.

Cultivated. Collected 02/02/1993 in Japan. Latitude 36° 42' N. Longitude 137° 14' E. Toyama University (Nagasaki-ken, Shaimabara-shi, Mayu-yama). Lat/lon = Toyama. Pedigree - Cultivated plants originally collected in the wild in Japan.

The following were developed by Arnold Arboretum of Harvard University, 125 Arborway, Jamaica Plain, Massachusetts 02130-3500, United States. Received 02/22/1993.

PI 618516. *Rubus odoratus* L.

Cultivated. Collected in United States. Pedigree - collected from the wild.

The following were donated by Harvey K. Hall, Crop Research Division, DSIR, Riwaka Research Station, Rd 3, Motueka, South Island, New Zealand. Received 06/18/1993.

PI 618517. *Rubus* sp.

Wild. Collected in Australia. Latitude 28° 58' S. Longitude 168° 3' E. Norfolk Island, north of New Zealand. Pedigree - Collected from the wild on Norfolk Island (Australia).

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 07/02/1992.

PI 618518. *Rubus lasiococcus* A. Gray

Wild. Collected 06/25/1992 in Oregon, United States. Latitude 43° 45' N. Longitude 122° 25' W. Elevation 1830 m. Bachelor Mtn, Willamette Nat'l Forest, mixed conifer forest. Pedigree - Collected from the wild in Oregon.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown; Gong Deshen, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Shi Shengde, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; De Sheng Wei, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Cheng Xiang Wang, Guizhou Botanical Garden, Guizhou Academy of Science, Liuchongguan, Guiyang, Guizhou 550001, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 618519. *Rubus coreanus* Miq.

Wild. 92152; *R. coreanus*. Collected 06/07/1992 in Guizhou, China. Latitude 26° 23' N. Longitude 109° 9' E. Elevation 431 m. Dong Fang Forest Farm 25 km northeast of Liping Arboretum and Experimental plantings. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618520. *Rubus coreanus* Miq.

Wild. 92216; *R. coreanus*. Collected 06/26/1992 in Guizhou, China. Latitude 26° 20' N. Longitude 106° 40' E. Elevation 1046 m. About 42 km south of Guiyang, just north of Chi Tu village. Beside road. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618521. *Rubus eustephanos* Focke ex Diels

Wild. 92022; *R. eustephanos*. Collected 05/21/1992 in Guizhou, China. Latitude 27° 49' N. Longitude 108° 45' E. Elevation 650 m. In the vicinity (within 1 km) of the Ecological Station in Fanjing Shan Nature Preserve, about 27 km NW of Jiangkuo, Kiangkuo County. Very steep mountains, heavily vegetated Near Hei Wan River. Pedigree - Collected from the wild in China. Additional information is forthcoming.

- PI 618522. *Rubus multibracteatus* H. Lev. & Vaniot**
 Wild. 92198; *R. multibracteatus*. Collected 06/23/1992 in Guizhou, China. Latitude 25° 0' N. Longitude 105° 46' E. Elevation 861 m. a few km west of Ceheng (just past Ceyang). This species is common in this region. Pedigree - Collected from the wild in China. Additional information is forthcoming.
- PI 618523. *Rubus multibracteatus* H. Lev. & Vaniot**
 Wild. 92218; *R. multibracteatus*. Collected 06/24/1992 in Guizhou, China. Latitude 25° 7' N. Longitude 106° 1' E. Elevation 861 m. An Mao Ao village, 25 km SW of Wangmo, Wangmo County We walked a short distance into the woods and then back down the road. Plants beside road. Pedigree - Collected from the wild in China. Additional information is forthcoming.
- PI 618524. *Rubus niveus* Thunb.**
 Wild. 92172; *R. niveus*. Collected 06/19/1992 in Guizhou, China. Latitude 25° 2' N. Longitude 105° 27' E. Elevation 1357 m. Zao Ti Park in Anlong, Anlong County. Plants growing by an irrigation channel in partial shade. Pedigree - Collected from the wild in China. Additional information is forthcoming.
- PI 618525. *Rubus parvifolius* L.**
 Wild. 92117; *R. parvifolius*. Collected 06/01/1992 in Guizhou, China. Latitude 26° 30' N. Longitude 108° 10' E. Elevation 840 m. Drive 43 km northeast from Leishan collected in the vicinity of Xijiang town in Leigong Nature Preserve, Leichan County. cool, subtropical, mountainous vegetation, mostly shrubby with scattered large trees. Pedigree - Collected from the wild in China. Additional information is forthcoming.
- PI 618526. *Rubus parvifolius* L.**
 Wild. 92131; *R. parvifolius*. Collected 06/04/1992 in Guizhou, China. Latitude 25° 42' N. Longitude 108° 48' E. Elevation 410 m. Drive from Rongjiang to Congjiang, Congjiang County 10 km west of Congjiang. The region is extensively cultivated or too steep for access so government official needed to help collect. collection along a trail up a creek valley dense vegetation : low shrubs, ferns, small trees. Pedigree - Collected from the wild in China. Additional information is forthcoming.
- PI 618527. *Rubus parvifolius* L.**
 Wild. 92136; *R. parvifolius*. Collected 06/05/1992 in Guizhou, China. Latitude 25° 38' N. Longitude 108° 58' E. Elevation 492 m. About 10 km south of Xi Shan, near Bei Meng village, along roadside. Moist, subtropical forest. Pedigree - Collected from the wild in China. Additional information is forthcoming.
- PI 618528. *Rubus parvifolius* L.**
 Wild. 92151; *R. parvifolius*. Collected 06/07/1992 in Guizhou, China. Latitude 26° 23' N. Longitude 109° 9' E. Elevation 461 m. Dong Fang Forest Farm 25 km northeast of Liping Arboretum and Experimental plantings. small plants growing among the grass and weeds in open exposed areas of the arboretum. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618529. *Rubus parvifolius* L.

Wild. 92220; *R. parvifolius*. Collected 06/03/1992 in Guizhou, China. Latitude 25° 7' N. Longitude 106° 1' E. Elevation 861 m. An Mao Ao village 25 km SW of Wanagmo, Wangmo County Walked a short distance into the woods and then back down the road. on side of road through a mixed forest. Many plants of these species along roadside. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618530. *Rubus parvifolius* L.

Wild. 92300; *R. parvifolius*. Collected 06/04/1992 in Guizhou, China. Latitude 25° 42' N. Longitude 108° 48' E. Elevation 410 m. 8 km west of Congjiang, in Congjiang County. Plants hanging down a bank in shade, beside road. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618531. *Rubus parvifolius* L.

Wild. 92301; *R. parvifolius*. Collected 06/18/1992 in Guizhou, China. Latitude 25° 8' N. Longitude 104° 57' E. Elevation 1342 m. Drive to trailhead of Ma Li River Gorge trail about 8 km northeast of Xingyi, Xingyi county. Walk down into canyon and long a trail on the face of the cliff near trailhead. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618532. *Rubus swinhoei* Hance

Wild. 92138; *R. swinhoei*. Collected 06/05/1992 in Guizhou, China. Latitude 25° 38' N. Longitude 108° 58' E. Elevation 581 m. 10 km south of Xi Shan. moist subtropical forest. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618533. *Rubus swinhoei* Hance

Wild. 92147; *R. swinhoei*. Collected 06/07/1992 in Guizhou, China. Latitude 26° 8' N. Longitude 109° 5' E. Elevation 677 m. Shi Jin Shan Forest Farm about 20 km wouth west of Liping. extension reforestation. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 618534. *Rubus tsangiorum* Hand.-Mazz.

Wild. 92304; *R. tsangorum*. Collected 07/03/1992 in Guizhou, China. Latitude 32° 2' N. Longitude 118° 47' E. Elevation 0 m. Nanjing Botanical Garden, Nanjiing. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were collected by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Judith Young, Unknown; Gong Deshen, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Shi Shengde, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; De Sheng Wei, Guizhou Botanical Garden, Liuchongguan, Guiyang, Guizhou 550001, China; Cheng Xiang Wang, Guizhou

Botanical Garden, Guizhou Academy of Science, Liuchongguan, Guiyang, Guizhou 550001, China. Donated by Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Received 07/21/1992.

PI 618535. *Rubus* sp.

Wild. 92169; *R. sp.*. Collected 06/19/1992 in Guizhou, China. Latitude 25° 2' N. Longitude 105° 23' E. Elevation 1268 m. drive from Xingyi to Anlong, Anlong County near Wen Jia Po village, about 6 km west of Anlong. open rocky slope beside road with scattered shrubs. Pedigree - Collected from the wild in China. Additional information is forthcoming.

PI 618536. *Rubus* sp.

Wild. 92188; *R. sp.*. Collected 06/21/1992 in Guizhou, China. Latitude 25° 0' N. Longitude 105° 38' E. Elevation 1660 m. drive 28 km southeast from Anlong to Shi Pan village Hiked around Xian He Ping Mountain. high on Xian He Ping Mountain. Pedigree - Collected from the wild in China. Additional information is forthcoming.

The following were developed by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada. Received 11/20/1991.

PI 618537. *Rubus macvaughianus* Rzed. & Calderon

Breeding. 90-35-11. Collected in Mexico. Pedigree - Seedling selection from seedlot collected in Mexico. Selected for resistance to the aphid vector of the raspberry mosaic virus complex, at Abbotsford.

PI 618538. *Rubus macvaughianus* Rzed. & Calderon

Breeding. 90-35-12. Collected in Mexico. Pedigree - Seedling selection from seedlot collected in Mexico. Selected for resistance to the aphid vector of the raspberry mosaic virus complex, at Abbotsford.

PI 618539. *Rubus macvaughianus* Rzed. & Calderon

Breeding. 90-35-14. Collected in Mexico. Pedigree - Seedling selection from seedlot collected in Mexico. Selected for resistance to the aphid vector of the raspberry mosaic virus complex, at Abbotsford.

The following were developed by USDA, ARS, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Richard H. Converse, USDA/ARS, Oregon State University, Dept. Botany & Plant Pathology, Corvallis, Oregon, United States. Received 11/16/1983.

PI 618540. *Rubus lambertianus* var. *glaber* Hemsl.

Breeding. Collected in China. Pedigree - Increased seed from Chinese seedling selection CRUB 429. (This accession was part of the PL,SD 'breakout' - 1992).

The following were collected by J. Scott Cameron, Washington State University, Research & Extension Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Developed by Washington State University, SW

Washington Research Unit, 1919 NE 78th St., Vancouver, Washington 98665, United States. Received 02/25/1992.

PI 618541. *Rubus idaeus* L.

Breeding. 2 SIM 1D. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Yellow fruit.

PI 618542. *Rubus idaeus* L.

Breeding. 2 SIM 1C. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Red fruit.

PI 618543. *Rubus armeniacus* Focke

Breeding. 2 PAI 1A. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

PI 618544. *Rubus armeniacus* Focke

Breeding. 2 PAI 1B. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

PI 618545. *Rubus armeniacus* Focke

Breeding. 2 PAI 1C. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

PI 618546. *Rubus armeniacus* Focke

Breeding. 2 BIO 1A. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

PI 618547. *Rubus armeniacus* Focke

Breeding. 2 GOR 1A. Collected 02/1992 in Chile. Pedigree - Selected from the wild from Chile. Collection information is forthcoming.

The following were collected by Robert Skirvin, University of Illinois, Dept of Horticulture, 258 Plant and Animal Biotech. Lab., Urbana, Illinois 61801, United States. Received 04/20/1992.

PI 618548. *Rubus laciniatus* Willd.

Wild. Collected 03/08/1992 in Victoria, Australia. Latitude 38° 2' S. Longitude 145° 54' E. Jindivic. Pedigree - Collected from the wild in Australia. Probably the same species found in Oregon. Could be useful for genetic comparisons in future studies.

The following were donated by Dan Hinkley, Heronswood Nursery, 7530 288th NE, Kingston, Washington 98346, United States. Received 06/29/1992.

PI 618549. *Rubus lambertianus* var. *glaber* Hemsl.

Cultivated. Collected in China. Pedigree - Uncertain, from botanical collection.

PI 618550. *Rubus irenaeus* Focke

Cultivated. Collected in China. Pedigree - Uncertain, from botanical collection.

PI 618551. *Rubus microphyllus* var. *subcrataegifolius* (H. Lev. & Vaniot) Ohwi

Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

PI 618552. *Rubus nepalensis* (Hook. f.) Kuntze
Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

PI 618553. *Rubus palmatus* var. *coptophyllus* (A. Gray) Koidz.
Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

PI 618554. *Rubus parvifolius* L.
Cultivated. Collected in Unknown. Pedigree - Uncertain, from botanical collection.

The following were collected by Wes Messinger, Oregon State University, Dept. Horticulture, Corvallis, Oregon 97331, United States. Received 07/02/1992.

PI 618555. *Rubus lasiococcus* A. Gray
Wild. Collected 06/25/1992 in Oregon, United States. Latitude 43° 16' N. Longitude 122° 39' W. Elevation 1830 m. Bachelor Mtn, Willamette Nat'l Forest, mixed conifer forest. Pedigree - Collected from the wild in Oregon.

PI 618556. *Rubus lasiococcus* A. Gray
Wild. Collected 06/25/1992 in Oregon, United States. Latitude 43° 16' N. Longitude 122° 39' W. Elevation 1830 m. Bachelor Mtn, Willamette Nat'l Forest, mixed conifer forest. Pedigree - Collected from the wild in Oregon.

PI 618557. *Rubus lasiococcus* A. Gray
Wild. Collected 06/25/1992 in Oregon, United States. Latitude 43° 16' N. Longitude 122° 39' W. Elevation 1830 m. Bachelor Mtn, Willamette Nat'l Forest, mixed conifer forest. Pedigree - Collected from the wild in Oregon.

The following were developed by Luther Burbank, Santa Rosa, California, United States. Donated by Lon J. Rombough, 13113 Ehlen Road, P.O. Box 365, Aurora, Oregon 97002, United States. Received 07/17/1991.

PI 618558. *Rubus hybrid*
Cultivar. "Snowbank". Pedigree - white fruited mutant of blackberry.

The following were developed by Peter H. Tallman, 5690 Steeplechase Dr., Longmont, Colorado 80503, United States. Received 07/22/1991.

PI 618559. *Rubus occidentalis* L.
Breeding. WS001 OP. Pedigree - Open-pollinated seed of seedling selection from the wild. Fallbearing black raspberry which also fruits normally on floricanes the following summer. Quality similar to wild.

PI 618560. *Rubus occidentalis* L.
Breeding. Pedigree - Open-pollinated seed of seedling selection from the wild. 'White-fruited' type of black raspberry, berry ripens to a dirty orange color. Floricanes are green. Poor quality.

The following were developed by Francis J. Lawrence, USDA/ARS/NCGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by Elzibeth Volk, Oregon State University, Dept. Botany and Plant Path., Corvallis, Oregon 97331, United States. Received 02/1991.

PI 618561. *Rubus hybrid*

Breeding. ORUS 1826 ORUSM 271. Collected in Oregon, United States. Elevation 0 m. Corvallis Was almost released by Lawrence, went as far as large scale grower trials and I believe still exists in commercial plantings (2002). Chad Finn notes: very good separation, good but tart flavor appears to get raspberry bushy dwarf virus. Pedigree - OSC 1122 (Marion x OSC 878 [Jenner x Eldorado]) x Boysen.

The following were developed by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada. Received 07/18/1991.

PI 618562. *Rubus leucodermis* Douglas ex Torr. & A. Gray

Breeding. 90-34. Pedigree - collected from the wild. No additional information provided upon receipt.

The following were collected by Raul Castillo, Instituto Nacional de Investigaciones Agropecuarias, Departamento de Recursos, Fitogeneticos, Estacion Experimental, Quito, Pichincha, Ecuador; David Spooner, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706-1590, United States. Donated by George A. White, USDA, ARS, National Germplasm Repository, University of California, Davis, California 95616, United States. Received 08/05/1991.

PI 618563. *Rubus sp.*

Wild. Collected 1991 in Ecuador. Pedigree - Collected from the wild in Ecuador. Passport data not received.

PI 618564. *Rubus sp.*

Wild. Collected 1991 in Ecuador. Pedigree - Collected from the wild in Ecuador. Passport data not received.

PI 618565. *Rubus sp.*

Wild. Collected 1991 in Ecuador. Pedigree - Collected from the wild in Ecuador. Passport data not received.

The following were collected by Margaret M. Stahler, USDA/SCS, Plant Materials Center, 3415 NE Granger, Corvallis, Oregon 97333, United States; James R. Ballington, North Carolina State University, Department of Horticultural Sciences, Box 7609, Raleigh, North Carolina 27695-7609, United States; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States; Maxine Thompson, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States. Donated by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/25/1991.

PI 618566. *Rubus hispidus* L.
Wild. Running Blackberry, Swamp Blackberry, Sw. Collected 07/23/1991 in Pennsylvania, United States. Latitude 40° 44' N. Longitude 77° 46' W. Near a bog in Bear Meadows, halfway down the hill. Pedigree - Collected from the wild in Pennsylvania. (This accession was part of the PL,SD 'breakout' - 1992).

PI 618567. *Rubus odoratus* L.
Wild. Red-flowering Raspberry, Purple-flowerin. Collected 07/23/1991 in Pennsylvania, United States. Latitude 40° 44' N. Longitude 77° 46' W. Near a bog in Bear Meadows, halfway down the hill. Pedigree - Collected from the wild in Pennsylvania. (This accession was part of the PL,SD 'breakout' - 1992).

The following were collected by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan; Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Donated by Naohiro Naruhashi, Toyama University, Department of Biology, Faculty of Science, Toyama, Toyama 930, Japan. Received 08/30/1991.

PI 618568. *Rubus ikenoensis* H. Lev. & Vaniot
Wild. Collected 08/20/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1900 m. Mt. Tateyama, Tateyama-machi, Nakaniikawa-gun, Toyama Pref. Pedigree - Collected from the wild in Japan.

PI 618569. *Rubus illecebrosus* Focke
Wild. Collected 08/21/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1600 m. Hirayu, foot of Mt. Norikura-dake, Nyukawa-mura, Yoshiki-gun. Pedigree - Collected from the wild in Japan.

PI 618570. *Rubus parvifolius* L.
Wild. Nawashiro-ichigo. Collected 08/19/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 100 m. Ikakeyama, Enotomari-cho, Nano-shi, Ishikawa Prefecture. Pedigree - Collected from the wild in Japan.

PI 618571. *Rubus phoenicolasius* Maxim.
Wild. Collected 08/21/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 500 m. Kuzuyama, Kamitakara-mura, Kibi-gun, Gifu Prefecture. Pedigree - Collected from the wild in Japan.

PI 618572. *Rubus microphyllus* var. *subcrataegifolius* (H. Lev. & Vaniot) Ohwi
Wild. Collected 08/21/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 1600 m. Hirayu, Mt. Norikura-dake, Nyukawa-mura, Yoshiki-gun, Gifu. Pedigree - Collected from the wild in Japan.

PI 618573. *Rubus trifidus* Thunb.
Wild. Collected 08/19/1991 in Honshu, Japan. Latitude 36° 30' N. Longitude 136° 30' E. Elevation 5 m. Matsudaehama, Himi City, Toyama Prefecture. Pedigree - Collected from the wild in Japan.

The following were collected by Robert Skirvin, University of Illinois, Dept of Horticulture, 258 Plant and Animal Biotech. Lab., Urbana, Illinois 61801, United States. Received 11/01/1991.

PI 618574. *Rubus cissoides* A. Cunn.

Wild. Bush Lawyer. Collected 10/02/1991 in New Zealand. Latitude 41° 18' S. Longitude 173° 16' E. Sylvia Flats, along Rt. 7 to Nelson.
Pedigree - Collected from the wild in New Zealand. Tip layer from a large specimen that was growing over a native bush.

The following were collected by He Shan An, Nanjing Botanical Garden, Mem. Sun Yat-Sen, Nanjing, Jiangsu 21004, China. Received 11/15/1991.

PI 618575. *Rubus hirsutus* Thunb.

Cultivated. Collected in Jiangsu, China. Pedigree - Uncertain, from botanical collection. No additional information provided.

The following were developed by Hugh A. Daubeny, Agriculture Canada, Vancouver Experiment Station, 6660 N.W. Marine Drive, Vancouver, British Columbia V6T 1X2, Canada. Received 11/20/1991.

PI 618576. *Rubus macvaughianus* Rzed. & Calderon

Breeding. 90-35-1. Collected in Mexico. Pedigree - Seedling selection from seedlot collected in Mexico. Selected for resistance to the aphid vector of the raspberry mosaic virus complex, at Abbotsford.

PI 618577. *Rubus macvaughianus* Rzed. & Calderon

Breeding. 90-35-6. Collected in Mexico. Pedigree - Seedling selection from seedlot collected in Mexico. Selected for resistance to the aphid vector of the raspberry mosaic virus complex, at Abbotsford.

PI 618578. *Rubus macvaughianus* Rzed. & Calderon

Breeding. 90-35-8. Collected in Mexico. Pedigree - Seedling selection from seedlot collected in Mexico. Selected for resistance to the aphid vector of the raspberry mosaic virus complex, at Abbotsford.

The following were developed by Bruce H. Barritt, Washington State University, Tree Fruit Research & Extension Ctr., 1100 N. Western Avenue, Wenatchee, Washington 98801, United States. Received 03/18/1981.

PI 618579. *Rubus praecox* Bertol.

Breeding. Collected in Russian Federation. Original seedlot collected by J.W. Hull in the North Caucasus.

PI 618580. *Rubus praecox* Bertol.

Breeding. Collected in Russian Federation.

The following were donated by T. Righetti, Oregon State University, Cordley Hall Room 2042, Corvallis, Oregon 97331, United States. Received 04/25/1983.

PI 618581. *Rubus ellipticus* Sm.

Uncertain. Collected in Unknown. Pedigree - Unknown, possibly collected wild?. (This accession was part of the PL,SD 'breakout' - 1992).

The following were developed by D.L. Jennings, Scottish Crop Research Inst., Invergowrie, Scotland, United Kingdom. Donated by Jo Ann Robbins, Washington State University, Research and Extension Center, 7612 Pioneer Way East, Puyallup, Washington 98371, United States. Received 04/08/1988.

PI 618582. *Rubus idaeus* L.

Cultivar. "Glen Moy"; SCRI 7210/20; CANADA RUB0126. Pedigree - SCRI 688/12 x SCRI 6815/113 (Parentage includes *Rubus occidentalis*, Glen Clova, Lloyd George, and Mailing Landmark.). Orig. in Scotland by D.L. Jennings, Scottish Crop Res. Inst. SCRI 688/12 x SCRI 6815/113 (parentage includes *Rubus occidentalis*, Glen Clova, Lloyd George, and Mailing Landmark). Cross made in 1972; selected in 1976; tested as SCRI 7210/204; introd. in 1981. Marketing rights held by Plant Breeding Intl., Cam-bridge, U.K. Fruit: large; light to medium red; moderately firm; easy fruit abscission; ripens early. Plant: very productive, erect, vigorous, spine-free, pubescent canes, moderately winter hardy. Susceptible to cane midge and to root rot; gene Al gives resistance to two strains of the European aphid vector of the raspberry mosaic virus complex; gene Bu gives resistance to rasp-berry bushy dwarf virus.

The following were donated by Daniel Murphy, North Star Gardens, 23 Empire Dr., Suite 1000, St. Paul, Minnesota 55103, United States. Received 06/13/1991.

PI 618583. *Rubus idaeus* L.

Cultivar. "Century". Developed in Uncertain. Pedigree - Uncertain.

The following were collected by Kim Hummer, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/01/1991.

PI 618584. *Rubus spectabilis* Pursh

Wild. Salmonberry. Collected in Oregon, United States. Latitude 44° 50' N. Longitude 123° 40' W. Elevation 300 m. Polk Co., 1 m. west of Pedee near Monmouth Peak. Pedigree - Collected from the wild in Oregon. Collected near the bank of the Luckiamute River.

The following were collected by S. Sankar, Kerala Forest Research Institute, Peechi Thrissur District, Kerala 680 653, India. Donated by Ann E. Russell, Iowa State University, Botany Department, 353 Bessey Hall, Ames, Iowa 50011-1020, United States. Received 09/13/1997.

PI 618585. *Amaranthus hypochondriacus* L.

Landrace. Ames 23941. Collected 09/1997 in Kerala, India. Latitude 11° 5' N. Longitude 76° 35' E. Attappadi Valley in the Western Ghats. Pedigree - This accession is unusual for being a grain-type that originates so far south in India. David Brenner. Used in popcorn.

The following were donated by Rogers Brothers Seed Company, P.O. Box 4727, Boise, Idaho 83711-0727, United States. Received 1967.

PI 618586. *Pisum sativum* L.

Cultivated. "SPARKLE"; NSL 53058. 60 days to maturity. Early freezer. Vine 18". Pod 3-1/4". Dark. Blunt. 50% doubled. Seed large. Wrinkled. Good yield.

The following were developed by A. Doug Brede, J.R. Simplot Co., 5300 West Riverbend Avenue, Post Falls, Idaho 83854-9499, United States; S.H. Samudio, Jacklin Seed by Simplot, 5300 West Riverbend Avenue, Post Falls, Idaho 83854-9499, United States. Received 04/09/2001.

PI 618587. *Cynodon dactylon* (L.) Pers.

Cultivar. "SUNDEVIL II"; J-1223. CV-41. Pedigree - Synthetic developed from the maternal progenies of five clones, selected from old turf areas in Walla Walla, WA in 1987, Atoka, OK in 1988 and Jackson, TN in 1989. One of these clones was also used in the development of Jackpot. Attractive, uniform, moderately low growing, seed-propagated variety that has a medium-dark green color, medium-fine texture, and high density. In turf trials, demonstrated improved frost tolerance, drought tolerance to dormancy, and color recovery after dormancy. Improvements over Arizona common in turf quality, color, leaf texture, spring, summer, and winter density. Reproductive fertility in seed production is good. Average seedhead contains 4 to 5 racemes but is smaller in size than Jackpot's. Seedheads have purplish cast at maturity. Heading rate estimated at 50% on April 12 and over 90% on April 18, 1995, near Dome Valley, AZ.

The following were developed by Virginia Tech Intellectual Properties, Inc., Virginia, United States. Received 04/20/2001.

PI 618588 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "766"; VA96W-351. PVP 200100134. Pedigree - P81401A1-32-2(Arthur71/Caldwell/4/Arthur71/3/Benhur//Riley*2/W62-63-119A)/FFR555W.

The following were developed by Central Valley Seeds, Inc., United States. Received 04/20/2001.

PI 618589 PVPO. *Lactuca sativa* L.

Cultivar. "THERMO COS". Utility Patent 6649816; PVP 200100135.

The following were developed by Holden's Foundation Seeds, Inc., United States. Received 04/20/2001.

PI 618590 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "LH246". PVP 200100136.

PI 618591 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "LH254". PVP 200100137.

PI 618592 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "LH295". PVP 200100138.

PI 618593 PVPO. Zea mays L. subsp. mays
Cultivar. "LH310". PVP 200100139.

PI 618594 PVPO. Zea mays L. subsp. mays
Cultivar. "LH320". PVP 200100140.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 04/20/2001.

PI 618595. Brassica napus L.
Cultivar. "45A55". PVP 200100141.

PI 618596. Brassica napus L.
Cultivar. "46A42". PVP 200100142.

The following were developed by Mitsubishi Chemical Corporation, Tokyo, Tokyo, Japan. Received 04/20/2001.

PI 618597 PVPO. Oryza sativa L.
Cultivar. "YUMEIPPAI". PVP 200100143.

The following were developed by Cebeco International Seeds, Inc., P.O. Box 229, Halsey, Oregon 97348-0229, United States. Received 04/20/2001.

PI 618598 PVPO. Festuca arundinacea Schreb.
Cultivar. "ISI-TF 23". PVP 200100145.

The following were developed by Syngenta Seeds, Inc., United States. Received 04/20/2001.

PI 618599 PVPO. Phaseolus vulgaris L.
Cultivar. "CHARON". PVP 200100146.

The following were developed by Delta and Pine Land Company, Scott, Mississippi, United States. Received 04/20/2001.

PI 618600 PVPO. Gossypium hirsutum L.
Cultivar. "PM 2379 RR". PVP 200100150.

PI 618601 PVPO. Gossypium hirsutum L.
Cultivar. "SURE-GROW 150BR". PVP 200100151.

PI 618602 PVPO. Gossypium hirsutum L.
Cultivar. "SURE-GROW 521BR". PVP 200100152.

PI 618603 PVPO. Gossypium hirsutum L.
Cultivar. "SURE-GROW 150R". PVP 200100153.

PI 618604 PVPO. Gossypium hirsutum L.
Cultivar. "SURE-GROW 521R". PVP 200100154.

PI 618605 PVPO. Gossypium hirsutum L.

Cultivar. "SG 215 BG/RR". PVP 200100155.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 04/20/2001.

PI 618606 PVPO. *Pisum sativum* L.
Cultivar. "EARLY SWEET 414". PVP 200100156.

The following were developed by Novel Ag, Inc., United States. Received 04/20/2001.

PI 618607 PVPO. *Poa pratensis* L.
Cultivar. "HALLMARK". PVP 200100157.

PI 618608 PVPO. *Poa pratensis* L.
Cultivar. "WELLINGTON". PVP 200100158.

The following were developed by Delta and Pine Land Company, Scott, Mississippi, United States. Received 04/20/2001.

PI 618609 PVPO. *Gossypium hirsutum* L.
Cultivar. "DP 491". PVP 200100159.

PI 618610 PVPO. *Gossypium hirsutum* L.
Cultivar. "DELTA TOPAZ". PVP 200100161.

The following were developed by Syngenta Seeds, Inc., United States. Received 04/20/2001.

PI 618611 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "COKER 9025". PVP 200100162. Pedigree -
AL8500046(Coker762/I173-2909)/Coker 86-23.

The following were developed by Advanta USA, Inc., United States. Received 04/20/2001.

PI 618612 PVPO. *Gossypium hirsutum* L.
Cultivar. "PM 2156 RR". PVP 200100163.

The following were developed by Minnesota Agricultural Experiment Station, St. Anthony Park, Minnesota, United States. Received 04/20/2001.

PI 618613. *Glycine max* (L.) Merr.
Cultivar. Pureline. "MN0902CN". PVP 200100113.

The following were developed by South Dakota Agric. Exp. Station, Highmore, South Dakota, United States. Received 04/20/2001.

PI 618614 PVPO. *Glycine max* (L.) Merr.
Cultivar. "SD1091RR". PVP 200100160.

The following were developed by John L. Caddel, Oklahoma State University, Oklahoma Cooperative Extension Service, Department of Plant & Soil Sciences, Stillwater, Oklahoma 74078-0507, United States; Ali A. Zarrabi, Oklahoma State University, Department of Entomology & Plant Pathology, 127 Noble Research Center, Stillwater, Oklahoma 74078-0464, United States; J.D. Prater, Oklahoma State University, Dept. of Plant & Soil Sciences, Stillwater, Oklahoma 74078-6028, United States. Received 04/09/2001.

PI 618615. *Medicago sativa* L.

Cultivar. "OK 169". CV-200. Pedigree - A blend of seed of seven strains each of which was the result of interpollination of the best entries in field evaluations. Parentage includes: 555, Cimarron, OK 51, OK 49, 630, 655, 624, 636, 5432, Archer, DK 135, WL 320, 5364, Acclaim, Action, Apollo, Arc, Crockett, Dynasty, Edge, Good As Gold, Magnum+, Pro-Cut, Riley, Southern Special, Sure, and 20 experimental strains. Averaged 102.4% in seven tests in 3 production years and four tests for one production year (about 3% higher than average, which is as good as any well-tested cultivar from public or private breeding program). Standard pest resistance tests indicate high resistance to bacterial wilt, and the spotted alfalfa aphid. Moderate resistance to phytophthora root rot and low resistance to anthracnose and the blue alfalfa aphid. Fall dormancy is approx. 4.6 compared to Saranac = 4 and Archer = 5 (1 to 9 scale, where 9 is very non dormant). Flower color about 95% purple and 5% variegated.

The following were developed by Richard Berberet, Oklahoma State University, Department of Entomology & Plant Pathology, Room 127 NRC, Stillwater, Oklahoma 74078-0464, United States; John L. Caddel, Oklahoma State University, Oklahoma Cooperative Extension Service, Department of Plant & Soil Sciences, Stillwater, Oklahoma 74078-0507, United States; Ali A. Zarrabi, Oklahoma State University, Department of Entomology & Plant Pathology, 127 Noble Research Center, Stillwater, Oklahoma 74078-0464, United States; J.D. Prater, Oklahoma State University, Dept. of Plant & Soil Sciences, Stillwater, Oklahoma 74078-6028, United States. Received 04/09/2001.

PI 618616. *Medicago sativa* L.

Breeding. OK 163. GP-338. Pedigree - An equal blend of seed from 6 populations: OK 106, OK 108, OK 122, OK 123, OK 124 and OK 125. Broad gene base germplasm descending from hundreds of world collection accessions with little enhancement for adaptation. Strain crossed with Cimarron pollen but seed harvested from PIs. Tests for resistance to the following diseases presented as percent resistant plants: fusarium wilt - OK 163 = 48, Agate(R) = 54, MNGN-1(S) = 5; bacterial wilt - OK 163 = 36, Vernal(R) = 42, Narragansett(S) = 2; and phytophthora root rot - OK 163 = 15, Agate(R) = 43, Saranac(S) = 5; spotted alfalfa aphid - OK 163 = 38, Baker (R) = 50, and Caliverde(S) = 2.

PI 618617. *Medicago sativa* L.

Breeding. OK 164. GP-339. Pedigree - An equal blend of seed from 6 populations: OK 106, OK 108, OK 122, OK 123, OK 124 and OK 125. Broad gene base germplasm descending from hundreds of world collection accessions with significant enhancement for adaptation. Strain crossed with PI's pollen and seed harvested from Cimarron. Tests for resistance

to the following diseases presented as percent resistant plants:
fusarium wilt - OK 164 = 46, Agate(R) = 54, MNGN-1(S) = 5; bacterial
wilt - OK 164 = 46, Vernal(R) = 42, Narragansett(S) = 2; and
phytophthora root rot - OK 164 = 28, Agate(R) = 43, Saranac(S) = 5;
spotted alfalfa aphid - OK 164 = 49, Baker(R) = 50, and Caliverde(S) =
2.

PI 618618. *Medicago sativa* L.

Breeding. OK 187. GP-340. Pedigree - An equal blend of seed from 6
populations: OK 106, OK 108, OK 122, OK 123, OK 124 and OK 125. Broad
gene base germplasm descending from hundreds of world collection
accessions with little enhancement for adaptation. Strain crossed with
Cimarron pollen but seed harvested from PIs. Tests for resistance to the
following diseases presented as percent resistant plants; fusarium wilt
- OK 187 = 34, Agate(R) = 54, MNGN-1(S) = 5; bacterial wilt - OK 187 =
31, Vernal(R) = 42, Narragansett(S) = 2; and phytophthora root rot - OK
187 = 25, Agate(R) = 43, Saranac(S) = 5; spotted alfalfa aphid - OK 187
= 24, Baker(R) = 50, and Caliverde(S) = 2.

PI 618619. *Medicago sativa* L.

Breeding. OK 188. GP-341. Pedigree - An equal blend of seed from 6
populations: OK 106, OK 108, OK 122, OK 123, OK 124 and OK 125. Broad
gene base germplasm descending from hundreds of world collection
accessions with little enhancement for adaptation. Strain crossed with
Cimarron pollen but seed harvested from PIs. Tests for resistance to the
following diseases presented as percent resistant plants; fusarium wilt
- OK 188 = 58, Agate(R) = 54, MNGN-1(S) = 5; bacterial wilt - OK 188 =
38, Vernal(R) = 42, Narragansett(S) = 2; and phytophthora root rot - OK
188 = 28, Agate(R) = 43, Saranac(S) = 5; and spotted alfalfa aphid - OK
188 = 37, Baker(R) = 50, and Caliverde(S).

PI 618620. *Medicago sativa* L.

Breeding. OK 189. GP-342. Pedigree - An equal blend of seed from 6
populations: OK 106, OK 108, OK 122, OK 123, OK 124, and OK 125. Broad
gene base germplasm descending from hundreds of world collection
accessions with little enhancement for adaptation. These populations
possess many genes tracing to their highly diverse parentage not
normally possessed by most cultivars and experimental strains in
traditional breeding programs. In addition to their varying degrees of
adaptation contributed by their adapted parent, they provide some
resistance to fusarium wilt (*Fusarium oxysporum*), bacterial wilt
(*Clavibacter michiganensis*), phytophthora root rot (*Phytophthora*
megasperma), anthracnose (*Collectotrichum trifolii*), blue alfalfa aphid
(*Acyrtosiphon kondoi*) (biotype BAOK90 collected in Oklahoma), and pea
aphid (*A. Pisum*).

PI 618621. *Medicago sativa* L. subsp. *sativa*

Breeding. OK 208. GP-343. Pedigree - An equal blend of seed from 6
populations: OK 106, OK 108, OK 122, OK 123, OK 124, and OK 125. Broad
gene base germplasm from hundreds of world collection accessions with
little enhancement for adaptation. Strain crossed with Cimarron pollen
but seed harvested from PIs. Tests for resistance to the following
diseases presented as percent resistant plants: fusarium wilt - OK 208 =
54, Agate(R) = 54, MNGN-1(S) = 5; bacterial wilt - OK 208 = 29,
Vernal(R) = 42, Narragansett(S) = 2; and phytophthora root rot - OK 208
= 19, Agate(R) = 43, Saranac(S) = 5; and spotted alfalfa aphid - OK 208
= 56, Baker(R) = 50, and Caliverde(S) = 2.

The following were donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

PI 618622. *Amaranthus caudatus* L.

Cultivar. RRC 78S-8; RRC 8; Ames 1966; CVE. S. 19954; E. S. 19954. Collected 1976 in Unknown. The seeds are tan (RRC: white), flowers orange, leaves green. The RRC class type is 'edulis.' All observations except seed color from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 618623. *Amaranthus hypochondriacus* L.

Landrace. IC 5527; RRC 46; RRC 78S-46; Ames 1996; YC 5527. The seeds are white, flowers pink and green, leaves green. The RRC class type is Nepal grain. It segregates for height and branching. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were developed by Wisconsin Alumni Research Foundation, University of Wisconsin, Madison, Wisconsin, United States. Received 05/02/2001.

PI 618624 PVPO. *Solanum tuberosum* L.

Cultivar. "W84-75R". PVP 9700269.

The following were donated by Arizona Crop Imp. Assoc., University of Arizona, Tucson, Arizona, United States. Received 1961.

PI 618625. *Pisum sativum* L.

Cultivar. "PAPAGO"; REG NO 1. CV-1. Pedigree - Originated as a selection from seed obtained from the Papago Indian Reservation. Medium green foliage. Erect. Slightly branching stems. Tall growing. Late maturity. Flowers are white. Pods small and green. Seeds smooth. Light cream. Orange-yellow cotyledons. Intermediate in frost resistance. High yield. Cultivated.

The following were donated by University of Wisconsin, Wisconsin Agr. Exp. Station, Madison, Wisconsin, United States. Received 1968.

PI 618626. *Pisum sativum* L.

Breeding. WISCONSIN 183. GP-5. Pedigree - F18 generation. Selection from Delwiche Commando. Other parents unknown. Plant height 70 cm. Number of nodes 19. First pod at node 15. 5 pods per plant. 4 peas per pod. Peas dark green. Seeds small. Wrinkled and green. Resistant to Fusarium wilt (*Fusarium oxysporum* f. *lisi* race 1) and bean virus 2. Variable for resistance Fusarium near-wilt (*Fusarium oxysporum* f. *lisi* race 2). High processing quality. Cultivated.

The following were donated by USDA-ARS/Washington Agric. Exp. Station, Pullman, Washington, United States. Received 1971.

PI 618627. *Pisum sativum* L.

Breeding. PH-91-3. GP-11. Pedigree - An F7 selection. Parentage is (Perfected Freezer 60 x P.I. 16659) x (Early Perfection 3040 x C-165). Resistant to pea root rot complex (*Fusarium solani*) and *Pythium* spp. Remains vigorous and yields well in soil where root rot susceptible peas are destroyed. Varies between 60-100% resistance to near wilt. White flowered. Double podded. Flowers in the 12 - 13th node. Cultivated.

The following were donated by D.L. Auld, University of Idaho, Dept. of Plant, Soil and Entomology, Moscow, Idaho 83843, United States. Received 1979.

PI 618628. *Pisum sativum* L.

Cultivar. "MELROSE"; ID 119 MICH 119. CV-11. Pedigree - F6 selection from cross between Perfection edible spring pea and selection from Austrian Winter field pea. Chocolate brown, speckled and mottled seed coat. Smooth seed. Yellow cotyledons. Flowers early June above 15th node. Indeterminate. 2 - 3 purple flowers borne on each peduncle. Vines may exceed 1.5 m in length at maturity. Tolerant to *Ascochyta* foot rot and pea leaf weevil. Susceptible *Fusarium* wilt r.

The following were donated by John M. Kraft, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350, United States. Received 1979.

PI 618629. *Pisum sativum* L.

Breeding. VR74-410-2. GP-19. Pedigree - Selection from cross between New Season x P.I. 193835. Unique in being immune to Pea Seedborne Mosaic Virus and resistant to *Fusarium oxysporum* f. sp. pisi race 1 (common wilt) and 2 (near wilt). Resistant pea root rot complex. Used canning. Double to triple podded. Blooms 11th - 12th node. Wrinkled seeds. Cultivated.

PI 618630. *Pisum sativum* L.

Breeding. VR74-1492-1. GP-20. Pedigree - Wisconsin 7105 x Geneva 059-81. Unique in being immune to Pea Seedborne Mosaic Virus and resistant to *Fusarium oxysporum* f. sp. pisi race 1 (common wilt) and 2 (near wilt). Resistant pea root rot complex. Used canning. Double podded. Blooms 14th - 16th node. Reduced stipules. Seed mixture wrinkled and smooth types. Cultivated.

PI 618631. *Pisum sativum* L.

Breeding. 792024. GP-22. Pedigree - PH-114-119 X Afila. Combines modified tendrill gene, dominant genes for resistance to Races 1 and 2 of *Fusarium oxysporum* and resistance to root rot caused by *F. solani* pisi and *Pythium ultimum*. 70 cm tall at maturity. Strong tendrill habit and reduced foliage (should resist lodging and vine rot). Dimple-seeded canner. White flowers. Yellow cotyledons. Blooms on the 14th to 15th node. Double podded. Cultivated.

The following were donated by S.T. Ali-Kahn, Agriculture Canada, Research Station, Box 3001, Morden, Manitoba R0G 1J0, Canada. Received 1981.

PI 618632. *Pisum sativum* L.

Breeding. MP 919. GP-40. 100 days to maturity. Semi-leafless plant type. Leaves converted to tendrils. Stipules normal. Vine length 116 cm. Yield approx 2,000 kg/ha. Yellow seed color. Round. Smooth. Seed weight large, approx. 220 g/1,000 seeds. Susceptible to *Ascochyta* blight and powdery mildew. Cultivated.

PI 618633. *Pisum sativum* L.

Breeding. MP 926. GP-41. 95 days to maturity. Semi-leafless plant type. Leaves converted to tendrils. Stipules normal. Vine length 120 cm. Yield approx 1,900 kg/ha. Yellow seed color. Round. Smooth. Seed weight small, approx. 160 g/1,000 seeds. Susceptible to *Ascochyta* blight and powdery mildew. Cultivated.

The following were donated by John M. Kraft, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350, United States. Received 1983.

PI 618634. *Pisum sativum* L.

Breeding. WR-1158. GP-31. Pedigree - [(B-669-87-0 x G22063)F4 x 74SN5]F8. White flowers. Green cotyledons. Semi-faciated growth habit. Blooms 13th node. Strong double podding tendency. Dry seeds dimpled. Dark green. 76 cm tall. Resistant races 1, 2, 5 and 6 *F. oxysporum* f. sp. pisi and *F. solani* f. sp. pisi. Tolerant root rot complex. Cultivated.

PI 618635. *Pisum sativum* L.

Breeding. WR-1167. GP-32. Flowers white. Green cotyledons. Blooms 13th node. Double podded. Long pointed pods. Green dimpled seed. 76 cm tall. Resistant races 1, 2, 5 and 6 *F. oxysporum* f. sp. pisi and *F. solani* f. sp. pisi. Cultivated.

PI 618636. *Pisum sativum* L.

Breeding. 75-786. GP-34. Pedigree - PH-14-119 X 792022. Unique in combining modified tendril with genes for resistance to races 1 and 2 of *Fusarium oxysporum* and tolerance to common root rot caused by *Aphanomyces euteiches*. Susceptible to powdery mildew caused by *Erysiphe pisi*. Wrinkle-seeded canner. White flowers. Green cotyledons. Double podded with blunt pods. Blooms at 14th to 15th node. Cultivated.

PI 618637. *Pisum sativum* L.

Breeding. 84-1638. GP-35.

PI 618638. *Pisum sativum* L.

Breeding. 84-1930. GP-36. Pedigree - Derived from cross PH-91-3 X 792022. Info. from Crop Sci. 26(6):1262 (1986) -- unique in combining modified tendril with genes for resistance to races 1 and 2 of *Fusarium oxysporum* and tolerance to common root rot caused by *Aphanomyces euteiches*. Susceptible to powdery mildew caused by *Erysiphe pisi*. Wrinkle-seeded canner. Green cotyledons. Flowers at 12th node. Double podded. Slightly curved pods. Cultivated.

The following were donated by R. G. Robinson, University of Minnesota, Agronomy Department, St. Paul, Minnesota 55108, United States. Received 1986.

PI 618639. *Pisum sativum* L.

Cultivar. "PROCON". CV-67. Pedigree - Selection from cross of Century x Gastro. Derived from a single plant selected in the F4 generation. Matures 99 days after planting. High yield. Used as protein-concentrate feed for livestock. White flowers. Cream-colored seeds. Seed coats smooth. Dimpled. Seed shape spherical to rectangular-spherical. Seed protein concentration 25%. Vine length ave. 69 cm. Cultivated.

The following were donated by Jerzy Puchalski, Polish Academy of Sciences, Botanical Garden, Center for Biological Diversity Conservation, Warsaw, Warszawa 02-973, Poland. Received 04/30/2001.

PI 618640. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-111; 17583; NSGC 8703. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618641. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-112; 17584; NSGC 8704. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618642. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-113; 17585; NSGC 8705. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618643. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-123; 17592; NSGC 8706. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618644. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-13; 17537; NSGC 8707. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618645. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-143; 17600; NSGC 8708. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618646. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-24; 17542; NSGC 8709. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618647. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-29; 17545; NSGC 8710. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618648. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-31; 17546; NSGC 8711. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618649. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-32; 17547; NSGC 8712. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

PI 618650. *Secale cereale* L. subsp. *cereale*

Landrace. 77A-33; 17548; NSGC 8713. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.

- PI 618651. *Secale cereale* L. subsp. *cereale***
Landrace. 77A-553; 17602; NSGC 8714. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618652. *Secale cereale* L. subsp. *cereale***
Landrace. 77A-554; 17603; NSGC 8715. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618653. *Secale cereale* L. subsp. *cereale***
Landrace. 77A-557; 17605; NSGC 8716. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618654. *Secale cereale* L. subsp. *cereale***
Landrace. 77A-73; 17564; NSGC 8717. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618655. *Secale cereale* L. subsp. *cereale***
Landrace. 77A-95; 17574; NSGC 8718. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618656. *Secale cereale* L. subsp. *cereale***
Landrace. 78A-672; 17683; NSGC 8719. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618657. *Secale cereale* L. subsp. *cereale***
Landrace. 78A-860; 17694; NSGC 8720. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618658. *Secale cereale* L. subsp. *cereale***
Landrace. 78A-863; 17695; NSGC 8721. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618659. *Secale cereale* L. subsp. *cereale***
Landrace. 78A-866; 17697; NSGC 8722. Collected in Portugal. Latitude 39° 30' N. Longitude 8° 0' W.
- PI 618660. *Secale cereale* L. subsp. *cereale***
Cultivated. 5803; Kuckucks Riesengebirgs Landroggen; NSGC 8723.
Collected in Germany. Latitude 51° 30' N. Longitude 10° 30' E.
- PI 618661. *Secale cereale* L. subsp. *cereale***
Cultivated. 14959; Osterreich; NSGC 8724. Collected in Austria. Latitude 47° 30' N. Longitude 14° 0' E.
- PI 618662. *Secale cereale* subsp. *afghanicum* (Vavilov) K. Hammer**
Uncertain. 30225; NSGC 8725. Collected in Armenia. Latitude 40° 30' N. Longitude 45° 0' E.
- PI 618663. *Secale cereale* subsp. *ancestrale* Zhuk.**
Uncertain. 14357; NSGC 8726. Collected in Turkey. Latitude 39° 0' N. Longitude 35° 0' E.
- PI 618664. *Secale cereale* subsp. *ancestrale* Zhuk.**
Uncertain. 17791; NSGC 8727. Collected in Sweden. Latitude 62° 0' N. Longitude 15° 0' E.

- PI 618665. *Secale cereale* subsp. *ancestrale* Zhuk.
Uncertain. 24263; NSGC 8728.
- PI 618666. *Secale cereale* subsp. *ancestrale* Zhuk.
Uncertain. 30226; NSGC 8729. Collected in Turkey. Latitude 39° 0' N.
Longitude 35° 0' E.
- PI 618667. *Secale cereale* subsp. *dighoricum* Vavilov
Uncertain. 17785; NSGC 8730. Collected in Sweden. Latitude 62° 0' N.
Longitude 15° 0' E.
- PI 618668. *Secale cereale* subsp. *dighoricum* Vavilov
Uncertain. 30224; NSGC 8731. Collected in Russian Federation. Latitude
60° 0' N. Longitude 47° 0' E.
- PI 618669. *Secale cereale* subsp. *rigidum* Vavilov & Antropov
Uncertain. 14193; NSGC 8732. Collected in Turkey. Latitude 39° 0' N.
Longitude 35° 0' E.
- PI 618670. *Secale cereale* subsp. *segetale* Zhuk.
Uncertain. 7520; NSGC 8733. Collected in Azerbaijan. Latitude 40°
30' N. Longitude 47° 0' E.
- PI 618671. *Secale cereale* subsp. *segetale* Zhuk.
Uncertain. 14372; NSGC 8734. Collected in Turkey. Latitude 39° 0' N.
Longitude 35° 0' E.
- PI 618672. *Secale cereale* subsp. *segetale* Zhuk.
Uncertain. 24269; NSGC 8735.
- PI 618673. *Secale cereale* subsp. *segetale* Zhuk.
Uncertain. 1782/94; NSGC 8736. Collected in Turkey. Latitude 39° 0'
N. Longitude 35° 0' E.
- PI 618674. *Secale sylvestre* Host
Uncertain. 838/96; NSGC 8737. Collected in Ukraine. Latitude 49° 0'
N. Longitude 32° 0' E.
- PI 618675. *Secale sylvestre* Host
Uncertain. 839/96; NSGC 8738. Collected in Bulgaria. Latitude 43° 0'
N. Longitude 25° 0' E.
- PI 618676. *Secale sylvestre* Host
Uncertain. 14185; NSGC 8739.
- PI 618677. *Secale sylvestre* Host
Uncertain. 30227; NSGC 8740. Collected in Ukraine. Latitude 49° 0'
N. Longitude 32° 0' E.
- PI 618678. *Secale vavilovii* Grossh.
Uncertain. 30228; NSGC 8741. Collected in Armenia. Latitude 40° 30'
N. Longitude 45° 0' E.
- PI 618679. *Secale vavilovii* Grossh.
Uncertain. 833/96; NSGC 8742. Collected in Georgia. Latitude 42° 0'
N. Longitude 43° 30' E.

PI 618680. *Secale vavilovii* Grossh.

Uncertain. 1783/94; NSGC 8743. Collected in Turkey. Latitude 39° 0' N. Longitude 35° 0' E.

PI 618681. *Secale vavilovii* Grossh.

Uncertain. 1784/94; NSGC 8744. Collected in Turkey. Latitude 39° 0' N. Longitude 35° 0' E.

PI 618682. *Secale vavilovii* Grossh.

Uncertain. 14197; NSGC 8745.

The following were donated by Botanischer Garten, Universitat Leipzig, Linnestrasse 1, Leipzig, Saxony D-04103, Germany. Received 12/30/1992.

PI 618683. *Ampelopsis glandulosa* var. *brevipedunculata* (Maxim.) Momiy.
Cultivated. No. 2007; Ames 20102.

The following were collected by Peter Widrlechner, 3674 Dam Lane, Phelps, Wisconsin 54554, United States; Irene Widrlechner, 3674 Dam Lane, Phelps, Wisconsin 54554, United States. Received 09/20/1996.

PI 618684. *Aronia melanocarpa* (Michx.) Elliott

Wild. Ames 23189. Collected 09/15/1996 in Wisconsin, United States. Latitude 46° 4' N. Longitude 89° 28' W. Section 19, T41N, R11E, Vilas County.

The following were donated by The Morton Arboretum, Route 53, Lisle, Illinois 60532, United States. Received 02/19/1990.

PI 618685. *Betula alleghaniensis* Britton

Wild. Morton No.10; 8; Ames 12798; Ames 14895. Collected in Pennsylvania, United States. Huntingdon County.

PI 618686. *Brunnichia ovata* (Walter) Shinnars

Wild. 9; Ames 10216. Collected in Illinois, United States. Latitude 37° 11' N. Longitude 89° 11' W. Alexander County.

The following were collected by Manuel Cardoso Alves, Jardim Botanico da Universidade de Coimbra, Arcos do Jardim, Coimbra, Coimbra 3049, Portugal; Jaime Ventura Forte, Jardim Botanico da Universidade de Coimbra, Arcos do Jardim, Coimbra, Coimbra 3049, Portugal; Armenio Da Costa Matos, Jardim Botanico da Universidade de Coimbra, Arcos do Jardim, Coimbra, Coimbra 3000, Portugal. Donated by Jardim Botanico da Universidade de Coimbra, Arcos do Jardim, Coimbra, Coimbra 3000-393, Portugal. Received 05/24/1999.

PI 618687. *Calendula arvensis* L.

Wild. Index Seminum 333; Ames 25291. Collected 03/18/1998 in Coimbra, Portugal. Latitude 40° 12' N. Longitude 8° 25' W. Coimbra.

The following were donated by Quentin Jones, Crops Research Division - USDA-ARS, New Crops Research Branch, Plant Industry Station, Beltsville, Maryland 20705-2350, United States; Robert Kleiman, USDA, ARS, National

Center for Agric., Utilization Research, Peoria, Illinois 61604, United States; Thompson & Morgan Ltd., London Road, Ipswich, England IP2 0BA, United Kingdom. Received 01/30/1992.

PI 618688. *Calendula officinalis* L.

Cultivated. NU 40508; Ames 18458.

The following were donated by Quentin Jones, Crops Research Division - USDA-ARS, New Crops Research Branch, Plant Industry Station, Beltsville, Maryland 20705-2350, United States; Thompson & Morgan Ltd., London Road, Ipswich, England IP2 0BA, United Kingdom; USDA, ARS-Midwest Area, National Center for Agricultural Utilization Research, 1815 North University Street, Peoria, Illinois 61604, United States. Received 01/29/1998.

PI 618689. *Calendula officinalis* L.

Cultivated. "Pacific Apricot Beauty"; NU 40515; Ames 24242.

The following were collected by K.G. Tkaczenko; V.M. Reinwald. Donated by V.L. Komarov Botanical Institute, Russian Academy of Sciences, 2, Prof. Popov Street, St. Petersburg, Leningrad 197376, Russian Federation. Received 01/16/1998.

PI 618690. *Chrysanthemum zawadskii* subsp. *latilobum* (Maxim.) Kitag.

Wild. 2799; Ames 24130. Collected 1996 in Primorye, Russian Federation. Mountain ridge Gamova.

The following were donated by University of Guelph, Arboretum, Guelph, Ontario N1G 2W1, Canada. Received 05/25/1990.

PI 618691. *Cornus drummondii* C. A. Mey.

Wild. 890414; Ames 13773. Collected 1990 in Ontario, Canada. Latitude 41° 44' N. Longitude 82° 41' W. Elevation 175 m. Pelee Island, Mosquito Bay, Essex County. Shrub thicket.

The following were donated by Agriculture Canada, Research Branch, Research Station, Unit 100-101 Route 100, Morden, Manitoba R6M 1Y5, Canada. Received 02/17/1984.

PI 618692. *Cornus sericea* L. subsp. *sericea*

Cultivated. Ames 2812.

The following were donated by University de Neuchatel, Jardin Botanique, 22 Chemin di Chantemrie, Neuchatel, Neuchatel CH-2000, Switzerland. Received 08/04/1992.

PI 618693. *Dianthus armeria* L.

Wild. No. 11; Ames 19297. Collected in Switzerland. Elevation 500 m. Foot of Jura Mountains.

The following were collected by O. Arndt. Donated by Botanischer Garten, Universitat Leipzig, Linnestrasse 1, Leipzig, Saxony D-04103, Germany. Received 06/17/1991.

PI 618694. *Dianthus carthusianorum* L.

Wild. 314; Ames 15713. Collected in Saxony-Anhalt, Germany. Latitude 51° 4' N. Longitude 12° 9' E. Zangenberg.

The following were donated by Botanical Garden, Institute of Ecology and Botany, of the Hungarian Academy of Sciences, Vacratot, Pest H-2163, Hungary. Received 06/03/1992.

PI 618695. *Dianthus carthusianorum* L.

Cultivated. No. 934; Ames 19129.

The following were donated by University de Neuchatel, Jardin Botanique, 22 Chemin di Chantemrie, Neuchatel, Neuchatel CH-2000, Switzerland. Received 08/04/1992.

PI 618696. *Dianthus carthusianorum* L.

Wild. No. 12; Ames 19298. Collected in Valais, Switzerland. Latitude 46° 10' N. Longitude 7° 30' E. Alps Mountains of Valais.

The following were donated by P. Kupfer, Jardin Botanique de l'Universite, Pertuis-du Sault 58, Neuchatel, Neuchatel CH-2000, Switzerland. Received 05/20/1993.

PI 618697. *Dianthus deltoides* L.

Wild. No. 36; Ames 21071. Collected in Spain. Near L'Ebro River. Valley.

The following were collected by Jaana Moilanen. Donated by Botanical Garden, University of Joensuu, P.O. Box 111, Joensuu, Pohjois-Karjala SF 80101, Finland. Received 09/08/1993.

PI 618698. *Dianthus deltoides* L.

Wild. 157; Ames 21464. Collected 09/14/1992 in Pohjois-Karjala, Finland. Latitude 62° 35' N. Longitude 29° 49' E. Repokallio, Joensuu. Dry meadow.

The following were donated by Botanical Garden, Institute of Ecology and Botany, of the Hungarian Academy of Sciences, Vacratot, Pest H-2163, Hungary. Received 06/03/1992.

PI 618699. *Dianthus giganteus* d'Urv.

Cultivated. No. 922; Ames 19122.

PI 618700. *Dianthus* hybrid

Cultivated. No. 915; Ames 19119. Pedigree - OP garden hybrid, complex of species including *D. plumarius* and *caryophyllus*.

PI 618701. *Dianthus hybrid*

Cultivated. No. 919; Ames 19120. Pedigree - OP garden hybrid, a complex of species including *D. plumarius* and *caryophyllus*.

PI 618702. *Dianthus hybrid*

Cultivated. No. 923; Ames 19123. Pedigree - OP garden hybrid, a complex of species including *D. plumarius* and *caryophyllus*.

PI 618703. *Dianthus hybrid*

Cultivated. No. 926; Ames 19124. Pedigree - OP garden hybrid, a complex of species including *E. plumarius* and *caryophyllus*.

PI 618704. *Dianthus hybrid*

Cultivated. No. 932; Ames 19127. Pedigree - OP garden hybrid, a complex of species including *D. plumarius* and *caryophyllus*.

The following were donated by Montreal Botanic Garden, 4101 Rue Sherbrooke Est., Montreal, Quebec H1X 2B2, Canada. Received 03/16/1990.

PI 618705. *Dianthus lumnitzeri* Wiesb.

Cultivated. 106; Ames 13126.

PI 618706. *Dianthus petraeus* Waldst. & Kit.

Cultivated. 107; Ames 13127.

The following were collected by Geza Kosa, A Magyar Tudomanyos Akademia, Okologiai es Botanikai Kutatointezetenek, Botanikus Kertje, Vacratot, Pest H-2163, Hungary. Donated by Botanical Garden, Institute of Ecology and Botany, of the Hungarian Academy of Sciences, Vacratot, Pest H-2163, Hungary. Received 06/03/1992.

PI 618707. *Dianthus serotinus* Waldst. & Kit.

Wild. No. 212; Ames 19128. Collected in Pest, Hungary. Latitude 47° 4' N. Longitude 19° 23' E. Festucetum vaginatae-danubiale, near Tatar-Szentgyorgy, Kiskunsag. Part of Great Hungarian Plain between Duna, Danube, and Tisza rivers. Sand steppes.

The following were collected by N.B. Alexeeva; A.V. Cholopova; G.A. Firsov; V.M. Reinwald. Donated by V.L. Komarov Botanical Institute, Russian Academy of Sciences, 2, Prof. Popov Street, St. Petersburg, Leningrad 197376, Russian Federation. Received 09/29/1992.

PI 618708. *Dianthus superbus* L.

Wild. 3306; Ames 20026. Collected 1989 in Sakhalin, Russian Federation. Latitude 44° 10' N. Longitude 146° E. Kunashir Island in the Kuril Islands.

The following were donated by Botanical Garden, Institute of Ecology and Botany, of the Hungarian Academy of Sciences, Vacratot, Pest H-2163, Hungary. Received 06/03/1992.

PI 618709. *Dianthus pancicii* Velen.

Cultivated. No. 935; Ames 19130.

The following were collected by Peter Bristol, The Holden Arboretum, 9500 Sperry Road, Kirtland, Ohio 44060-5172, United States; Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; Tae Shan Jin, Heilongjiang Academy of Forestry, Harbin, China; Jun Liu, Heilongjiang Academy of Forestry, Haping Road, Harbin, Heilongjiang, China; Kris Bachtell, The Morton Arboretum, 4100 Illinois Route 53, Lisle, Illinois 60532-1293, United States. Donated by Edward J. Garvey, USDA, ARS, National Germplasm Repository, U.S. National Arboretum, Washington, District of Columbia 20002, United States. Received 12/29/1993.

PI 618710. *Flueggea suffruticosa* (Pall.) Baill.

Wild. HLJ-088; 348-93; NA 65050; Ames 21775. Collected 09/13/1993 in Heilongjiang, China. Latitude 43° 51' 49" N. Longitude 128° 54' 48" E. Elevation 340 m. Jiang Po Lake, Jian Shan Jiao. Scrub community on rocky cliff above Jiang Po Lake. In association with *Quercus mongolica* and *Prunus mandshurica*. Subshrub. Plant height 1 meter. Fruit green, round.

The following were collected by Geza Kosa, A Magyar Tudományos Akademia, Okologiai es Botanikai Kutatointezetek, Botanikus Kertje, Vacratot, Pest H-2163, Hungary. Donated by Botanical Garden, Institute of Ecology and Botany, of the Hungarian Academy of Sciences, Vacratot, Pest H-2163, Hungary. Received 05/27/1997.

PI 618711. *Gypsophila fastigiata* L.

Wild. Index Seminum 148; Ames 23758. Collected 1997 in Pest, Hungary. Latitude 47° 4' N. Longitude 19° 23' E. Near Tatarszentgyorgy, Kiskunsag. Part of the Great Hungarian Plain between the rivers Duna (Danube) and Tisza. Sand-steppes.

The following were donated by Arboretum Kostelec, University of Agriculture - Prague, Kostelec nad Cernymi Lesy, Prague, Central Bohemia, Czech Republic. Received 04/20/1984.

PI 618712. *Hypericum androsaemum* L.

Cultivated. 196; Ames 2929.

The following were collected by A. S. Barclay, USDA, ARS, Crops Research Division, Plant Industry Station, Beltsville, Maryland 20705-2350, United States. Donated by USDA, ARS-Midwest Area, National Center for Agricultural Utilization Research, 1815 North University Street, Peoria, Illinois 61604, United States. Received 01/29/1998.

PI 618713. *Lavatera triloba* L. subsp. *triloba*

Wild. 21; NU 42575; Ames 24400. Collected 01/1998 in Spain.

The following were collected by Jardin Botanique de l'Universite, Pertuis-du-Sault 58, Neuchatel, Neuchatel CH 2000, Switzerland. Donated by P. Kupfer, Jardin Botanique de l'Universite, Pertuis-du Sault 58, Neuchatel, Neuchatel CH-2000, Switzerland. Received 05/20/1993.

PI 618714. *Ligustrum vulgare* L.

Wild. No. 60; Ames 21075. Collected 1992 in Switzerland. Elevation 500 m. Foot of Jura Mountains.

The following were donated by John Orlowsky, National Clonal Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333, United States; Hortus Botanicus Academie Scientiarum, Taschkent, Karamurtakaja, Tashkent, Uzbekistan. Received 04/30/1990.

PI 618715. *Potentilla recta* L.

Uncertain. 2298; Ames 13504.

The following were donated by Smith Nursery Co., Box 515, Charles City, Iowa 50616, United States. Received 10/21/1986.

PI 618716. *Rhus copallinum* L.

Cultivated. Ames 7467. Large shrub or small tree, deciduous. 10 plants purchased from Smith Nursery for regional testing program. These were the only plants with good fall color in a large planting.

The following were collected by Paul Meyer, The University of Pennsylvania, Morris Arboretum, 9414 Meadowlark Avenue, Philadelphia, Pennsylvania 19118, United States; William Thomas, Longwood Gardens, P.O. Box 501, Kennett Square, Pennsylvania 19348, United States; Kevin Conrad, U.S. National Arboretum, USDA, ARS, 3501 New York Avenue, N.E., Washington, District of Columbia 20002, United States; Peter del Tredici, The Arnold Arboretum, Harvard University, 125 Arbor Way, Jamaica Plain, Massachusetts 02130-3159, United States. Donated by Shawn Belt, USDA, ARS, U.S. National Arboretum, National Germplasm Repository, Glenn Dale, Maryland 20769-9157, United States; Edward J. Garvey, USDA, ARS, National Germplasm Repository, U.S. National Arboretum, Washington, District of Columbia 20002, United States. Received 01/12/1995.

PI 618717. *Spiraea blumei* G. Don

Wild. WD147; NA 64914; Ames 22276. Collected 09/28/1994 in Hubei, China. Latitude 32° 22' 44" N. Longitude 111° 9' 46" E. East of Bai Yang Ping. Cut over slope. Shrub, 1.5 meters tall.

The following were donated by University of Guelph, Arboretum, Guelph, Ontario N1G 2W1, Canada. Received 03/02/1988.

PI 618718. *Staphylea trifolia* f. *pyriformis* Dore

Wild. 860013; Ames 8078. Collected in Ontario, Canada. Latitude 45° 16' N. Longitude 75° 45' W. Ottawa, Nepean Township, Carleton Region.

The following were collected by Robert E. Schutzki, Michigan State University, Department of Horticulture, 218 Plant & Soil Sciences Building, East Lansing, Michigan 48824-1325, United States; Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Vasily Yukhnovsky, National Agricultural University of Ukraine, Forestry Department, Str. 15 G. Oborony, Kiev, Kiev

252041, Ukraine; Victor Sviatetsky, National Agricultural University of Ukraine, Forestry Department, Str. 15 G. Oborony, Kiev, Kiev 252041, Ukraine. Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 09/29/1999.

PI 618719. *Tanacetum parthenium* (L.) Sch. Bip.

Wild. WSYUS 71; Ames 25551. Collected 09/17/1999 in Cherkasy, Ukraine. Latitude 48° 43' 40" N. Longitude 30° 17' 25" E. Elevation 225 m. 3 km southwest of Gerezhenovka. Edge of road in front of forest. Open site, 0-2% slope with a northwestern exposure. Clay loam soil with good drainage. Low herbaceous plant.

The following were developed by HZPC Holland B.V., Netherlands. Received 05/09/2001.

PI 618720 PVPO. *Solanum tuberosum* L.

Cultivar. "DIVINA". PVP 9800156.

The following were developed by A. Doug Brede, J.R. Simplot Co., 5300 West Riverbend Avenue, Post Falls, Idaho 83854-9499, United States. Received 04/30/2001.

PI 618721. *Poa pratensis* L.

Cultivar. "CHICAGO". CV-63. Pedigree - Originated as a highly apomictic, single-plant selection from hybrid cross number 89-1075, made in the field in July 1989. Plants of Huntsville Kentucky bluegrass (PI 531526) were open-pollinated with plants of 20 commercial varieties. In turf quality testing, ranked twenty-ninth in the 1995 National Turfgrass Evaluation Program (NTEP) trials for Kentucky bluegrass, out of 103 entries (Morris 2000). Ranked first at two locations using a mowing height of 40-50 mm. Showed improved resistance to leaf rust (*Puccinia coronata*), stem rust (*P. graminis*), dollar spot (*Lanzia* or *Moellerodiscus*), and billbug (*Sphenophorus* spp.).

The following were developed by B.V. Conger, Tennessee Agricultural Experiment Station, University of Tennessee, Dept. of Plant and Soil Sciences, Knoxville, Tennessee 37901-1071, United States. Received 04/16/2001.

PI 618722. *Dactylis glomerata* L.

Cultivar. "PERSIST". CV-16; PVP 200200147. Pedigree - Originates from seed collected from 6 year or older stands of orchardgrass throughout Tennessee. Single solid-seeded rows were established at Knoxville, Crossville and Jackson. Resulting plants were subjected to clipping or grazing to a height of 2.5 cm 4 times per year for 4 years. Seventy two individual plant selections were made from the population at Jackson. These were cloned and established at Knoxville. Six clones were selected based on vigor, progeny tests, disease ratings and synchrony of flowering. Produced high dry matter yields in both Tennessee and Kentucky and exceeded Potomac (the standard for seed production) in seed yield trials at Halsey, Oregon. Similar in maturity date to currently grown cultivars. Easily and readily established and has excellent seedling vigor. In a grazing trial in southwest Tennessee, performance

of early-weaned steers was equal to that of those grazing Benchmark and produced more available forage, both with and without clover. Equal to currently grown cultivars in crude protein, acid detergent fiber and neutral detergent fiber. A strong characteristic is persistence, In the mentioned grazing trial, a greater than 80% stand remained after 4 years of grazing and drought stress in the pastures seeded without clover. There was a 10% or less stand of Benchmark. Expected to have good adaptation throughout all regions of the U.S. where orchardgrass is grown, but will be especially productive and persistent in the southern portion of the middle southern states, which is outside the optimum adaptation range of other currently grown orchardgrass cultivars.

The following were developed by Victor Maddox, Mississippi State University, Plant and Soil Sciences, 117 Dorman Hall, Mississippi State, Mississippi 39759, United States; H. Wayne Philley, Mississippi State University, Dept. of Plant & Soil Sciences, Box 9555, Mississippi State, Mississippi 39762, United States; M. Tomaso-Peterson, Mississippi State University, Dept. of Plant and Soil Sciences, Mississippi State, Mississippi 39762, United States; J.M. Goatley, Jr., Mississippi State University, Dept. of Plant and Soil Sciences, Mississippi State, Mississippi 39762, United States; B.A. Stewart, Dryland Agricultural Institute, West Texas A&M University, Post Office Box 278, Canyon, Texas 70016-0001, United States; Jeff V. Krans, Mississippi State University, Department of Plant & Soil Sciences, Box 9555, Mississippi State, Mississippi 39762, United States; D.W. Wells, Mississippi State University, Dept. of Plant and Soil Sciences, Mississippi State, Mississippi 39762, United States. Received 04/10/2001.

PI 618723. *Agrostis stolonifera* L.

Breeding. MSRS-328. GP-80. Pedigree - Originated from in vitro cell selection involving callus induction from Penncross creeping bentgrass seed and co-culture with *Rhizoctonia solani* in the host pathogen interaction system. Released 09/19/2000. Creeping bentgrass with enhanced resistance to brown patch disease (*Rhizoctonia solani*). In growth chamber and golf green evaluation displayed less symptoms of brown patch than other genotypes. In a greenhouse study, displayed less infection than Penncross creeping bentgrass. Should be useful in developing brown patch resistant cultivars.

PI 618724. *Agrostis stolonifera* L.

Breeding. MSRS-330. GP-81. Pedigree - Originated from in vitro cell selection involving callus induction from Penncross creeping bentgrass seed and co-culture with *Rhizoctonia solani* in the host pathogen interaction system. Released 09/19/2000. Creeping bentgrass with enhanced resistance to brown patch (*Rhizoctonia solani*). In growth chamber and golf green evaluations displayed less symptoms of brown patch than other genotypes. In a greenhouse study, polycross progeny displayed less infection than Penncross creeping bentgrass. Should be useful in developing brown patch resistant cultivars.

The following were developed by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Brady A. Vick, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105-5677, United States. Donated by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Received 04/12/2001.

PI 618725. *Helianthus annuus* L.

Genetic. Pureline. HA 421. GS-22. Pedigree - Bulked F10 maintainer genetic stock selected from the cross HA 341 / HA 821. Maintainer sunflower genetic stock possessing a mid-range oleic fatty acid composition. Available for use by the sunflower industry and public researchers to create sunflower hybrids with a mid-range oleic acid composition (NuSun) for utilization by the snack food industry of the U.S. Oleic acid concentration ranges from 54.9 to 71.3% and averaged 63.7% in the 1995 to 1998 in USDA breeding nurseries at Fargo, ND.

PI 618726. *Helianthus annuus* L.

Genetic. Pureline. HA 422. GS-23. Pedigree - Bulked F10 maintainer genetic stock selected from the cross HA 341 / HA 821. Maintainer sunflower genetic stock possessing a mid-range oleic fatty acid composition. Available for use by the sunflower industry and public researchers to create sunflower hybrids with a mid-range oleic acid composition (NuSun) for utilization by the snack food industry of the U.S. Oleic acid concentration ranges from 60.9 to 72.7% and averaged 66.9% in the 1995 to 1998 USDA breeding nurseries at Fargo, ND.

PI 618727. *Helianthus annuus* L.

Genetic. Pureline. HA 423. GS-24. Pedigree - Bulked F10 maintainer genetic stock selected from the cross HA 341 / HA 821. Maintainer sunflower genetic stock possessing a mid-range oleic fatty acid composition. Available for use by the sunflower industry and public researchers to create sunflower hybrids with a mid-range oleic acid composition (NuSun) for utilization by the snack food industry of the U.S. The oleic acid concentration ranged from 58.0 to 72.4% and averaged 67.0% in the 1995 to 1998 USDA breeding nurseries at Fargo, ND.

PI 618728. *Helianthus annuus* L.

Genetic. Pureline. HA 424. GS-25. Pedigree - Bulked F10 maintainer genetic stock selected from the cross HA 383 / HA 341. Maintainer sunflower genetic stock possessing a mid-range oleic fatty acid composition. Available for use by the sunflower industry and public researchers to create sunflower hybrids with a mid-range oleic acid composition (NuSun) for utilization by the snack food industry of the U.S. The oleic acid concentration ranged from 60.3 to 69.2% and averaged 64.1% in the 1995 to 1998 USDA breeding nurseries at Fargo, ND.

The following were developed by Mark A. Brick, Colorado State University, Department of Soil and Crop Sciences, Room C113, Fort Collins, Colorado 80521, United States; H.F. Schwartz, Colorado State University, Dept. of Plant Pathology and Weed Science, Fort Collins, Colorado 80523, United States; J.B. Ogg, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States; F. Judson, Fruita Research Station, 1910 L Road, Fruita, Colorado 81521, United States. Received 04/26/2001.

PI 618729. *Phaseolus vulgaris* L.

Breeding. Inbred. CO-32948. GP-217. Pedigree - GH196 / Anasazi. Advanced inbred line that combines mid-season maturity, high yield potential and resistance to BCM. This line and the Anasazi parent were tested for 3 yrs. at Fort Collins, CO. Mean days to harvest maturity 93 and 112 d,

mean seed yields 1774 and 1830 kg ha⁻¹, and mean seed weights were 35.7 and 26.7 g 100 seed⁻¹, for this line and Anasazi, respectively. The germplasm is homozygous for the bc2(2) allele which confers resistance to pathogroups I, II, III, IV, V and VI of BCMV. Semi-vine, prostrate, Type III growth habit.

PI 618730. *Phaseolus vulgaris* L.

Breeding. Inbred. CO-32977. GP-218. Pedigree - GH-196 / Anasazi. Advanced inbred line that combines mid-season maturity, high yield potential and resistance to BCM. This line and the Anasazi parent were tested for 3 yrs. at Fort Collins, CO. Mean days to harvest maturity were 93 and 112 d, mean seed yields were 1830 and 1830 kg ha⁻¹, and mean seed weights were 35.2 and 26.7 g 100 seed⁻¹, for this line and Anasazi, respectively. The germplasm is segregating for the bc2(2) allele which confers resistance to pathogroups I, II, III, IV, V, and VI of BCMV. Semi-vine, prostrate, Type III growth habit.

PI 618731. *Phaseolus vulgaris* L.

Breeding. Inbred. CO-40696. GP-219. Pedigree - Othello / Anasazi. Advanced inbred line that combines mid-season maturity, and high yield potential. This line and the Anasazi parent were tested for 3 yrs. at Fort Collins, CO. Mean days to harvest maturity were 94 and 112 d, mean seed yields were 1613 and 1830 kg ha⁻¹, and mean seed weights were 36.2 and 26.7 g 100 seed⁻¹, for this line and Anasazi, respectively. Semi-vine, prostrate, Type III growth habit.

The following were collected by Hortus Botanicus Pekinensis, Instituti Botanici Academiae Sinicae, Beijing, Beijing 100092, China. Donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

PI 618732. *Amaranthus retroflexus* L.

Wild. RRC 38; RRC 78S-38; Ames 1989. Collected 1977 in Taiwan. The seeds are black, flowers green, leaves green. The RRC class type is: weed. Native pigweed. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. The leaves are red on the undersides, as observed at the Plant Introduction Station, Ames, IA.

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan; Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

PI 618733. *Amaranthus hypochondriacus* L.

Landrace. A74-62; RRC 101C; RRC 78S-101C; Ames 2030. Collected 09/01/1977 in China. Pedigree - Since this *A. hypochondriacus* was segregated from an accession of *A. tricolor* at the RRC, it might be from a seed mixing error rather than from the same source as the parent accession RRC 101. The seeds are brown and white, flowers mixed, leaves mixed. The RRC class type is: Nepal.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Katherine O'Brien, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States. Received 05/10/2001.

PI 618734. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "IONA"; A89232S; IDO492; NSGC 8746. CV-918. Pedigree - Idaho 367/Klasic. Released 1999. Hard red spring wheat. Based on field evaluations in Washington and Idaho, has adult plant resistance to stripe rust and moderate susceptibility to leaf rust. Most similar in appearance to Probrand 751. High flour protein content and high milling yield.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 1995.

PI 618735. *Pseudoroegneria spicata* (Pursh) A. Love

Wild. T-21; W6 16733. Collected in Oregon, United States. Latitude 44° 33' N. Longitude 117° 26' W. Elevation 744 m. Plano Rd off I-84, Baker Co., near mile marker 330 at first fenced driveway over hillside (back side).

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 1995.

PI 618736. *Pseudoroegneria spicata* (Pursh) A. Love

Wild. no. K33; Acc:213; W6 16734. Collected in Idaho, United States. Latitude 46° 2' N. Longitude 116° 58' W. 4 miles north Lewiston on Pullman road, Nez Perce County.

The following were collected by Dave Stout, Washington State University, Regional Plant Introduction Station, Seed Storage, Pullman, Washington 99164-6402, United States; A. M. Davis, USDA, ARS, Regional Plant Introduction Station, 59 Johnson Hall, Pullman, Washington 99164-6402, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 1995.

PI 618737. *Pseudoroegneria spicata* (Pursh) A. Love

Wild. no. DS101; Acc:254; W6 16737. Collected in Washington, United States. Latitude 46° 34' N. Longitude 117° 8' W. Elevation 268 m. Colton, Whitman County, between mile markers 6 and 7 on Steptoe Canyon road.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 05/1995.

PI 618738. *Stipa sibirica* (L.) Lam.

Wild. E94070; W6 18028. Collected 09/1994 in Mongolia. Latitude 45° 47' 17" N. Longitude 111° 24' 17" E. Elevation 976 m. Northern edge of desert steppe. Desert steppe. Soils light brown, sandy loam texture.

PI 618739. *Leymus chinensis* (Trin.) Tzvelev

Wild. E94169; W6 18105. Collected 09/1994 in Mongolia. Latitude 47° 59' 49" N. Longitude 118° 6' 26" E. Elevation 466 m. Research station established to test shrub and tree species adaptation to steppe environment. Extreme northeast corner of Mongolia, approximately 30 km from border with Inner Mongolia. Grass steppe. Disturbed agricultural area.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/24/1992.

PI 618740. *Lolium* sp.

Wild. B92-224; W6 10911. Collected 07/02/1992 in Varna, Bulgaria. Latitude 43° 12' N. Longitude 27° 57' E. In vacant lot, across from entrance to the Faculty of Medicine.

The following were collected by David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States; Lloyd R. Nelson, Texas A&M University, Agricultural Research & Extension Center, P.O. Box 200, Overton, Texas 75684, United States. Donated by Lloyd R. Nelson, Texas A&M University, Agricultural Research & Extension Center, P.O. Box 200, Overton, Texas 75684, United States. Received 01/22/1993.

PI 618741. *Lolium* sp.

Wild. 316; W6 11214. Collected 07/08/1992 in Turkey. Latitude 35° 5' N. Longitude 30° 9' E. Elevation 1090 m. Mountain hillside, Dinar, Afyon.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuvëli, Agricultural University of Tirana, Dept. of Agronomy, Rr. "Myslym Shyri", Tirana, Albania. Received 09/1996.

PI 618742. *Thinopyrum pycnanthum* (Godr.) Barkworth

Wild. Al 029; W6 18621. Collected 08/25/1996 in Albania. Latitude 40° 23' 56" N. Longitude 19° 28' 38" E. Elevation 50 m. Jonufer, S of Vlore, off the Adriatic Bay of Vlore. West facing slope in terraced orchard. Height 50-60cm.

PI 618743. *Brachypodium phoenicoides* (L.) Roem. & Schult.

Wild. Al 049; W6 18628. Collected 08/26/1996 in Albania. Latitude

40° 11' 54" N. Longitude 20° 10' 35" E. Elevation 1290 m. Pastures of Cajup and surrounding hillside. Abundant. With other grasses on rocky hillside. Area grazed by sheep and goats. Height 50-60cm. Panicle length 6-8cm.

The following were collected by Scott Lambert, USDA-NRCS, Plant Materials Center, Room 127, Johnson Hall, Pullman, Washington 99164-6410, United States. Donated by Mark E. Stannard, National Resources Conservation Service, Washington State University, 211 Hulbert Hall, Pullman, Washington 99164-6211, United States. Received 12/10/1996.

PI 618744. *Deschampsia* sp.

Wild. W6 18930. Collected 09/10/1996 in Alma-Ata, Kazakhstan. Latitude 43° 0' N. Longitude 76° 30' E. 15 kilometers south of town of Almaty in the foothills of the Tianshun Mountains.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 618745. *Poa* sp.

Wild. B96-189; W6 19372. Collected 07/1996 in Bulgaria. Latitude 41° 39' 59" N. Longitude 24° 24' 37" E. Elevation 882 m. Rocky area on side of road near village of village, Gela. north.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 01/16/1992.

PI 618746. *Elymus mutabilis* (Drobow) Tzvelev

Wild. DJ-3981; W6 10291. Collected 08/15/1989 in Russian Federation. Elevation 1240 m. Between 660 and 661km markers. South side of Cheketeman Pass, Gorno Altay A.O. from summit (660km marker on Highway 52 at 1250m) to Cheketeman camp (666km marker at 960m). Siberia. Spikes long, arched, lightly-pigmented.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 618747. *Bromus inermis* Leyss. subsp. *inermis*

Wild. VIR D46; W6 17810. Collected 07/21/1995 in Russian Federation. Latitude 44° 12' 20" N. Longitude 40° 37' 12" E. Elevation 750 m. pH 7.2-7.7.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 05/1995.

PI 618748. *Stipa capillata* L.

Wild. E94205; W6 18123. Collected 09/1994 in Mongolia. Latitude 47° 53' 58" N. Longitude 113° 44' 25" E. Elevation 680 m. Range of low mountains along Herlen River 100 km west of Choibalsan. Mountain-grass steppe. Soils thin, many rock cobbles present. Aspect southwest, slope 5%.

PI 618749. *Koeleria macrantha* (Ledeb.) Schult.

Wild. W94077; W6 18226. Collected 09/1994 in Mongolia. Latitude 48° 39' 23" N. Longitude 102° 7' 23" E. Elevation 1574 m. About 15 km NW of Hayrhan. Open hillside. Mountain steppe. SE slope 3%.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 618750. *Bromus catharticus* Vahl var. *catharticus*

Cultivated. "Primabel"; W6 6222. Developed in France.

The following were collected by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 11/02/1993.

PI 618751. *Poa pratensis* L.

Wild. X93205; W6 13110. Collected 08/21/1993 in Xinjiang, China. Latitude 43° 41' N. Longitude 89° 18' E. Elevation 1870 m. Loam soil, middle pasture, 44km south of Jimsar, east sloping steep hillside pasture near Chuan Zi Jie Village, Xinjiang. Diversity immense.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 1995.

PI 618752. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-33; W6 16723. Collected in Nevada, United States. Latitude 40° 52' N. Longitude 115° 52' W. Elevation 1737 m. 5 miles north of Elko, Elko County, on Highway 225.

PI 618753. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-55; W6 16724. Collected in Nevada, United States. Latitude 40° 49' N. Longitude 115° 12' W. Elevation 1658 m. 5 m N of Secret Pass, Elko Co., NV.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States. Donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage

and Range Research Laboratory, Logan, Utah 84322-6300, United States.
Received 1995.

- PI 618754. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. A23; Acc:329; W6 16726. Collected in Nevada, United States.
Latitude 40° 41' N. Longitude 118° 4' W. 2 miles south of Mill City,
road to tungsten mine, Pershing County. Lat/lon accurate to Mill City.
- PI 618755. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. no. K75; Acc:379; W6 16727. Collected in Utah, United States.
Latitude 41° 44' N. Longitude 112° 10' W. Garland, Box Elder County.
- PI 618756. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. no. K160; Acc:380; W6 16728. Collected in Wyoming, United States.
Latitude 41° 48' N. Longitude 110° 32' W. Kemmerer, Lincoln County.
- PI 618757. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. no. K72; Acc:390; W6 16729. Collected in Idaho, United States.
Latitude 43° 37' N. Longitude 116° 13' W. 20 miles south of Boise,
1 mile east I-184, Ada County.
- PI 618758. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. no K174; Acc:394; W6 16730. Collected in Idaho, United States.
Latitude 42° 39' N. Longitude 111° 36' W. Soda Springs, Caribou
County.
- PI 618759. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. no. K70; Acc:401; W6 16731. Collected in Idaho, United States.
Latitude 43° 37' N. Longitude 116° 12' W. Boise, Ada County.
- PI 618760. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. no. A85; Acc:405; W6 16732. Collected in Utah, United States.
Highway 89-91 near summit, Box Elder County.

The following were collected by Luigi Guarino, IBPGR, c/o Agric. Research
Institute, P.O. Box 2016, Nicosia, Cyprus. Donated by Paul Quek,
International Plant Genetics Resources Institute, Regional Office for Asia,
the Pacific and Oceania, c/o IDRC, 7th Storey, RELC Building, Singapore.
Received 11/21/1994.

- PI 618761. *Eragrostis tef*** (Zuccagni) Trotter
Uncertain. 12007; W6 19137. Collected 1989 in Socotra, Yemen.

The following were collected by Jerrold I. Davis, Cornell University, L. H.
Bailey Hortorium, 462 Mann Library, Ithaca, New York 14853-4301, United
States; Robert J. Soreng, Cornell University, L. H. Bailey Hortorium, 462
Mann Library, Ithaca, New York 14853-4301, United States; K. Guney, Ankara
University, Ankara, Ankara, Turkey; U. Bingol, Ankara University, Ankara,
Ankara, Turkey; L. Kurt, Ankara University, Ankara, Ankara, Turkey. Received
02/10/1997.

- PI 618762. *Poa pratensis*** L.
Wild. 4060; W6 19188. Collected 07/13/1993 in Tokat, Turkey. Latitude
40° 5' N. Longitude 35° 56' E. Elevation 1067 m. Deveci Daglari,
26 km south of Zile. Shallow valley above creek.

The following were collected by Jerrold I. Davis, Cornell University, L. H. Bailey Hortorium, 462 Mann Library, Ithaca, New York 14853-4301, United States; Robert J. Soreng, Cornell University, L. H. Bailey Hortorium, 462 Mann Library, Ithaca, New York 14853-4301, United States; K. Guney, Ankara University, Ankara, Ankara, Turkey; U. Bingol, Ankara University, Ankara, Ankara, Turkey. Received 02/10/1997.

PI 618763. *Poa pratensis* L.

Wild. 4114; W6 19210. Collected 07/18/1993 in Antalya, Turkey. Latitude 37° 7' N. Longitude 31° 51' E. Elevation 1220 m. Toros Mountains, south of Beysehir on Route 07-11 towards Mediterranean Sea, 11 km south of Cevizli. Low ground in flat area in open *Pinus nigra* forest. Grey organic loamy clay soils. Occasional, rhizomatous, forming very sparse clones.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 618764. *Poa pratensis* L.

Wild. B96-231; W6 19402. Collected 07/1996 in Bulgaria. Latitude 41° 34' 10" N. Longitude 24° 51' 48" E. Elevation 714 m. 15km southeast of Smolyan, along Cherna River. Near village of Ravnishte. south.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 618765. *Poa attenuata* subsp. *argunensis* (Roshev.) Tzvelev

Wild. 96N-282; W6 19767. Collected 08/1996 in Mongolia. Latitude 49° 58' 52" N. Longitude 93° 45' 28" E. Elevation 1201 m. Uvs Aimag, dry draw and ridge tops in the sand hills 9 km north of Dzel and 57 km south of Tooromi. Slope varied from 0-25%. soils are sand. DOMINANT VEG: *Agropyron desertorum*, *Hedysarum fruticosum*, *Cleistogenes squarrosa*, *Caragana bungei*, *Caragana pygmaea*, *Stipa capillata* ECOLOGICAL ZONE: Steppe.

PI 618766. *Poa pratensis* L.

Wild. 96N-198; W6 19691. Collected 08/1996 in Mongolia. Latitude 48° 32' 54" N. Longitude 98° 29' 59" E. Elevation 2002 m. Site is 28 km southeast of town of Tosontsengel in Zuvhan Aimag. 3% east slope. Located in the wooded creek bottom with understory of shrub. Creek is running east. North slope is *Larix* while south is grass covered. Soils appear to be sandy/sandy loam. DOMINANT VEG: *Larix sibiricum*, *Dasiphora fruticosa*, *Salix ledebouriana*, *Carex korshinsky*, *Carex caespitosa*, *Poa pratense*, *Allium spinosa* ECOLOGICAL ZONE: Forest steppe - mountain meadow.

PI 618767. *Poa attenuata* Trin.

Wild. 96N-230; W6 19721. Collected 08/1996 in Mongolia. Latitude 48° 54' 25" N. Longitude 95° 40' 56" E. Elevation 1971 m. Site 14 km

west of Songino. 15% slope. Site is an east aspect mountain side. Ground is grass covered with no tree or shrubs. Soils are tan and appear to have significant gravel. Winter grazing areas. DOMINANT VEG: *Poa attenuata*, *Festuca lenensis*, *Thermopsis dahurica*, *Artemisia commutata*, *Artemisia frigida* ECOLOGICAL ZONE: Mountain steppe.

PI 618768. *Poa pratensis* L.

Wild. 96S-149; W6 19657. Collected 09/1996 in Mongolia. Latitude 49° 30' 19" N. Longitude 96° 38' 6" E. Elevation 1710 m. Zavhan Aimag, Tes Sum, about 80 km east of sum center. 3% east slope. Rolling hills with rock outcrops along the hill crest. Soils are very gravelly brown sands and loamy soils. Conifers occur in protected areas. DOMINANT VEG: *Elymus secalinus* + *Poa pratensis*, *Artemisia* sp., *Carex* sp.

PI 618769. *Poa attenuata* Trin.

Wild. 96N-215; W6 19707. Collected 08/1996 in Mongolia. Latitude 48° 56' 34" N. Longitude 97° 16' 33" E. Elevation 2002 m. Site is a northeast face on a draw running south toward Telmen Nuur. Site is 8 km northwest of Telmen Nuur and 10 km southeast of Holboo Nuur. 5% slope. Soils are sandy loam with gravel. DOMINANT VEG: *Poa attenuata*, *Kochia prostrata*, *Festuca lenensis*, *Artemisia commutata*, *Leontopodium leontopodoides*, *Potentilla bifurca* ECOLOGICAL ZONE: Forest Steppe.

PI 618770. *Poa attenuata* Trin.

Wild. 96N-239; W6 19729. Collected 08/1996 in Mongolia. Latitude 49° 13' 37" N. Longitude 94° 55' 52" E. Elevation 1878 m. 7 km southeast of Tsetserleg. 2% to 3% slope. On a very rocky, stony exposed hillside site with southwest aspect. Soil is gravelly. DOMINANT VEG: *Festuca lenensis*, *Stipa capillata*, *Agropyron cristatum*, *Poa attenuata*, *Heteropappus hispidus*, *Artemisia commutata* ECOLOGICAL ZONE: Steppe.

PI 618771. *Poa pratensis* L.

Wild. 96N-256; W6 19746. Collected 08/1996 in Mongolia. Latitude 49° 25' 50" N. Longitude 94° 29' 34" E. Elevation 2172 m. Uvs Aimag, located 26 km south on Beruuturuun and 18 km west of Mondaahoo. Site is a woodland opening with 10% slope and a south aspect with some logging and considerable scattered wood scraps about. DOMINANT VEG: Collected species plus *Geranium pratense*, *Carex pediformis*, *Thalictrum simplex*, *Delphinium grandifolium*, *Dianthus versicolor* ECOLOGICAL ZONE: Forest steppe.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 618772. *Phleum pratense* L.

Wild. VIR 291; W6 17749. Collected 09/18/1995 in Russian Federation. Latitude 44° 22' 15" N. Longitude 40° 22' 52" E. Elevation 550 m. pH 3.7-4.1.

PI 618773. *Phleum pratense* L.

Wild. VIR 312; W6 17756. Collected 09/21/1995 in Russian Federation. Latitude 44° 10' 12" N. Longitude 39° 56' 12" E. Elevation 1320 m.

Krasnodarskiy kray. Nearest village Mezmay. Area cut/grazed. Slope 0-6(10)%, aspect NE. Open. Moist, ridgetop. pH 5.1. Vegetation closed, seasonal tall grass. Dominant herb/grass species *Dactylis glomerata*, *Calamagrostis epigeios*, *Brachipodium sylvaticum*, *Elytrigia* r., *Galega orien*. Population distribution uniform, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618774. *Phleum pratense* L.

Wild. VIR D122; W6 17775. Collected 08/17/1995 in Russian Federation. Latitude 44° 48' 57" N. Longitude 38° 16' 59" E. Elevation 60 m. pH 5.9-6.7.

PI 618775. *Phleum pratense* L.

Wild. VIR D125A; W6 17776. Collected 08/17/1995 in Russian Federation. Latitude 44° 54' 39" N. Longitude 37° 57' 45" E. Elevation 70 m. pH 7.6-7.9.

PI 618776. *Phleum pratense* L.

Wild. VIR D126; W6 17777. Collected 08/17/1995 in Russian Federation. Latitude 45° 16' 26" N. Longitude 37° 23' 19" E. Elevation 50 m. pH 5.3-6.1.

PI 618777. *Phleum pratense* L.

Wild. VIR D129; W6 17779. Collected 08/20/1995 in Russian Federation. Latitude 44° 40' 57" N. Longitude 37° 57' 8" E. Elevation 380 m. pH 6.8-7.0.

PI 618778. *Phleum pratense* L.

Wild. VIR D130; W6 17780. Collected 08/21/1995 in Russian Federation. Latitude 44° 33' 30" N. Longitude 38° 21' 48" E. Elevation 700 m. pH 6-7.

PI 618779. *Phleum pratense* L.

Wild. VIR D135; W6 17783. Collected 08/23/1995 in Russian Federation. Latitude 43° 33' 5" N. Longitude 39° 54' 30" E. Elevation 200 m. pH 7.5.

PI 618780. *Dactylis glomerata* L.

Wild. VIR D36; W6 17807. Collected 07/20/1995 in Russian Federation. Latitude 44° 21' 24" N. Longitude 40° 43' 30" E. Elevation 450 m. pH 5.8.

PI 618781. *Dactylis glomerata* L.

Wild. VIR D47X; W6 17812. Collected 07/26/1995 in Russian Federation. Latitude 44° 4' 25" N. Longitude 42° 21' 24" E. Elevation 800 m. pH 7.8.

PI 618782. *Agrostis* sp.

Wild. VIR D7A; W6 17818. Collected 07/08/1995 in Russian Federation. Latitude 44° 48' 30" N. Longitude 38° 21' E. Elevation 80 m. pH 5.4-5.6.

The following were collected by Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California

92119-1219, United States; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Melvin Rumbaugh, R.R. 3, Box 125, Humboldt, Nebraska 68376, United States; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Jay Hart, 20 Bush Lane, Ithaca, New York 14850, United States; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 618783. *Phleum pratense* L.

Wild. 0049; VIR 215; US 49; W6 17836. Collected 09/03/1995 in Russian Federation. Latitude 44° 12' 30" N. Longitude 40° 15' 10" E. Elevation 550 m. Province Maykop, 5 km. southeast of Dakhovskaya. Past logged, now roadway. Slope 0-5%, aspect SE. Light open. Soil clay-loam upper-25 cm., clay >25 cm., pH 5.5-6.5. Seasonally dry, mid slope. Vegetation closed, evergreen tall grass and broad-leafed herb vegetation. Surrounding vegetation evergreen open forest with closed lower layers. Dominant tree species *Quercus* sp. Dominant shrub species *Rosa* sp. Dominant herb/grass species *Daucus* c., *Trifolium* sp., *Achellia* sp., *Geranium* sp., *Brachypodium* p., *Festuca* sp., *Calamagrostis* sp., *Agrostis* sp., *Phleum* sp. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618784. *Phleum pratense* L.

Wild. 0060; VIR 217; US 60; W6 17840. Collected 09/04/1995 in Russian Federation. Latitude 44° 37' 7" N. Longitude 40° 29' 24" E. Elevation 350 m. 1 km. east of Yeroslavskaya, and 30+ km. east of Maykop. Area grazed. Slope 11-40%, aspect S. Light open. Soil clay, cracking, pH 6.3-6.8, large rocks in profile. Seasonally dry, lower slope. Vegetation closed, seasonal tall grass. Surrounding veg. open deciduous forest with closed lower layers. Dominant tree species *Crataegus* sp., *Quercus* sp., *Monogyna*, *Pentagyna*. Dominant shrub species *Rosa* sp., *Prunus* sp. Dominant herb/grass species *Achellea* sp., *Daucus* c., thistle, bindweed, chicory, *Bothriochloa* i., *Cynodon* d. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618785. *Phleum pratense* L.

Wild. 0077; VIR 234; US 77; W6 17843. Collected 09/05/1995 in Russian Federation. Latitude 44° 5' 4" N. Longitude 40° 50' 38" E. Elevation 620 m. Province Maykop/Labrinsk, 10 km southeast of Psebay. Area grazed. Slope 6-10%, aspect SW. Light open. Soil clay, pH 5.1-5.6. Moist to seasonally dry, lower slope, stream terrace. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species *Quercus robur*, *Quercus* sp., *Fagus* o., *Carpinus* c. Dominant shrub species *Laurocerosus* sp., *Crataegus* sp., *Rosa* sp., *Ribes* sp. Dominant herb/grass species *Lotus* c., *Achillia* sp., *Trifolium* sp., wild strawberry, *Geranium* sp., *Phleum* p., other grasses. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618786. *Phleum pratense* L.

Wild. 0083; VIR 240; US 83; W6 17845. Collected 09/05/1995 in Russian Federation. Latitude 43° 55' N. Longitude 41° 13' 59" E. Elevation 850 m. Cherkessk-Karachayeyesk Republic, 2 km. east of Pregradnaysk. Past logged, now grazed/hayed. Slope 0-5%, aspect S. Light open. Soil loam, pH 5.6-5.7. Moist to seasonally dry, stream terrace. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species *Quercus* sp., *Fagus* o., *Betula* p. Dominant shrub species *Laurocerasus* o., *Ribes* sp., *Rosa* sp. Dominant herb/grass species *Achillea* sp., *Trifolium* sp., *Medicago* sp., *Geranium* sp., *Ambrosia* sp., *Daucus*, *Dactylis* g., *Phleum* p., *Lolium* p. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618787. *Phleum pratense* L.

Wild. 0089; VIR 246; US 89; W6 17846. Collected 09/06/1995 in Russian Federation. Latitude 43° 43' 9" N. Longitude 41° 35' 45" E. Elevation 1200 m. Cherkessk-Karachayeyesk Republic, 8 km. south of Marvkha. Area grazed/hayed. Slope 6-10%, aspect SW. Light open. Soil clay, pH 5.0-5.3. Moist to seasonally dry, ridgetop, upper slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species *Alnus* i., *Corylus* a. Dominant shrub species *Rhododendron* sp., *Rosa* sp., *Ribes* sp. Dominant herb/grass species *Trifolium* sp., *Lotus* c., *Achillea* sp., *Dandelion*, *Deschampsia* c., *Phleum* p., *Dactylis* g., *Agrostis* sp., *Calamagrostis* sp. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618788. *Phleum pratense* L.

Wild. 0115; VIR 270B; US 115; W6 17854. Collected 09/09/1995 in Russian Federation. Latitude 43° 15' 15" N. Longitude 41° 49' 43" E. Elevation 2050 m. Karachayevo-Cherkesskaya Republic, 30 km. southeast of Teberda near Klukhor Pass to Georgia. Past grazed, now roadway. Slope 6-10%, aspect SW. Light 1/4 shade. Soil loam, pH 5.7-6.1. Seasonally dry, upper slope, rock outcrop. Vegetation closed, evergreen and deciduous open forest with closed lower layers. Surrounding vegetation evergreen tall grass and broad-leafed herb vegetation. Dominant tree species *Pinus* sp., *Abies* sp., *Picea* sp., *Betula* sp. Dominant shrub species *Juniperus* sp., *Rhododendron* sp. Dominant herb/grass species *Achillea* sp., *Achimilla* sp., *Trifolium* sp., *Vicia* sp., *Lotus* c., *Hedysarum* h., *Agrostis* sp., *Calamagrostis* sp., *Phleum* p., *Dactylis* g., *Festuca* sp., *Deschampsia* c. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618789. *Phleum pratense* L.

Wild. 0129; VIR 261; US 129; W6 17859. Collected 09/07/1995 in Russian Federation. Latitude 43° 28' 27" N. Longitude 41° 40' 54" E. Elevation 1800 m. Karachayevo-Cherkesskaya Republic, 8 km. west of Teberda. Past logged, now grazed. Slope 41-60%, aspect S. Light 3/4 to shaded. Soil loam, pH 6.1. Seasonally dry, lower-mid slope. Vegetation

closed, evergreen open forest with closed lower layers. Surrounding vegetation same. Dominant tree species *Pinus* s., *Hamata* on S. slope, *Abies* n., *Picea* o. on N. slope. Dominant shrub species *Juniperus oblonga*, *Rosa* sp., *Ribes* sp. Dominant herb/grass species *Achillea* sp., *Trifolium* sp., *Coronilla* sp., *Lotus* c., *Deschampsia* c., *Festuca* sp., *Agrostis* sp., *Calamagrostis*. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618790. *Phleum pratense* L.

Wild. 0255; VIR 098; US 255; W6 17876. Collected 08/18/1995 in Russian Federation. Latitude 45° 16' N. Longitude 36° 57' E. Elevation 60 m. Mt. Blevaka, 2 km. west of site #8. Area grazed. Slope 6-10%, aspect N. Light open. Soil loam, clay, pH 7.2. Seasonally dry, mid slope, mud volcano. Vegetation open, evergreen dwarf shrub steppe savanna. Dominant tree species Russian Olive, Hornbeam-Oak. Dominant shrub species *Artemisia austriaca*. Dominant herb/grass species *Festuca* sp., *Phleum* sp., occasional annual *Medicagos*. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618791. *Dactylis glomerata* L.

Wild. 0081; VIR 238; US 81; W6 17844. Collected 09/05/1995 in Russian Federation. Latitude 43° 55' N. Longitude 41° 13' 59" E. Elevation 850 m. Cherkessk-Karachayeyesk Republic, 2 km. east of Pregradnaysc. Past logged, now grazed/hayed. Slope 0-5%, aspect S. Light open. Soil loam, pH 5.6-5.7. Moist to seasonally dry, stream terrace. Vegetation closed, evergreen broad-leaved herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species *Quercus* sp., *Fagus* o., *Betula* p. Dominant shrub species *Laurocerasus* o., *Ribes* sp., *Rosa* sp. Dominant herb/grass species *Achillea* sp., *Trifolium* sp., *Medicago* sp., *Geranium* sp., *Ambrosia* sp., *Daucus*, chicory, *Dactylis* g., *Phleum* p., *Lolium* p. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

PI 618792. *Phleum pratense* L.

Wild. 0001; VIR 198; US 1; W6 17819. Collected 09/01/1995 in Russian Federation. Latitude 44° 9' 28" N. Longitude 40° 1' 50" E. Elevation 1250 m. Province Maykop, 15 km. southwest of Dakhovskaya. Past logged, now grazed/hayed. Slope 0-5%, aspect N. Light 1/4 shade. Soil loam, pH neutral. Moist to seasonally dry, lower slope. Vegetation closed, evergreen broad-leaved herb vegetation. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species *Acer* sp. Dominant shrub species *Laurocerasus* o., *Rosa* sp. Dominant herb/grass species *Geranium sanguineum*, *Clinopodium vulgare*, *Betonica macranta*, *Brachypodium pinnatum*, *Calamagrostis* a., *Phleum montanum*. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 618793. *Phleum pratense* L.

Wild. VIR D147; W6 17788. Collected 09/05/1995 in Russian Federation. Latitude 44° 10' 2" N. Longitude 40° 50' 56" E. Elevation 550 m. Province Maykop, 1.5 km. north of Psebay. Past and current grazing. Slope 0-5%, aspect SW. Light 1/2 shade. Soil loam/sand with gravel, pH 6.7. Site moist, stream terrace. Vegetation closed, open deciduous forest with closed lower layers. Surrounding vegetation evergreen tall grass and seasonal broad-leaved herb vegetation. Dominant tree species Hornbeam-Oak, *Carpinus* sp. Dominant shrub species *Carpinus* c., *Q. petraea*, willows, *Ribes*. Dominant herb/grass species *Asperula* sp., *Festuca* d., *Erytregia* sp., *Calamagrostis* sp., *Lolium* p. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 618794. *Agrostis stolonifera* L.

Wild. 96S-37; W6 19579. Collected 08/1996 in Mongolia. Latitude 44° 49' 50" N. Longitude 96° 48' 50" E. Elevation 1215 m. Gobi-Altai Aimag, Tsogt Sum, Bayantoorai Bag, experimental farm area 10 km north of the Bag. 3% south slope. Desert steppe. Low piedmont site with brown fine sandy soils. Crops are being grown under irrigation. DOMINANT VEG: Agricultural crops including corn, tomatoes, potatoes, cucumbers, watermelon. Associated Native Species: *Setaria viridula*, *Zygophyllum*, *Artemisia*, *Tribulus terrestris*.

PI 618795. *Bromus squarrosus* L.

Wild. 96S-103; W6 19622. Collected 09/1996 in Mongolia. Latitude 48° 3' 59" N. Longitude 91° 42' 12" E. Elevation 1425 m. Khovd Aimag, Buyant Sum, close to an experimental area about 2 km from the aimag center. 1% southeast slope. Wide valley bottom that is currently being used for growing vegetables and making hay. Soils are alluvial. Soils are coarse brown sandy loams. DOMINANT VEG: Vegetables and annual grasses.

The following were collected by Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 01/16/1992.

PI 618796. *Elymus macrochaetus* (Nevski) Tzvelev
Wild. DJ-4123A; Agafonov #34; W6 10284. Collected 08/09/1985 in
Kazakhstan. Latitude 43° 15' N. Longitude 76° 57' E. In
mountains near Alma Ata, Siberia.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range
Research Unit, Utah State University, Logan, Utah 84322-6300, United States;
Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah
State University, Logan, Utah 84322-6300, United States. Donated by Kevin B.
Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory,
Logan, Utah 84322-6300, United States. Received 11/17/1993.

PI 618797. *Thinopyrum intermedium* (Host) Barkworth & D. R. Dewey
Wild. JA-134; VIR U-0134984; W6 13899. Collected 1992 in Russian
Federation. Latitude 48° 8' N. Longitude 60° 16' E. Elevation
230 m. Clay soil in low area 60km east northeast of Chelkar. Annual
precipitation 150mm. Dominated by stands of *Thinopyrum intermedium* and
Artemisia terrae-albae.

The following were collected by Alexander Afonin, Vavilov Institute of Plant
Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000,
Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St.
Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil
Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation.
Received 01/1996.

PI 618798. *Thinopyrum intermedium* (Host) Barkworth & D. R. Dewey
Wild. VIR 103; W6 17737. Collected 08/18/1995 in Russian Federation.
Latitude 45° 16' 43" N. Longitude 36° 57' 57" E. Elevation 10 m.
Province Temrjuk-Novorossiysk, village Senah/Fanagaria, Greek ruins,
southwest of Temrjuk. Past settlement, now grazed. Slope 0-5%, aspect
NE. Light open. Soil sand, pH 7.0-7.6. Seasonally dry, beach terrace.
Vegetation open, evergreen dwarf shrub steppe savanna. Surrounding
vegetation seasonal tall grass. Dominant tree species Hornbeam-Oak,
Russian Olive. Dominant shrub species *Artemisia austriaca*. Dominant
herb/grass species *Elytrigia elongatum*, *Agropyron cristatum*, Bermuda
grass, Puncture Vine, Forbs, wild mustard. Population distribution
patchy, abundance occasional. Growth habit erect. Extensive regional
climate data available in spreadsheet format or image maps in raster
format suitable for GIS analysis. Contact Dr. Stephanie L. Greene
(sgreene@ars-grin.gov).

PI 618799. *Phleum phleoides* (L.) H. Karst.
Wild. VIR D27; W6 17803. Collected 07/19/1995 in Russian Federation.
Latitude 44° 24' 13" N. Longitude 40° 33' 3" E. Elevation 650 m.
pH 5.6-5.8.

The following were collected by Walter Graves, University of California
Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California
92119-1219, United States; Alexander Afonin, Vavilov Institute of Plant
Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000,
Russian Federation; Melvin Rumbaugh, R.R. 3, Box 125, Humboldt, Nebraska
68376, United States; Nicolay Portinier, Kamorov Institute of Botany, St.
Petersburg, Leningrad, Russian Federation; Jay Hart, 20 Bush Lane, Ithaca,

New York 14850, United States; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 618800. *Deschampsia cespitosa* (L.) P. Beauv.

Wild. 0021; VIR 186; US 21; W6 17825. Collected 08/31/1995 in Russian Federation. Latitude 44° 3' 49" N. Longitude 40° 1' 5" E. Elevation 1850 m. Province Maykop, 30 km. southwest of Dakhovskaya. Past logged, now grazed and roadway. Slope 6-10%, aspect S. Light 1/4 shade. Soil loam. Moist to seasonally dry, ridgetop, rock outcrop. Vegetation closed, evergreen and some deciduous forest with closed lower layers. Surrounding vegetation evergreen broad-leafed herb vegetation. Dominant tree species Caucasus Beech, Spruce-Fir, Pinus. Dominant shrub species Juniperus o. Dominant herb/grass species Calamagrostis c., Lolium p., Plantago sp., Trifolium, Cirsium and other Thistle sp., Rumex sp., Cephalaris sp. Population distribution uniform, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 05/1995.

PI 618801. *Melica turczaninowiana* Ohwi

Wild. E94023; W6 17996. Collected 09/1994 in Mongolia. Latitude 47° 4' 6" N. Longitude 109° 17' E. Elevation 1463 m. Near herder winter camp at toe-slope of small range of mountains adjacent to Herlen River. Mountain-grass steppe. Soils shallow, even on toe-slope. Position near camp indicates heavy winter grazing occurs.

PI 618802. *Phleum phleoides* (L.) H. Karst.

Wild. W94053; W6 18203. Collected 09/1994 in Mongolia. Latitude 49° 43' 5" N. Longitude 105° 17' 24" E. Elevation 835 m. On Toibiin River about 60 km SW of Dzuunburen by air. Mountain steppe.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Edward J. Garvey, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 409, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Lufter Xhuvëli, Agricultural University of Tirana, Dept. of Agronomy, Rr."Myslym Shyri", Tirana, Albania. Received 09/1996.

PI 618803. *Phleum* sp.

Wild. Al 051; W6 18630. Collected 08/26/1996 in Albania. Latitude 40° 11' 54" N. Longitude 20° 10' 35" E. Elevation 1290 m. Pastures of Cajup and surrounding hillside. With other grasses on rocky hillside. Height 30-40cm tall. Panicles large.

The following were collected by Daniel Taub, State University of New York, Dept. of Ecology & Evolution, Stony Brook, New York 11794, United States. Received 12/09/1996.

PI 618804. *Poa compressa* L.

Wild. 95-29; W6 19123. Collected 07/13/1995 in New York, United States. Latitude 40° 50' 30" N. Longitude 73° 13' 30" W. Blydenburgh County Park, Smithtown, NY. In very sandy soil along a horse trail.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 618805. *Phleum phleoides* (L.) H. Karst.

Wild. 96S-158; W6 19663. Collected 09/1996 in Mongolia. Latitude 49° 28' 58" N. Longitude 97° 21' 35" E. Elevation 1815 m. Khovsgol Aimag, Tsetserleg Sum, located 20 km west of sum center. 6% north slope. Low mountain slope with open grasslands mixed with dense stands of Larch. Soils are very gravelly brown loamy soils with a darker surface horizon darker under the forest canopy. DOMINANT VEG: *Larix*\ *Potentilla tanacetifolia*\ *Elymus dahuricus*, *Carex* spp., *Bromus inermis*, *Caragana* spp.

The following were donated by Leopoldo Montes, E.E.A. - I.N.T.A., Santa Cruz, CC. 332 - (9400) Rio Gallegos, Santa Cruz, Santa Cruz, Argentina. Received 03/1995.

PI 618806. *Poa duseinii* Hack.

Uncertain. RGA 251; W6 19129. Collected 1991 in Santa Cruz, Argentina. Latitude 49° 18' S. Longitude 67° 43' W. San Julian.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 05/1995.

PI 618807. *Elymus repens* (L.) Gould subsp. *repens*

Wild. W94029; W6 18184. Collected 09/1994 in Mongolia. Latitude 50° 2' 23" N. Longitude 105° 50' 27" E. Elevation 875 m. About 4 km SW of Dzuunburen, in floor of Selenge River Valley. Relatively wet meadow.

The following were developed by L.H. Edwards, Oklahoma State University, Department of Agronomy, Stillwater, Oklahoma 74078, United States; Kent Keim, Oklahoma State University, Department of Plant and Soil Sciences, 368 Agricultural Hall, Stillwater, Oklahoma 74078-6028, United States; L. Farno, Oklahoma State University, Dept. of Plant and Soil Science, Stillwater, Oklahoma 74078, United States. Received 04/20/2001.

PI 618808. *Glycine max* (L.) Merr.

Cultivar. Pureline. "Catoosa"; OK92650. CV-442. Pedigree - Miles X Lee 74. Mid-Group V, averaging 76 cm tall with good shattering and lodging resistance. Flowers purple, tan pods, tawny pubescence, and exhibits determinate growth habit. Seeds yellow with dull seedcoat luster. Average seed weight 20.0 g 100 seed⁻¹ and averages 1207 seeds kg⁻¹. Seed protein and oil contents average 41.9 and 20.0%, respectively. Tolerant

of soybean cyst nematode (*Heterodera glycines*) race 3 and southern root knot nematode (*Meloidogyne incognita*), but susceptible to stem canker (*Diaporthe phaseolorum*) and races 2 and 14 (former r.4) of soybean cyst nematode.

The following were developed by L.H. Edwards, Oklahoma State University, Department of Agronomy, Stillwater, Oklahoma 74078, United States; Kent Keim, Oklahoma State University, Plant and Soil Science, 276 Ag Hall, Stillwater, Oklahoma 74078, United States; L. Farno, Oklahoma State University, Dept. of Plant and Soil Science, Stillwater, Oklahoma 74078, United States. Received 04/20/2001.

PI 618809. *Glycine max* (L.) Merr.

Cultivar. Pureline. "Washita"; OK896001. CV-443. Pedigree - Essex X Gail. Mid-Group V averaging 73 cm tall with good shattering and lodging resistance. Flowers purple, gray pubescences, tan pod walls, and exhibits determinate growth habits. Average seed weight 15.4 g per 100 seeds and averages 1112 seeds per kilogram. Seed protein and oil content averages 43.7 and 19.8%, respectively. Resistant to soybean cyst nematode (*Heterodera glycines*) races 2, 3, and 4 and southern root knot nematode (*Meloidogyne incognita*). Susceptible to stem canker (*Diaporthe phaseolorum*).

The following were developed by Maurice Snook, USDA-ARS, Tobacco Quality and Safety Lab, P.O. Box 5677, Richard Russell Research Cntr, Athens, Georgia 30605, United States; Bill R. Wiseman, USDA-ARS, Georgia Coastal Plains Experiment Station, Insect Biology Lab, Tifton, Georgia 31793-0748, United States; Brian T. Scully, University of Florida, Everglades Experiment Center, P.O. Box 8003, Belle Glade, Florida 33430, United States; Greg Nuessly, University of Florida, Everglades REC, 3200 E. Palm Beach Rd., Belle Glade, Florida 33430, United States. Donated by Brian T. Scully, University of Florida, Everglades Experiment Center, P.O. Box 8003, Belle Glade, Florida 33430, United States. Received 04/20/2001.

PI 618810. *Zea mays* L. subsp. *mays*

Cultivar. Population. "Zapalote Chico 2451F"; AC-2451F; Zap. Chico 2451F; Capalote Chico 2451#(P)C3; ZC-2451#(P)C3. GP-370. Pedigree - Derived from three cycles of recurrent mass selection from a population developed in Tifton, GA and coded as ZC 2451#(P)C3, which is a selected purple phenotype of the land race Zapalote Chico, originally from Oaxaca, Mexico and held at CIMMYT as Oaxaca Gpo.35. White kernel floury corn with a purple plant. Improved silk resistance to the fall armyworm (FAW) (*Spodoptera frugiperda*) and the corn earworm (CEW) (*Heliothis virescens*), and the corn silk fly (CSF) (*Euxesta stigmatias*). Resistance is based on chemical antibiosis and conferred by the flavone glycoside, maysin and its chemical analogues. Maysin is present in the emerging silk at levels of 0.52% of fresh silk weight, above the 0.20% considered toxic to ear feeding lepidopterans. Early population often maturing in less than 75 days in tropical and subtropical climates. Does not appear to be photoperiod sensitive.

The following were developed by Jim D. Kelly, Michigan State University, Department of Crop & Soil Science, 370 Plant & Soil Sci. Bldg. MSU, East Lansing, Michigan 48824-1325, United States; Phillip Miklas, USDA, ARS,

Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States. Received 05/03/2001.

PI 618811. Phaseolus vulgaris L.

Breeding. USCR-7. GP-220. Pedigree - C92158/6/T.HORT*3/3/Montcalm//BRB-33/Montcalm. Upright bush cranberry bean with complete resistance to BCMV and BCMNV potyviruses. Also has Co-1 gene for resistance to Colletotrichum lindemuthianum.

PI 618812. Phaseolus vulgaris L.

Breeding. USCR-9. GP-221. Pedigree - C92161/6/C92158/5/T.Hort.*2/3/Montcalm//BRB-33/Montcalm. Upright bush cranberry bean with complete resistance to BCMV and BCMNV potyviruses. Susceptible to Colletotrichum lindemuthianum.

The following were developed by Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States. Received 05/03/2001.

PI 618813. Phaseolus vulgaris L.

Breeding. "USLK-2". Pedigree - CELEK*2/5/Montcalm/4/BRB-33//CELRK/Chinook-2000/3/K88401/CELRK. Light red kidney with complete resistance to BCMV and BCMNV except strain NL-3K. Upright bush growth habit and the Co-1 gene for resistance to Collectotrichum lindemuthianum.

The following were developed by An Hang, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; Jim D. Kelly, Michigan State University, Department of Crop & Soil Science, 370 Plant & Soil Sci. Bldg. MSU, East Lansing, Michigan 48824-1325, United States; Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States; Carl A. Strausbaugh, University of Idaho, Research & Extension Center, 3793 North, 3600 East, Kimberly, Idaho 83341, United States; R. Forster, University of Idaho, 3793 North 3600 East, Kimberly, Idaho 83341, United States. Received 05/03/2001.

PI 618814. Phaseolus vulgaris L.

Breeding. USDK-4. GP-223. Pedigree - Montcalm*2/Red Hawk/5/BRB-33//CELRK/Chinook-200/3/K88401/CELRK/4/Montcalm. Dark red kidney with complete resistance to BCMV and BCMNV except strain NL-3K. Upright bush growth habit and the Co-1 gene for resistance to Collectotrichum lindemuthianum.

PI 618815. Phaseolus vulgaris L.

Breeding. USWK-6. GP-224. Pedigree - 94T1661/6/Red Hawk/5/BRB-33//CELRK/Chinook-2000/3/K88401/CELRK/4/Montcalm. White kidney with complete resistance to BCMV and BCMNV. Upright bush growth habit and the Co-1 gene for resistance to Collectotrichum lindemuthianum.

The following were developed by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States; N. Jerry Chatterton, USDA-ARS, Forage & Range Research, Utah State

University, Logan, Utah 84322-6300, United States; Douglas R. Dewey, USDA-ARS, Forage and Range Research Laboratory, Utah State University, UMC-63, Logan, Utah 84322, United States; Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 04/30/2001.

PI 618816. *Leymus hybrid*

Breeding. *Leymus hybrid*-1. GP-82. Pedigree - Developed from eight cycles of recurrent selection within a segmental autoallopolyploid population that originated from intercrossing three hybrids. Population I was a cross between *L. racemosus* (PI 313965) x *L. angustus* (PI 314682) which produced a 70 chromosome hybrid that resulted from an unreduced *L. racemosus* egg, n=28, fertilized by a reduced *L. angustus* gamete, n=42. Population II was a 98 chromosome hybrid that originated from a cross that involved an unreduced *L. cinereus* (PI 286809) gamete (n=56) and reduced *L. angustus* (PI 314672 and 314682) pollen (n=42). Population III was a backcross of the *L. racemosus* x *L. angustus* hybrid to *L. angustus*. Three way cross combining genetic material from Altai wildrye (*Leymus angustus*), Great Basin wildrye (*L. cinereus*), and mammoth wildrye (*L. racemosus*). Cross pollinating and behaves meiotically as a segmental autoallopolyploid with multiple copies of the Ns and Xsm genomes from *Psathyrostachys* and an unknown diploid progenitor. In environments where annual precipitation ranges from 400-500 mm, dry matter production exceeded the current Altai wildrye cultivars at mid August by 36% and at late November by 42%. Forage quality lower than the check cultivars throughout the year. However, increased dry matter yields more than compensated in available nutrient levels. Should be utilized as a standing forage for winter grazing.

The following were donated by Matt Erasmus, ARC, Range and Forage Institute, Private Bag X05, Lynn East, South Africa. Received 02/23/1996.

PI 618817. *Acanthosicyos naudinianus* (Sond.) C. Jeffrey

Wild. 010102; Prime No. 02EW; Grif 14017. Fruits oval shaped, green, with green spines. Fruit 6 to 8 centimeters in length by 4 to 5 centimeters in diameter. High yield of fruits per plant with many seed, greater than 200 seed/fruit. Plants small and not overly spreading, not climbing.

The following were donated by Royal Botanic Gardens, Kew, Surrey, England TW9 3AB, United Kingdom. Received 02/22/1999.

PI 618818. *Diplocyclos palmatus* (L.) C. Jeffrey

Uncertain. 1987-2609; Grif 14231. Fruits round and berry-like, green with white longitudinal stripes turning to bright red with white longitudinal stripes at maturity. Fruit averages 1 to 2 centimeters in diameter. Moderate yield of fruit with relatively few (< 10) seed/fruit. Fruborne singly. Plant is relatively small and not aggressive, spreading and not climbing.

The following were donated by Bill Murray, Iowa State University, Econ., 183 Heady Hall, Ames, Iowa 50010, United States. Received 06/27/1990.

PI 618819. Cucumis melo L. subsp. melo

Landrace. Ames 13855; White Lanzhou. Collected in China. Seed of the 'Wallace Melon' was given to China by Henry Wallace of Iowa during his visit to Gansu province in 1963. Seed was returned to USA as 'White Lanzhou'.

The following were donated by Joe Norton, Auburn University, Department of Horticulture, Auburn, Alabama 36849, United States; Wu Guang Xu, Hubei Agricultural College, Department of Horticulture, Jiangling, Jiangsu, China. Received 12/15/1993.

PI 618820. Cucumis melo L. subsp. melo

Uncertain. W8 x C9; Ames 21762; Cai Melon.

PI 618821. Cucumis melo L. subsp. melo

Uncertain. W9 x C1; Ames 21763; Xiao Qi Xue.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Weihong Gu, Shanghai Horticultural Institute, Shanghai Academy of Agricultural Sciences, Shanghai, Shanghai, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618822. Cucumis melo L. subsp. melo

Landrace. ZWRM-005; Huang Jing Gua; Ames 22339. Small fruit with white flesh. Small cream colored seed. Thin skin, sweet, no storage life. Local variety reportedly cultivated for more than 400 years.

The following were collected by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618823. Cucumis melo L. subsp. melo

Uncertain. ZWRM-015; Sweet Melon; Ames 22340. Collected 07/15/1994 in Shanghai, China. Latitude 31° 6' N. Longitude 121° 22' E. Shanghai. Vegetable market. Vegetable melon type fruit, 14 cm long, 3 cm in diameter, dark green, waxy skin with 10 yellow-green stripes.

PI 618824. Cucumis melo L. subsp. melo

Uncertain. ZWRM-016; Sweet Melon; Ames 22341. Collected 07/15/1994 in Shanghai, China. Latitude 31° 6' N. Longitude 121° 22' E. Shanghai. Vegetable market. Pyriforme fruit shape, 4 cm long, 2.5 cm in diameter, dark yellow skin with 10 dark green stripes.

PI 618825. *Cucumis melo* L. subsp. *melo*

Uncertain. ZWRM-017; Sweet Melon; Ames 22342. Collected 07/15/1994 in Shanghai, China. Latitude 31° 6' N. Longitude 121° 22' E. Shanghai. Vegetable market. Oval fruit shape, small, 5 cm long, 3 cm in diameter, light yellow skin with 10 pale green stripes, and green flesh.

PI 618826. *Cucumis melo* L. subsp. *melo*

Uncertain. ZWRM-018; Sweet Melon; Ames 22343. Collected 07/15/1994 in Shanghai, China. Latitude 31° 6' N. Longitude 121° 22' E. Shanghai. Vegetable market. Pyriforme fruit shape, 4 cm long, 4.5 cm in diameter, dark green, waxy skin with 10 dark yellow-green stripes.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Dwei Zhu, Vegetable and Floral Research Institute, Chinese Academy of Agricultural Sciences, Beijing, Beijing, China; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618827. *Cucumis melo* L. subsp. *melo*

Uncertain. ZWRM-030; Snow Phoenix Melon Fl; Ames 22344. Sweet melon type fruit, white skin color, and white flesh. Early, vigorous, resistant to disease and humid condition with stable, good yield, soluble solids can reach 16%, 75 days, 18-25 C. Lit Cheong Agricultural Ltd., Unit B, 16/F, United Centre.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Ming Wang, Northwestern Agricultural Universtiy, Department of Horticulture, Yangling, Shaanxi, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618828. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-038; "Yellow River Honeydew No. 2"; Ames 22345. Sweet melon type fruit, yellow skin color, and green flesh. Envelope indicates Fl, but is actually an OP cultivar.

PI 618829. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-039; "Yellow River Honeydew No. 3"; Ames 22346. Heavy netting, yellow skin color, and green flesh. Envelope indicates Fl, but is actually an OP cultivar.

PI 618830. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-040; "Xi Nong Honeydew"; Ames 22347. Thick skin, green flesh, and white seed. Fl cultivar.

PI 618831. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-041; "Golden thin skinned melon"; Ames 22348. Sweet melon type fruit, small with white flesh. Small seed. Thin skin, very sweet. Cultivar.

PI 618832. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-042; Xian thin skin melon; Ames 22349. Sweet melon type fruit, small with white flesh. Small seed. Thin skin. Landrace.

PI 618833. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-043; "81301-1"; Ames 22350. True F1 cultivar. Japanese type?.

The following were collected by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618834. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-068; Sesame Seed melon; Ames 22351. Collected 07/21/1994 in Shaanxi, China. Latitude 34° 17' N. Longitude 108° 4' E. Yangling. Vegetable market. Sweet melon type fruit, 5.5 cm long, 4 cm in diameter, dark green skin with a dark green spot. Small seed. Uneven surface, full-slip, depressed blossom scar, buttery color around seed cavity. Landrace.

PI 618835. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-069; Ames 22352. Collected 07/22/1994 in Xinjiang, China. DeBanChen. Vegetable market. Sweet melon type fruit, oval shape, 6.75 cm long, 6 cm in diameter, light netting, dark green striped skin. Large seed. Abscission, but fruit harvested at quarter-slip, nice aroma. Landrace.

PI 618836. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-070; Ames 22353. Collected 07/22/1994 in Xinjiang, China. DeBanChen. Vegetable market. Sweet melon type fruit, oblate shape, 5 cm long, 5.75 cm in diameter, scant netting, narrow dark green stripes at blossom end and speckled at stem end of skin, green flesh. Large seed. Landrace.

PI 618837. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-071; Ames 22354. Collected 07/22/1994 in Xinjiang, China. DeBanChen. Vegetable market. Sweet melon type fruit, oblate shape, 4.25 cm long, 5 cm in diameter, trace netting, yellow skin. Landrace.

PI 618838. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-072; Ames 22355. Collected 07/22/1994 in Xinjiang, China. DeBanChen. Vegetable market. Hami type fruit, elongate shape, 12 cm long, 5.5 cm in diameter, heavy netting at stem, yellow skin with green spots (piel de sapo). Landrace.

PI 618839. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-073; Beijing Li; Ames 22356. Collected 07/21/1994 in Shaanxi, China. Latitude 34° 17' N. Longitude 108° 4' E.

Yangling. Vegetable market. Sweet melon type fruit, small, 3.5 cm long, 3.5 cm in diameter, wide striped skin, white flesh. Small seed.

Landrace.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Uygur Village Committee, Turpan, Xinjiang, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618840. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-074; Li Chi Gan (Early); Ames 22357. Sweet melon type fruit. Reportedly has small oblate fruit, vein tracts, yellow skin at maturity, white flesh, and large seed. Landrace.

PI 618841. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-075; "Hong Xin Cui (local Hami melon)"; Ames 22358. Hami type fruit, 12 cm long, 6 cm in diameter. Cultivar.

PI 618842. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-076; Li Chi Gan (Early); Ames 22359. Sweet melon type fruit, oblate shape, small, 3 cm long, 3.5 cm in diameter, dark green skin, white flesh. Large seed. Landrace.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Depei Lin, Western China Group Seed Co., Changji, Xinjiang, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618843. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-106; "Changji Hong Xin Cui"; Ames 22360. Hami type fruit, oblong shape, light netting, yellow skin, salmon flesh. Self-pollinated fruit. Cultivar.

PI 618844. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-107; "Pao Tai Hong"; Ames 22361. Hami type fruit, oblong shape, light netting, yellow skin, salmon flesh. Self-pollinated fruit. Cultivar.

PI 618845. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-108; Xi Yu No. 1; Ames 22362. Oval fruit shape, light netting, grey-green skin, salmon flesh. F1 (some combination of Japanese x Hami x Perlita FR).

PI 618846. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-109; Xi Yu No. 3; Ames 22363. Oval fruit shape, light netting, grey-green skin, salmon flesh. F1 (some combination of Japanese x Hami x Perlita FR).

PI 618847. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-110; "8303"; Ames 22364. Hami type fruit, oblong shape, light netting, yellow skin, salmon flesh. Cultivar.

PI 618848. *Cucumis melo* L. subsp. *melo*

Uncertain. ZWRM-112; An Noon; Ames 22365. Oval fruit shape, light netting, grey-green skin, salmon flesh. Originally from Japan. Resistant to Fusarium wilt, gummy stem blight, alternaria, and CMV.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Meizhu Wu, Xinjiang Academy of Agricultural Science, Horticultural Institute, Urumqi, Xinjiang, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618849. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-113; Huan Dan Zi; Ames 22366. Oval fruit shape, ivory skin color, white flesh color. Landrace.

PI 618850. *Cucumis melo* L. subsp. *melo*

Landrace. ZWRM-114; Mi Tang Guan; Ames 22367. Sweet melon type fruit, oval shape, ivory skin, white flesh. Resistant to virus and foliage disease. Landrace.

PI 618851. *Cucumis melo* L. subsp. *melo*

Cultivar. ZWRM-115; "Fu Rong"; Ames 22368. Hami type fruit, oval shape, light netting, yellow skin, salmon flesh. Cross of Hami with Golden Beauty Casaba. Cultivar.

The following were donated by Bruno Defay, Rue de la Croze, PEBELLIT, St. Germain Laprade, Haute-Loire 43700, France. Received 04/10/1996.

PI 618852. *Cucumis melo* L.

Cultivated. Ames 22808; Baishami.

PI 618853. *Cucumis melo* L.

Cultivated. Ames 22809; Baishami R..

PI 618854. *Cucumis melo* L.

Cultivated. Ames 22810; Longtian #1.

PI 618855. *Cucumis melo* L.
Cultivated. Ames 22811; Shengkaihua.

PI 618856. *Cucumis melo* L.
Cultivated. Ames 22812; Shengkaihua.

PI 618857. *Cucumis melo* L.
Cultivated. Ames 22813; Xiaobia #1.

The following were collected by Roshan Klein, Richland, Washington, United States. Donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 1996.

PI 618858. *Cucumis melo* L.
Cultivated. Ames 23832; W6 17438. Collected 09/1995 in Xinjiang, China. Latitude 39° 29' N. Longitude 75° 58' E. Kashgar (also known as Kashi). Large seeded. Possibly Hami melon.

PI 618859. *Cucumis melo* L.
Uncertain. Hami Melon; W6 17734; Ames 24046. Collected 05/1990 in Xinjiang, China. Latitude 43° 48' N. Longitude 87° 35' E. Urumqi. Hami melon; from Roshan Abbas (5/90). Fruit ~2-3 kg, with a smooth dark green skin. Flesh orange colored, firm, and sweet.

The following were developed by Institute of Vegetables, Agric. & Forest, Academy of Hebei, Wuhan, Hubei, China. Donated by David W. Davis, University of Minnesota, Department of Horticultural Sciences, 334 Alderman Hall, St. Paul, Minnesota 55108, United States. Received 09/18/1986.

PI 618860. *Cucumis sativus* L. var. *sativus*
Cultivar. Ames 7117; Ji Cucumber 2. 30 cm in length, 3.5 cm in diameter. Short leading end and dark green peel. The fruit surface gives glazing light, with little tumors. Rich in white thorn and few in branching. Primary vine is the producer. Often the first female flower locates between 4-6 node, and the following fruits can be found at each distance of approximately 2.3 to 1.7 node. Highly resistant to Cucumber Downy Mildew (*Pseudoperonospora cubensis*) and Powdery Mildew of Cucumber (*Erysiphe cichoracearum* or *Sphaerotheca fuliginea*). Intermediately tolerant to *Fusarium* wilt of cucumber (*F. oxysporum* f. sp. *cucumerinum*).

PI 618861. *Cucumis sativus* L. var. *sativus*
Cultivar. Ames 7118; Ji Cai 3. 34 cm in length and about 100-200 grams in weight. Dark green peel, numerous in white spines, and good in quality. Time from sowing to maturity: 120 days (approx.). Resistant to: *Pseudoperonospora cubensis*, *Pseudomonas lachrymans*, *Phytophthora infestans*. Tolerant to: *Erysiphe cichoracearum* (or *Sphaerotheca fuliginea*) and *Fusarium oxysporum* f. sp. *cucumerinum*.

The following were donated by Zhenhua Guo, Dept. of Germplasm Resources, Vegetable Res. Institute, CAAS, 30 Baishigiao Road, Beijing, China. Received 09/07/1988.

PI 618862. Cucumis sativus L. var. sativus

Cultivar. "Zhong Nong No. 3"; Ames 10088. Hybrid; all female, CMV tolerant, downy mildew resistant.

PI 618863. Cucumis sativus L. var. sativus

Cultivar. "Zhong Nong No. 4"; Ames 10089. Hybrid; all female, CMV tolerant, downy mildew resistant.

PI 618864. Cucumis sativus L. var. sativus

Cultivar. "Zhong Nong No. 5"; Ames 10090. Hybrid; all female, CMV tolerant, downy mildew resistant.

The following were donated by Shu De Lee, Chinese Academy of Agricultural Sciences, 30 Baishigiao Rd., Beijing, Beijing 100094, China. Received 05/09/1991.

PI 618865. Cucumis sativus L. var. sativus

Uncertain. Ames 15676.

The following were developed by Tianjin Cucumber Research Institute, Tianjin Academy of Agricultural Science, No. 295, Baaidi Road, Tianjin, Tianjin, China. Donated by Richard W. Robinson, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456, United States. Received 11/15/1991.

PI 618866. Cucumis sativus L. var. sativus

Cultivar. "Jinyan No. 4"; 19; Ames 18059.

PI 618867. Cucumis sativus L. var. sativus

Cultivar. "Jinza No. 2"; 20; Ames 18060.

The following were developed by Northwest Agricultural University, Yangling, Shaanxi, China. Donated by Richard W. Robinson, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456, United States. Received 11/15/1991.

PI 618868. Cucumis sativus L. var. sativus

Cultivar. "Nong Chen No. 3"; 30; Ames 18061.

PI 618869. Cucumis sativus L. var. sativus

Cultivar. "Nong Chen No. 4"; 32; Ames 18062.

PI 618870. Cucumis sativus L. var. sativus

Cultivar. "Nong Chen No. 12"; 31; Ames 18063.

The following were donated by Tong Daxiang, Institute of Crop Germplasm Resources, Chinese Academy of Agricultural Sciences, 30 Bai Shi Qiao Road, Beijing, Beijing, China. Received 02/02/1993.

PI 618871. Cucumis sativus L. var. sativus

Uncertain. Ex. No. 10; Ames 20146; Hei you tiao.

- PI 618872. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 14; Ames 20147; Ji cai 3 hao huang gua.
- PI 618873. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 19; Ames 20148; Kai lu di huang gua.
- PI 618874. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 21; Ames 20149; Lu chun 26.
- PI 618875. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 22; Ames 20150; Lu chun 32.
- PI 618876. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 24; Ames 20151; Lu huang gua 1 hao.
- PI 618877. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 36; Ames 20152; Min zhu she huang gua (bai).
- PI 618878. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 37; Ames 20153; Xi an da ci huang gua.
- PI 618879. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 38; Ames 20154; Bian peng qing huang gua.
- PI 618880. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 39; Ames 20155; Mu xu yuan huang gua.
- PI 618881. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 40; Ames 20156; Gong zai tou huang gua.
- PI 618882. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 41; Ames 20157; Zao shou xiao hei ci.
- PI 618883. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 42; Ames 20158; Fu jian huang gua.
- PI 618884. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 42; Ames 20159; Qing pi huang gua.
- PI 618885. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 44; Ames 20160; Min zhu she huang gua (hei).
- PI 618886. *Cucumis sativus* L. var. *sativus***
Uncertain. Ex. No. 46; Ames 20161; Huang pi hei ci.

Unknown source. Received 11/25/1988.

- PI 618887. *Cucumis sativus* L.**
Uncertain. Chinese cucumber; Ames 21701. Collected in China.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Weihong Gu, Shanghai Horticultural Institute, Shanghai

Academy of Agricultural Sciences, Shanghai, Shanghai, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618888. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-001; Yang Hang Huang Gua; Ames 22289. Small fruit. White seeds. Open-pollinated.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Zhouggou Qi, Shanghai, Shanghai, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618889. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-008; Ames 22290. Cream seeds. Local cucumber grown in Shanghai area. Received in foil laminated envelope labeled "Shuang Wei".

The following were collected by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618890. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-013; Ames 22291. Collected 07/15/1994 in Shanghai, China. Latitude 31° 6' N. Longitude 121° 22' E. Shanghai. Vegetable market. Slicer type fruit, knobby shape, 12 cm long, 3 cm in diameter, orange mature skin, warty, black spines.

PI 618891. *Cucumis sativus* L. var. *sativus*

Uncertain. ZWRM-014; Ames 22292. Collected 07/15/1994 in Shanghai, China. Latitude 31° 6' N. Longitude 121° 22' E. Shanghai. Vegetable market. Slicer type fruit, 8 cm long, 2 cm in diameter, orange mature skin.

PI 618892. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-020; "Summer Producer"; Ames 22293. Collected 07/17/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Tianjin Dongjiao Seed Company, Zhengzhou. Vegetable market. Oriental trellis type fruit. Marketed by Tianjin Dong Jiao Seed Company.

PI 618893. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-031; "3511"; Ames 22294. Collected 07/19/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Zhengzhou. Vegetable market. Oriental trellis type fruit. Cultivar.

PI 618894. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-032; "Jin Za No.2"; Ames 22295. Collected 07/19/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Zhengzhou. Vegetable market. Oriental trellis type fruit. Early, high yield, high percentage of female flowers, can be grown under low temperatures, reportedly resistant to three diseases: Fusarium wilt, downy mildew, and powdery mildew. Huanongpai commercial brand. Cultivar.

PI 618895. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-033; "Jin Yang No.4"; Ames 22296. Collected 07/19/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Zhengzhou. Vegetable market. Oriental trellis type fruit, 35 cm long, 240 grams, dark green skin. First fruit sets at fifth or seventh node. Outdoor cultivation. Resistant to Fusarium wilt, downy mildew, and powdery mildew. Cultivar.

PI 618896. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-034; "Jin Chun No.4"; Ames 22297. Collected 07/19/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Zhengzhou. Vegetable market. Oriental trellis type fruit. Resistant to Fusarium wilt, downy mildew, and powdery mildew. Best for early spring and late fall cultivation under plastic tunnel or field. Cultivar.

PI 618897. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-035; "Non Cheng F1"; Ames 22298. Collected 07/19/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Zhengzhou. Vegetable market. Oriental trellis type fruit. Early. Cultivar.

PI 618898. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-036; Xiao Ba Ca; Ames 22299. Collected 07/19/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Zhengzhou. Vegetable market. Oriental trellis type fruit, 35 cm long. Resistant to low temperature, fruit will set at temperature below 10 C, early, first fruit will set from second to fourth node, very good yield, one of the most popular Chinese cucumbers for breeding, receive.

PI 618899. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-037; Ames 22300. Collected 07/19/1994 in Henan, China. Latitude 34° 45' N. Longitude 113° 40' E. Zhengzhou. Vegetable market. Oriental trellis type fruit. Huanongpai Brand. Cultivar.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Hongwen Cui, Northwestern Agricultural Universtiy, Department of Horticulture, Yangling, Shaanxi, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South

Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618900. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-052; "Nong Chen No. 5"; Ames 22301. Oriental trellis type fruit. Cultivar.

PI 618901. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-053; Alfalfa Field; Ames 22302. Oriental trellis type fruit. Landrace.

PI 618902. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-054; "Jin Yang No. 4"; Ames 22303. Oriental trellis type fruit. Cultivar.

PI 618903. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-055; Nong Chen No. 5; Ames 22304. Oriental trellis type fruit. Fl.

PI 618904. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-056; Heishui (Black Fruit cucumber); Ames 22305. Oriental trellis type fruit. Landrace.

PI 618905. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-057; Nong Chen No.1; Ames 22306. Oriental trellis type fruit. Fl.

PI 618906. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-058; Nong Chen No. 3; Ames 22307. Oriental trellis type fruit. Fl.

PI 618907. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-059; "Jin Yang No. 2"; Ames 22308. Oriental trellis type fruit. Cultivar.

PI 618908. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-060; Nong Chen No. 2; Ames 22309. Oriental trellis type fruit. Fl.

PI 618909. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-061; Nong Chen No. 4; Ames 22310. Oriental trellis type fruit. Fl.

PI 618910. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-062; "Chang Chun Mi Ci"; Ames 22311. Oriental trellis type fruit. Meici (warty). Cultivar.

PI 618911. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-063; "Hei Dan No. 1"; Ames 22312. Oriental trellis type fruit. Cultivar.

PI 618912. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-064; "Jin Yang No. 1"; Ames 22313. Oriental trellis type fruit. Cultivar.

- PI 618913. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-065; "Jin Chun No. 2"; Ames 22314. Oriental trellis type fruit. Cultivar.
- PI 618914. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-066; "An Li Zao"; Ames 22315. Oriental trellis type fruit. Cultivar.
- PI 618915. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-067; Jin Za No. 2; Ames 22316. Oriental trellis type fruit. Fl.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Dewei Zhu, Vegetable and Floral Research Institute, Chinese Academy of Agricultural Sciences, Beijing, Beijing, China; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

- PI 618916. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-116; "Chang Chun Mi Ci"; Ames 22317. Oriental trellis type fruit. Cultivar.
- PI 618917. *Cucumis sativus* L. var. *sativus***
Landrace. ZWRM-117; Xin Tai Mi Ci; Ames 22318. Landrace.
- PI 618918. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-118; Ames 22319. Commercial cultivar. Received in foil laminated package.
- PI 618919. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-119; "Zhong Nong No. 3"; Ames 22320. Cultivar.
- PI 618920. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-120; "Zhong Nong No. 4 F1"; Ames 22321. Cultivar.
- PI 618921. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-121; "Zhong Nong No. 5 F1"; Ames 22322. Cultivar.
- PI 618922. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-122; "Zhong Nong No. 1101 F1"; Ames 22323. Cultivar.
- PI 618923. *Cucumis sativus* L. var. *sativus***
Cultivar. ZWRM-123; "Jin Chun No. 4"; Ames 22324. Cultivar. Same as ZWRM-034?.
- PI 618924. *Cucumis sativus* L. var. *sativus***
Landrace. ZWRM-124; Er Qing; Ames 22325. Landrace.
- PI 618925. *Cucumis sativus* L. var. *sativus***
Uncertain. ZWRM-125; Ames 22326.

PI 618926. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-126; Cun Jin; Ames 22327. Landrace.

PI 618927. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-127; Da Ba Cha; Ames 22328. Landrace.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Chinese Academy of Agricultural Science, Vegetable and Floral Research Institute, Beijing, Beijing, China; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618928. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-128; Jin Er; Ames 22329. Landrace.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Dewei Zhu, Vegetable and Floral Research Institute, Chinese Academy of Agricultural Sciences, Beijing, Beijing, China; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618929. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-129; Bai Huang Gua; Ames 22330. White skin on fruit. Landrace.

PI 618930. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-130; Yang Hang; Ames 22331. Landrace.

PI 618931. *Cucumis sativus* var. *xishuangbannanensis* ined.

Landrace. ZWRM-131; Qi Er Yuan; Ames 22332. Landrace.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Tianjin Cucumber Research Institute, Tianjin Academy of Agricultural Science, No. 295, Baaidi Road, Tianjin, Tianjin, China; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618932. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-143; Apple cucumber; Ames 22333. Light green skin on fruit when immature, white when mature. Landrace.

The following were donated by Todd Wehner, North Carolina State University, Department of Horticultural Science, 222 Kilgore Hall, Raleigh, North Carolina 27695-7609, United States; James D. McCreight, USDA, ARS, Agricultural Research Station, 1636 East Alisal Street, Salinas, California 93905, United States; Xingping Zhang, Clemson University, Department of Horticulture, E-1417 & AS Building, Clemson, South Carolina 29634-0375, United States; Feng Hou, Tianjin Cucurbit Research Institute, Tianjin Academy of Agricultural Science, No. 295, Baaidi Road, Tianjin, Tianjin, China; Bill Rhodes, Clemson University, Horticulture Department, E147 Poole Center, Clemson, South Carolina 29634-0375, United States. Received 02/21/1995.

PI 618933. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-144; Guan Huan Gua; Ames 22334. Dark green skin on fruit, 15 cm long, spineless. Landrace.

PI 618934. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-145; "South Korean Cucumber"; Ames 22335. Fruit 35-40 cm long, warty. Downy mildew, powdery mildew, and PG. Cultivar.

PI 618935. *Cucumis sativus* L. var. *sativus*

Landrace. ZWRM-146; Short Hammer; Ames 22336. Slicer type fruit, 20-25 cm long, green skin. Guang Dong Province. Landrace.

PI 618936. *Cucumis sativus* L. var. *sativus*

Breeding. ZWRM-147; Chi Xin Huan Gua; Ames 22337. Fruit 30 cm long. Gynoecious, greenhouse, low light, low temperature. Breeding line.

PI 618937. *Cucumis sativus* L. var. *sativus*

Cultivar. ZWRM-148; "Jin Chun No. 4"; Ames 22338. Cultivar.

The following were donated by Jack E. Staub, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States; Jim Feng Chen, Southwest Agricultural University, Beibei, Chongqing, Sichuan, China. Received 11/05/1996.

PI 618938. *Cucumis sativus* L.

Wild. Ames 23722; Anyang Ci. Collected 1996 in Hunan, China. North Chinese type. White spine.

PI 618939. *Cucumis sativus* L.

Wild. Ames 23723; Qingpi Huanggua. Collected 1996 in Jiangxi, China. South Chinese type. Black spine, 25 cm X 6 cm, yellow brown.

PI 618940. *Cucumis sativus* L.

Wild. Ames 23724; Daqing Huanggua. Collected 1996 in Guangdong, China. Latitude 23° 7' N. Longitude 113° 15' E. Guangzhou. South Chinese type. White spine, light green, 24 cm X 6 cm, column.

PI 618941. *Cucumis sativus* L.

Wild. Ames 23725; Langli Zhao. Collected 1996 in Hunan, China. South Chinese type.

- PI 618942. *Cucumis sativus* L.**
Wild. Ames 23726; Sigua Qing. Collected 1996 in Beijing, China. North Chinese type. Black spine, 25 cm x 5 cm, yellow brown.
- PI 618943. *Cucumis sativus* L.**
Wild. Ames 23727; Jin Yan No. 4. Collected 1996 in Tianjin, China. North Chinese type.
- PI 618944. *Cucumis sativus* L.**
Wild. Ames 23728; Yangzhou Ruhuanggu. Collected 1996 in Jiangsu, China. South Chinese type. Black spine, 23 cm X 5 cm, yellow brown.
- PI 618945. *Cucumis sativus* L.**
Wild. Ames 23729; Wenshang Cigua. Collected 1996 in Shandong, China. North Chinese type. White spine, 26 cm X 6 cm, yellow brown.
- PI 618946. *Cucumis sativus* L.**
Landrace. Ames 23730; Linyang Daci. Collected 1996 in China. North Chinese type. White spine, 40 cm X 6 cm, light green.
- PI 618947. *Cucumis sativus* L.**
Wild. Ames 23731; Qingyu Dan. Collected 1996 in Hubei, China. North Chinese type. Black spine, 18 cm X 6 cm, yellow brown.
- PI 618948. *Cucumis sativus* L.**
Landrace. Ames 23732; Lingqing Huanggua. Collected 1996 in China. South Chinese type. 28 cm X 6 cm, light yellow, column.
- PI 618949. *Cucumis sativus* L.**
Wild. Ames 23733; Baipi Huanggua. Collected 1996 in Jiangsu, China. South Chinese type. Light green.
- PI 618950. *Cucumis sativus* L.**
Wild. Ames 23734; Nanging Chating. Collected 1996 in Jiangsu, China. South Chinese type. Black spine, 26 cm X 5 cm, yellow brown.
- PI 618951. *Cucumis sativus* L.**
Wild. Ames 23735; Yiupi Huanggua. Collected 1996 in Anhui, China. South Chinese type. Black spine, 36 cm X 5 cm, yellow brown.
- PI 618952. *Cucumis sativus* L.**
Wild. Ames 23736; Baise Zhao. Collected 1996 in Guangxi, China. North Chinese type. White spine, 24 cm X 6 cm, light green, column.
- PI 618953. *Cucumis sativus* L.**
Wild. Ames 23737; Tanshan Qiugua. Collected 1996 in Tianjin, China. North Chinese type. White spine, 45 cm X 6 cm, yellow.
- PI 618954. *Cucumis sativus* L.**
Wild. Ames 23738; Hetao Dihuanggua. Collected 1996 in Hebei, China. South Chinese type. Black spine, 22 cm X 6 cm, brown.
- PI 618955. *Cucumis sativus* L.**
Wild. Ames 23739; Fuan Zhao. Collected 1996 in Hunan, China. North Chinese type.

- PI 618956. *Cucumis sativus* L.**
Wild. Ames 23740; Er Zhaozi. Collected 1996 in Sichuan, China. South Chinese type.
- PI 618957. *Cucumis sativus* L.**
Wild. Ames 23741; Chun Jinzi. Collected 1996 in Sichuan, China. South Chinese type.
- PI 618958. *Cucumis sativus* L.**
Wild. Ames 23742; Baisi Tiao. Collected 1996 in Sichuan, China. South Chinese type.
- PI 618959. *Cucumis sativus* L.**
Wild. Ames 23743; Jin Yan No. 7. Collected 1996 in Tianjin, China. North Chinese type.
- PI 618960. *Cucumis sativus* L.**
Cultivar. Ames 23744; Lu Di No. 2. Collected 1996 in Beijing, China. North Chinese type.
- PI 618961. *Cucumis sativus* L.**
Wild. Ames 23745; Xingtai Mici. Collected 1996 in Beijing, China. North Chinese type.

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan; Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

- PI 618962. *Amaranthus cruentus* L.**
Breeding. "R 123"; Cr004; A73-17; RRC 78S-67; RRC 67; Ames 2015. Collected 09/01/1977 in Benin. Pedigree - RRC 1034 was selected from this accession. The seeds are dark brown, flowers green, leaves green. The RRC class type is: African. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States; R.R. Harwood, Winrock International, Petit Jean Mt., Morrilton, Arkansas 72110, Morrilton, Arkansas, United States. Received 02/20/1981.

- PI 618963. *Amaranthus caudatus* L.**
Landrace. RRC 125; RRC 78S-125; Ames 2062. Collected 09/01/1977 in Nepal. Tata Village. The seeds are light tan, flowers red and orange, leaves green. The RRC class type is: edulis. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were donated by International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 12/07/1993.

- PI 618964. *Ipomoea triloba* L.**
Wild. Mex-32; DLP 4361; Grif 6175. Collected in Mexico.

PI 618965. *Ipomoea triloba* L.

Wild. DLP 4374; Mex-45; Grif 6176. Collected 11/1990 in Michoacan, Mexico. Latitude 18° 11' 59" N. Longitude 102° 9' 36" W. Elevation 720 m. Five kilometers NE of Arteaga-uruapan, East Michoacan, Mexico.

PI 618966. *Ipomoea trifida* (Kunth) G. Don

Wild. DLP 4379; Mex-50; Grif 6177. Collected 11/1990 in Michoacan, Mexico. Latitude 19° 21' N. Longitude 102° 15' 36" W. Elevation 1250 m. Los Reyes D Salgado, East Michoacan, Mexico.

PI 618967. *Ipomoea triloba* L.

Wild. DLP 4380; Mex-51; Grif 6178. Collected 11/1990 in Michoacan, Mexico. Latitude 19° 46' 12" N. Longitude 102° 13' 48" W. Elevation 1250 m. Los Reyes D Salgado (Sta. Clara), East Michoacan, Mexico.

PI 618968. *Ipomoea triloba* L.

Wild. DLP 4385; Mex-56; Grif 6179. Collected 11/1990 in Michoacan, Mexico. Latitude 21° 27' 36" N. Longitude 99° W. Elevation 5 m. Five kilometers south Cd Valles-tamazunchale, East San Luis Potosi, Mexico.

PI 618969. *Ipomoea hederacea* Jacq.

Wild. Mex-20; DLP 4349; Grif 6216. Collected in Mexico.

The following were donated by Al Jones, USDA/ARS, U.S. Vegetable Laboratory, 2700 Savannah Highway, Charleston, South Carolina 29414, United States. Received 1991.

PI 618970. *Ipomoea hederacea* Jacq.

Wild. 76.21; Grif 6219. Collected in Hong Kong.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 618971. *Festuca arundinacea* Schreb.

Wild. X97-077; W6 20250. Collected 08/1997 in Xinjiang, China. Latitude 43° 1' 46" N. Longitude 81° 28' 36" E. Elevation 1020 m. 5 km east of Akedala Farm, 40 km east of Zhaosu County, Xinjiang. Ungrazed meadow, rough furrows, will not be cut for hay. Lush vegetation; may be subirrigated. No slope.

PI 618972. *Festuca ovina* L.

Wild. X97-083; W6 20254. Collected 08/1997 in Xinjiang, China. Latitude 43° 1' 42" N. Longitude 81° 18' 23" E. Elevation 1880 m. 30 km east of Zhaosu County, Xinjiang. Ungrazed hillside, rocky soil underlain with shale, very xeric site. Slope is 40% with south aspect.

PI 618973. *Festuca arundinacea* Schreb.

Wild. X97-086; W6 20256. Collected 08/1997 in Xinjiang, China. Latitude 43° 2' 30" N. Longitude 80° 58' 58" E. Elevation 1560 m. 20 km west of Zhaosu County, Xinjiang. Ungrazed meadow, will be cut for hay. Silt loam soil, low area surrounded by hills that would catch snow and spring runoff. No slope.

PI 618974. *Bromus inermis* Leyss. subsp. *inermis*

Wild. X97-100; W6 20265. Collected 08/1997 in Xinjiang, China. Latitude 43° 9' 52" N. Longitude 81° 37' 12" E. Elevation 1320 m. 40 km east Zhaosu County, Xinjiang. Ungrazed meadow that will be cut for hay. Lush vegetation, silt loam soil. Slope is 2% with southwest aspect. Near Suasu River.

PI 618975. *Festuca ovina* L.

Wild. X97-129; W6 20286. Collected 08/1997 in Xinjiang, China. Latitude 43° 29' 26" N. Longitude 81° 7' 24" E. Elevation 1960 m. 50 km south of Yili City, Xinjiang. Moderately grazed hillside. Clay loam topsoil with stones 1-3 cm diameter. Moderately xeric site. Slope is 25% with southeast aspect.

The following were collected by Charles West, University of Arkansas, Altheimer Laboratory-Agronomy, 276 Altheimer Drive, Fayetteville, Arkansas 72703, United States; David A. Sleper, University of Missouri, Department of Agronomy, 271-F Life Sciences Center, Columbia, Missouri 65211, United States; Jose Alberto Oliveira, Centro de Investigaciones Agrarias de Mabegondo, Apdo 10, La Coruqa, Spain. Received 12/1997.

PI 618976. *Festuca arundinacea* Schreb.

Wild. 93063; W6 20550. Collected 07/1993 in Spain. Latitude 37° 9' N. Longitude 3° 4' W. Elevation 1280 m. S side of Aldeire along stream in the province of Granada.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 618977. *Dactylis glomerata* L.

Cultivar. "Arly"; W6 6225. Developed in France.

PI 618978. *Dactylis glomerata* L.

Cultivar. "Furly"; W6 6227. Developed in France.

PI 618979. *Dactylis glomerata* L.

Wild. 363 RAGT; W6 6228. Collected 11/19/1990 in France. Latitude 46° 37' N. Longitude 0° 4' E. Latille, West France.

PI 618980. *Dactylis glomerata* L.

Wild. 378 RAGT; W6 6231. Collected 11/19/1990 in France. Latitude 46° 52' N. Longitude 1° 1' W. Les Herbiers, West France.

PI 618981. *Dactylis glomerata* L.

Wild. 386 RAGT; W6 6232. Collected 11/19/1990 in France. Latitude 45° 57' N. Longitude 0° 58' W. Rochefort, West France.

- PI 618982. *Dactylis glomerata* L.**
Wild. 399 RAGT; W6 6233. Collected 11/19/1990 in France. Latitude 44° 43' N. Longitude 3° 51' E. Langogne, Central France.
- PI 618983. *Dactylis glomerata* L.**
Wild. 505 RAGT; W6 6234. Collected 11/19/1990 in France. Latitude 42° 59' N. Longitude 1° 8' E. St. Girons, Pyrenees, South France.
- PI 618984. *Dactylis glomerata* L.**
Wild. 508 RAGT; W6 6235. Collected 11/19/1990 in France. Latitude 42° 35' N. Longitude 1° 48' E. L'Hospitalet, Pyrenees, South France.
- PI 618985. *Festuca arundinacea* Schreb.**
Cultivar. "Raba"; W6 6240. Developed in France.
- PI 618986. *Festuca arundinacea* Schreb.**
Cultivar. "Donia"; W6 6243. Developed in France.
- PI 618987. *Festuca arundinacea* Schreb.**
Cultivar. "Adora"; W6 6244. Developed in France.
- PI 618988. *Festuca arundinacea* Schreb.**
Cultivar. "Sinfonia"; W6 6245. Developed in France.
- PI 618989. *Festuca arundinacea* Schreb.**
Cultivar. 444 RAGT; W6 6246. Collected 11/19/1990 in France. Latitude 43° 42' N. Longitude 1° 49' E. Lavaur, near Toulouse, South France.
- PI 618990. *Festuca arundinacea* Schreb.**
Wild. 446 RAGT; W6 6247. Collected 11/19/1990 in France. Latitude 43° 18' N. Longitude 1° 14' E. Carbonne, near Toulouse, South France.

The following were collected by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 11/02/1993.

- PI 618991. *Bromus inermis* Leyss. subsp. *inermis***
Wild. X93231; W6 13135. Collected 08/24/1993 in Xinjiang, China. Latitude 43° 48' N. Longitude 87° 51' E. Elevation 1600 m. High winter pasture at Tu Juan south of Xiejago Stud Farm, 90km S & E of Urumqi, lowland seepage, upper sites very dry. Bottom lands clay loam, side hills gravelly. Dominant species include *Artemisa boraliensis*, *Stipa capillata*, *Festuca ovina*.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Saddik Saidi, Morocco; Mohammed Tazi, Morocco; Nezha Saidi, National Institute for Agricultural Research, Rabat, Morocco. Received 08/19/1994.

PI 618992. *Dactylis glomerata* L.

Wild. M226.CPG94; W6 15955. Collected 07/28/1994 in Morocco. Latitude 31° 33' 4" N. Longitude 7° 35' 30" W. Elevation 894 m. Near Taferiate/Ait-Ourir, 9 k east of Ait-Ourir on road P31, Marakech-Ouarzazate. Past grazed, now cultivated/protected. Slope 0-5%, aspect NE. 1/4 shade. Soil red sandy loam on calcareous schist/limestone, pH 9.5-10.0. Rainfall 350 mm. Seasonally dry, stream terrace. Vegetation closed, seasonal tall grass. Population abundance frequent, distribution patchy. Growth habit erect.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 618993. *Dactylis glomerata* L.

Wild. 697 RAGT; W6 6238. Collected 11/19/1990 in Italy. Latitude 45° 5' N. Longitude 10° 32' E. Lodrone, Italy.

PI 618994. *Festuca arundinacea* Schreb.

Wild. 956 RAGT; W6 6250. Collected 11/19/1990 in France. Latitude 48° 27' N. Longitude 1° 30' E. Chartres, Brittany, West France.

PI 618995. *Festuca arundinacea* Schreb.

Wild. 964 RAGT; W6 6252. Collected 11/19/1990 in France. Latitude 48° 24' N. Longitude 3° 26' W. Callac, Brittany, West France.

PI 618996. *Festuca arundinacea* Schreb.

Wild. 972 RAGT; W6 6254. Collected 11/19/1990 in Italy. Ragoli, Italy.

PI 618997. *Festuca arundinacea* Schreb.

Wild. 977 RAGT; W6 6255. Collected 11/19/1990 in Italy. Latitude 45° 45' N. Longitude 11° 39' E. Marostica, Italy.

PI 618998. *Festuca arundinacea* Schreb.

Wild. 978 RAGT; W6 6256. Collected 11/19/1990 in Italy. Latitude 45° 49' N. Longitude 10° 4' E. Lovere, Italy.

The following were donated by Welsh Plant Breeding Station, Genetic Resources Unit, Aberystwyth, Wales, United Kingdom. Received 09/03/1991.

PI 618999. *Lolium perenne* L.

Wild. ABY-BA 9821.80; W6 9329. Collected in Wales, United Kingdom. Latitude 52° 2' N. Longitude 4° 19' W. Elevation 220 m. Llandysul.

PI 619000. *Lolium perenne* L.

Wild. ABY-BA 9829.80; W6 9334. Collected in Wales, United Kingdom. Latitude 52° 11' N. Longitude 2° 51' W. Elevation 50 m. Dilwyn.

PI 619001. *Lolium perenne* L.

Wild. ABY-BA 9835.80; W6 9338. Collected in Wales, United Kingdom. Latitude 51° 57' N. Longitude 3° 3' W. Elevation 200 m. Llanthony.

PI 619002. *Lolium perenne* L.

Wild. ABY-BA 9838.81; W6 9341. Collected in Wales, United Kingdom. Latitude 52° 25' N. Longitude 3° 50' W. Elevation 330 m. Ponterwyd.

PI 619003. *Lolium perenne* L.

Wild. ABY-BA 10106.82; W6 9362. Collected in Norway. Latitude 58° 53' N. Longitude 5° 36' E. Elevation 25 m. Sola.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619004. *Bromus inermis* Leyss. subsp. *inermis*

Wild. 96S-132; W6 19644. Collected 09/1996 in Mongolia. Latitude 49° 50' 31" N. Longitude 94° 1' 5" E. Elevation 1085 m. Ubs Aimag, Zuun-gobi Sum, located in an experimental alfalfa seeding area about 100 km east of Ubs Noer. 2% slope. Experimental farm planted to alfalfa five years previously. Soils are brown sandy soils with very little gravel. DOMINANT VEG: *Medicago varia* + ragweed/ *Elymus* + *Bromus inermis*.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619005. *Festuca arundinacea* Schreb.

Wild. X97-011; W6 20211. Collected 08/1997 in Xinjiang, China. Latitude 43° 37' 7" N. Longitude 81° 49' 50" E. Elevation 720 m. 5 km east of Yemadu Bridge, Xinjiang. Hillside going down into a drainage area and near edge of drainage area. Sandy loam soil. Slope is 30% going down into drainage area.

PI 619006. *Festuca rubra* L.

Wild. X97-022; W6 20215. Collected 08/1997 in Xinjiang, China. Latitude 43° 14' 9" N. Longitude 81° 11' 25" E. Elevation 2370 m. 8 km north Zhaosu Horse Breeding Farm, Xinjiang. High mountain meadow, silt loam, gently rolling landscape, native grassland, will be cut for winter hay, field road running through site. Slope is 2% with northwest aspect.

The following were collected by Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzherbert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 01/1998.

PI 619007. *Festuca rubra* L.

Uncertain. OR16; W6 20382. Collected 08/1997 in Oregon, United States. Latitude 43° 29' N. Longitude 124° 13' W. Elevation 0 m. 1/2 mile south of Hauser just inland of Highway 101. Lat/lon accurate to Hauser. Lagoon behind coastal dunes. Sand, 0-5% slope, 1/4 shade, seasonally inundated. Natural wetland bisected by highway.

PI 619008. *Festuca rubra* L.

Uncertain. OR98; W6 20439. Collected 08/1997 in Oregon, United States. Latitude 43° 45' N. Longitude 122° 34' W. Elevation 0 m. 2 miles west of town of Hemlock at West Beaver. Stream terrace, rough grazed field. Loam, 0-5% slope, open, moist/seasonally dry.

PI 619009. *Festuca rubra* L.

Uncertain. W12; W6 20467. Collected 08/1997 in Washington, United States. Latitude 46° 59' N. Longitude 123° 56' W. Elevation 0 m. 5 miles west of Aberdeen on Highway 109. Roadside, 6-10% slope, moist.

PI 619010. *Festuca rubra* L.

Wild. W44; W6 20486. Collected 08/1997 in Washington, United States. Latitude 48° 10' 59" N. Longitude 124° 13' 2" W. Elevation 50 m. Highway 113, 8 miles north of Sappho. Grassy clearing in logged forest. Loam, 0-5%, open, moist.

PI 619011. *Festuca rubra* L.

Wild. W81; W6 20503. Collected 08/1997 in Washington, United States. Latitude 48° 7' 50" N. Longitude 123° 11' 50" W. Elevation 3 m. Near town of Dungeness, sand dune area adjacent to wildlife reserve. Sand, 0-5% slope, open, seasonally dry.

The following were donated by Welsh Plant Breeding Station, Genetic Resources Unit, Aberystwyth, Wales, United Kingdom. Received 09/03/1991.

PI 619012. *Lolium perenne* L.

Wild. ABY-BA 10100.83; W6 9359. Collected in England, United Kingdom. Latitude 53° 9' N. Longitude 1° 38' W. Elevation 300 m. Winster.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 619013. *Dactylis glomerata* L.

Wild. 375 RAGT; W6 6230. Collected 11/19/1990 in France. Latitude 46° 45' N. Longitude 1° 45' W. Apremont, West France.

The following were collected by Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzhert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 01/1998.

PI 619014. *Festuca rubra* L.

Uncertain. W72; W6 20500. Collected 08/1997 in Washington, United States. Latitude 48° 7' 53" N. Longitude 123° 43' 24" W. Elevation 20 m. East of Joyce in abandoned paddock, once grazed. Loam, 0-5% slope, open, seasonally dry.

The following were collected by Charles West, University of Arkansas, Altheimer Laboratory-Agronomy, 276 Altheimer Drive, Fayetteville, Arkansas 72703, United States; David A. Sleper, University of Missouri, Department of Agronomy, 271-F Life Sciences Center, Columbia, Missouri 65211, United

States; Jose Alberto Oliveira, Centro de Investigaciones Agrarias de Mabegondo, Apdo 10, La Coruqa, Spain. Received 12/1997.

PI 619015. Festuca arundinacea Schreb.

Wild. 93061; W6 20549. Collected 07/1993 in Spain. Latitude 37° 10' N. Longitude 3° 2' W. Elevation 1270 m. SW side of Ferreira along Rio Hondo in the province of Granada.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 619016. Festuca arundinacea Schreb.

Wild. 963 RAGT; W6 6251. Collected 11/19/1990 in France. Latitude 48° 17' N. Longitude 4° 36' W. Camaret, Brittany, West France.

The following were collected by Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzherbert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 01/1998.

PI 619017. Festuca rubra L.

Uncertain. OR76; W6 20423. Collected 08/1997 in Oregon, United States. Latitude 46° 14' N. Longitude 124° 1' W. Elevation 0 m. Trestle Bay, Clatsop Spit. Sand dune, 6-10% slope, open, seasonally dry.

The following were donated by Welsh Plant Breeding Station, Genetic Resources Unit, Aberystwyth, Wales, United Kingdom. Received 09/03/1991.

PI 619018. Lolium perenne L.

Wild. ABY-BA 9820.80; W6 9328. Collected in Wales, United Kingdom. Latitude 52° 2' N. Longitude 4° 19' W. Elevation 220 m. Llandysul.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619019. Bromus inermis Leyss. subsp. inermis

Wild. 96N-217; W6 19709. Collected 08/1996 in Mongolia. Latitude 48° 59' 45" N. Longitude 97° 14' 16" E. Elevation 2048 m. Site is located on a small stream running into Holboo Nuur. It is 6 km southeast of the lake. 10% slope. Mountain meadow. It has a north aspect and is at the edge of the Larel forest and uphill 100 yards from the creek. DOMINANT VEG: Carex pediformis, Poa pratensis, Dasiphora fruticosa, Sanguisorba officinalis, Geranium pratense ECOLOGICAL ZONE: Forest steppe.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 619020. *Dactylis glomerata* L.

Cultivar. "Amplly"; W6 6226. Developed in France.

PI 619021. *Dactylis glomerata* L.

Wild. 690 RAGT; W6 6237. Collected 11/19/1990 in Italy. Trucchi, Italy.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619022. *Bromus inermis* Leyss. subsp. *inermis*

Wild. 96N-371; W6 19835. Collected 09/1996 in Mongolia. Latitude 47° 1' 59" N. Longitude 93° 18' 18" E. Elevation 1355 m. Hovd Aimag, an abandoned wheat farm south of the highway from Hovd to Altai city. Less than 1% north slope. Site is directly south of the fence in the area previously under a circle irrigation. Soils are small gravel/sandy/silt. DOMINANT VEG: *Crepis tectorum*, *Sausurea amara*, *Salsola salina*, *Medicago falcata*, *Corispermum chinganicum*, *Corispermum declinatum*
ECOLOGICAL ZONE: Desert steppe.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619023. *Festuca rubra* L.

Wild. X97-028; W6 20220. Collected 08/1997 in Xinjiang, China. Latitude 43° 15' 4" N. Longitude 81° 8' 7" E. Elevation 2170 m. Hongnahai Village, 8 km north of Zhaosu County, Xinjiang. Mountain meadow, flat area near a stream, moderately grazed, wet flood plain, not saline, loam soil, dense vegetation cover. No slope.

The following were donated by Welsh Plant Breeding Station, Genetic Resources Unit, Aberystwyth, Wales, United Kingdom. Received 09/03/1991.

PI 619024. *Lolium perenne* L.

Wild. ABY-BA 10101.83; W6 9360. Collected in England, United Kingdom. Latitude 53° 17' N. Longitude 1° 46' W. Elevation 246 m. Tideswell.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619025. *Festuca arundinacea* Schreb.

Wild. X97-003; W6 20209. Collected 08/1997 in Xinjiang, China. Latitude 43° 54' 1" N. Longitude 80° 58' 27" E. Elevation 540 m. 10 km west of No. 68 Farm, 30 km southwest of Yili City, Xinjiang. Alluvial flood plain, sand and coarse stone with no slope. Near bank of Yili River.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 619026. *Festuca arundinacea* Schreb.

Cultivar. "Pastelle"; W6 6241. Developed in France.

PI 619027. *Festuca arundinacea* Schreb.

Wild. 451 RAGT; W6 6249. Collected 11/19/1990 in France. Latitude 42° 38' N. Longitude 2° 25' E. Prades, Pyrenees, South France.

PI 619028. *Dactylis glomerata* L.

Wild. 509 RAGT; W6 6236. Collected 11/19/1990 in France. Latitude 42° 33' N. Longitude 1° 50' E. Porte-Puymorens, Pyrenees, South France.

PI 619029. *Festuca arundinacea* Schreb.

Wild. 966 RAGT; W6 6253. Collected 11/19/1990 in France. Latitude 48° 38' N. Longitude 2° 4' W. Dinard, Brittany, West France.

The following were collected by Warren M. Williams, AgResearch, Grasslands Research Centre, Grasslands Research Centre, Fritzherbert West, Private Bags 11008, Palmerston North, North Island, New Zealand; Alan V. Stewart, Pyne Gould Guinness Ltd., P.O. Box 3100, 411 Blenheim Road, Christchurch, South Island 8015, New Zealand. Received 01/1998.

PI 619030. *Festuca rubra* L.

Uncertain. W23; W6 20476. Collected 08/1997 in Washington, United States. Latitude 47° 3' 29" N. Longitude 124° 0' 9" W. Elevation 20 m. Town of Copalis Crossing. Seward Nursery. Ungrazed grassland (old orchard). Loam, 0-5% slope, open, moist.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 619031. *Dactylis glomerata* L.

Wild. 368 RAGT; W6 6229. Collected 11/19/1990 in France. Latitude 47° 9' N. Longitude 0° 32' W. Vihiers, West France.

PI 619032. *Festuca arundinacea* Schreb.

Cultivar. "Sopline"; W6 6242. Developed in France.

The following were donated by Welsh Plant Breeding Station, Genetic Resources Unit, Aberystwyth, Wales, United Kingdom. Received 09/03/1991.

PI 619033. *Lolium perenne* L.

Wild. ABY-BA 9984.A81; W6 9352. Collected in Romania. Latitude 46° 59' N. Longitude 21° 49' E. Elevation 100 m. Les.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le Bourg, Druelle, France. Received 11/19/1990.

PI 619034. *Festuca arundinacea* Schreb.

Wild. 449 RAGT; W6 6248. Collected 11/19/1990 in France. Latitude 43° 1' N. Longitude 1° 37' E. St. Jean De Verges, Pyrenees, South France.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/30/1994.

PI 619035. *Astragalus canadensis* var. *mortonii* (Nutt.) S. Watson

Wild. W6 16296. Collected 07/30/1994 in Idaho, United States. Latitude 43° 47' N. Longitude 114° 36' W. Elevation 2075 m. Easley Campground in the Sawtooth National Recreation Area near the Easley Hot Springs off Highway 75 about 15 miles northwest of Ketchum. Growing in a dry site near the restroom of the Easley Campground. Long stems (6-10 inches) on which were borne a raceme of pods.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsy, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 619036. *Astragalus glycyphyllos* L.

Wild. VIR D133; W6 17781. Collected 08/23/1995 in Russian Federation. Latitude 43° 44' 59" N. Longitude 39° 41' 1" E. Province Souchi, 12 km. north of Dagomys, to west of site 78. Past logged, now grazed. Slope 11-40%, aspect SE. Light open. Soil clay, pH 5.9-6.0, moist, ridgetop-upper slope. Vegetation closed, open deciduous forest with closed lower layers. Surrounding vegetation evergreen tall grass. Dominant tree species *Carpinus* sp, *Quercus robur*, *Quercus* sp. Dominant shrub species *Laurocerasus* sp., *Ribes* sp. Dominant herb/grass species *Calamagrostis* sp., grass dominant, ferns, blackberry. Population abundance frequent. Growth habit semi-erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Melvin Rumbaugh, R.R. 3, Box 125, Humboldt, Nebraska 68376, United States; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Jay Hart, 20 Bush Lane, Ithaca,

New York 14850, United States; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 619037. *Astragalus galegiformis* L.

Wild. 0191; VIR 045; US 191; W6 17868. Collected 07/26/1995 in Russian Federation. Latitude 44° 4' 25" N. Longitude 42° 21' 24" E. Elevation 800 m. 5 km. south of Bereshevskaya, Karacajevo-Cerkesskaja Avtonommaja Oblast (K-C Republic). Previously logged/cleared, now grazed. Slope 11-40%, aspect E. Light open. Soil colluvial loams with gravel, pH 7.8-8.0. Vegetation closed, seasonal tall grass and seasonal short grass. Surrounding vegetation open deciduous forest with closed lower layers. Dominant shrub species *Carpinus* c., *Q. petraea*. Dominant herb/grass species *Carix* sp., *Bothriochloa* i., *Festuca* sp., *Koeleria* sp. Stem 1-1.3 m. thick. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 05/1995.

PI 619038. *Astragalus adsurgens* Pall.

Wild. E94146; W6 18090. Collected 09/1994 in Mongolia. Latitude 47° 6' 32" N. Longitude 117° 11' 58" E. Elevation 600 m. Dornod Aimag, eastern Mongolia. Near WWII battlefield with bunkers and destroyed vehicles. Approximately 200 km from Inner Mongolian border to the north, south, and east. Grass steppe.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 619039. *Astragalus monspessulanus* L.

Wild. B96-168; W6 19356. Collected 07/1996 in Bulgaria. Latitude 41° 50' 43" N. Longitude 24° 40' 41" E. Elevation 760 m. 2km south of town, Chvoyna. Collected at base of steep rocky cliff. Pine, Juglans, *Trifolium*, *Medicago*.

The following were developed by Associated Farmers Delinting, Inc., United States. Received 05/30/2001.

PI 619040 PVPO. *Gossypium hirsutum* L.

Cultivar. "AFD 2050". PVP 200100148.

PI 619041 PVPO. *Gossypium hirsutum* L.

Cultivar. "AFD 2051". PVP 200100149.

The following were developed by Pure Seed Testing, Inc., P.O. Box 449, Hubbard, Oregon 97032, United States. Received 05/30/2001.

PI 619042. *Poa pratensis* L.
Cultivar. "PST-B9-35". PVP 200100166.

The following were developed by Svalof Weibull AB, Svalow, Malmohus, Sweden. Received 05/30/2001.

PI 619043 PVPO. *Pisum sativum* L.
Cultivar. "SW Salute". PVP 200100168.

PI 619044 PVPO. *Pisum sativum* L.
Cultivar. "SW Midas". PVP 200100169.

The following were developed by Stoneville Pedigreed Seed Company, Stoneville, Mississippi, United States. Received 05/30/2001.

PI 619045 PVPO. *Gossypium hirsutum* L.
Cultivar. "AP 9257". PVP 200100170.

PI 619046 PVPO. *Gossypium hirsutum* L.
Cultivar. "AP 7126". PVP 200100171.

The following were developed by Seed Source, Inc., United States. Received 05/30/2001.

PI 619047 PVPO. *Gossypium hirsutum* L.
Cultivar. "SS 9815". PVP 200100172.

PI 619048 PVPO. *Gossypium hirsutum* L.
Cultivar. "SS 9901". PVP 200100173.

The following were developed by Minnesota Agricultural Experiment Station, St. Anthony Park, Minnesota, United States. Received 05/30/2001.

PI 619049 PVPO. *Glycine max* (L.) Merr.
Cultivar. "BM-7". PVP 200100174.

PI 619050 PVPO. *Glycine max* (L.) Merr.
Cultivar. "M-S2". PVP 200100175.

The following were developed by Virginia Tech Intellectual Properties, Inc., Virginia, United States. Received 05/30/2001.

PI 619051 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "38247"; VA96W-247. PVP 200100176. Pedigree - Coker 9803/Freedom.

PI 619052 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "38158"; VA96W-158. PVP 200100177. Pedigree - FFR555W/GA-Gore.

The following were developed by DEKALB Genetics Corporation, United States.
Received 05/30/2001.

- PI 619053. **Zea mays** L.
Cultivar. "I889291". PVP 200100178.
- PI 619054 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "I181664". PVP 200100179.
- PI 619055 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "I026458". PVP 200100180.

The following were developed by Asgrow Seed Company LLC, United States.
Received 05/30/2001.

- PI 619056. **Zea mays** L. **subsp. mays**
Cultivar. "I389972". PVP 200100181.
- PI 619057 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "7180". PVP 200100182.

The following were developed by DEKALB Genetics Corporation, United States.
Received 05/30/2001.

- PI 619058. **Zea mays** L. **subsp. mays**
Cultivar. "I161473". PVP 200100183.
- PI 619059. **Zea mays** L. **subsp. mays**
Cultivar. "I465837". PVP 200100184.
- PI 619060 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "I015011". PVP 200100185.
- PI 619061 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "I015036". PVP 200100186.
- PI 619062 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "I014738". PVP 200100187.
- PI 619063 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "I362697". PVP 200100188.
- PI 619064. **Zea mays** L. **subsp. mays**
Cultivar. "WQDS7". PVP 200100189.
- PI 619065 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "GF6151". PVP 200100190.
- PI 619066. **Zea mays** L. **subsp. mays**
Cultivar. "89AHD12". PVP 200100191.
- PI 619067 PVPO. **Zea mays** L. **subsp. mays**
Cultivar. "16IUL6". PVP 200100192.

PI 619068. Zea mays L. subsp. mays
Cultivar. "18DHZ5". PVP 200100193.

PI 619069 PVPO. Zea mays L. subsp. mays
Cultivar. "3327". PVP 200100194.

PI 619070. Zea mays L. subsp. mays
Cultivar. "94INK1B". PVP 200100195.

The following were developed by Abbott & Cobb, Inc., United States. Received 05/30/2001.

PI 619071 PVPO. Cucumis melo L.
Cultivar. "PM24". PVP 200100196.

The following were developed by Peter Franck, Germany. Received 05/30/2001.

PI 619072 PVPO. Triticum aestivum L. subsp. aestivum
Cultivar. Pureline. "GRANITE". PVP 200100197.

The following were developed by Plant Breeders 1, Inc., United States. Received 05/30/2001.

PI 619073 PVPO. Hordeum vulgare L. subsp. vulgare
Cultivar. "A629"; PB1-95-2R-A629. PVP 200100198.

The following were developed by President Colorado Certified Potato Growers' Assn., Inc., Colorado, United States. Received 06/01/2001.

PI 619074 PVPO. Solanum tuberosum L.
Cultivar. "RUSSET NORKOTAH SELECTION 8". PVP 9800255.

PI 619075 PVPO. Solanum tuberosum L.
Cultivar. "RUSSET NORKOTAH SELECTION 3". PVP 9800256.

The following were developed by HZPC Holland B.V., Netherlands. Received 06/01/2001.

PI 619076 PVPO. Solanum tuberosum L.
Cultivar. "FLORISSANT". PVP 9800339.

The following were developed by C. Meijer, B.V., Netherlands. Received 06/01/2001.

PI 619077 PVPO. Solanum tuberosum L.
Cultivar. "LADY CHRISTL". PVP 9900054.

The following were developed by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 06/01/2001.

PI 619078. *Pisum sativum* L.

Cultivar. "FALLON"; PS210387. CV-16. Pedigree - PS210713 / Flavanda. Released based on higher seed yields, larger seed size, and improved dry pea quality compared to Latah and Umatilla. The upright plant habit and resistance to lodging is especially beneficial for the production of high quality dry peas because pods are held above the soil surface during crop development and maturity which aids in keeping the peas clean and free of pathogens that can cause discoloration and rotting. Resistant to powdery mildew and fusarium wilt race 1. Dwarf growth habit and indeterminate and generally non-branching. Stipules large and medium green. Flowers white and appear on the 15th node and are borne on the peduncles in doubles. Pods straight and blunt ended and contain 6-7 seeds. Seeds weigh an average 25.1 grams per 100 seeds. Seeds smooth and round have yellow cotyledons. Water uptake and cooking time comparable to Latah and color is good after cooking.

PI 619079. *Pisum sativum* L.

Cultivar. "SHAWNEE"; PS010603. CV-17. Pedigree - X78127//WV341F/WA110-42. Plants have tall growth habit and flowering is indeterminate. Vines generally non-branching with straight internodes. Leaflets light green and slightly marbled. Flowers white and appear on the 15th node and are borne as singles and often as doubles. Pods straight and blunt ended and contain 6-7 seeds that are larger than Latah or Umatilla. When compared to Latah, averages 12 cm shorter, flowers an average of 2 d later and matured in 104 d, which was a similar maturity date as Latah and Umatilla. Uniform large round seeds (100 seeds weigh an average of 22.3 g). Seeds have yellow cotyledons and the seed coats are clear. Large seed size is desired by markets in U.S. and internationally. Cooking quality indicated cooking time is 22.0 minutes.

PI 619080. *Pisum sativum* L.

Cultivar. "JOEL"; PS110028. CV-18. Pedigree - Alaska 81 / MX1974. Green dry pea intended for use as a split dry edible pea. Plants single stemmed but sometimes branched at the base. Averages 5 cm tall, flowers 5 days later and matures one day later when compared to Columbian. Two flowers per peduncle compared to single flowers for Columbian. Pods contain 6-7 seeds that average 22.0 grams per 100 seeds. Seeds have dark green cotyledons and good color retention qualities. Resistance to seed bleaching is an advantage for production of high-quality smooth green dry peas. Cooking quality tests indicate an average cooking time of 22.3 minutes compared to 19.5 minutes for Columbian. Slower cooking time may be related to larger seed size. Resistant to powdery mildew and fusarium wilt (*Fusarium oxysporum* race 1) and had lower root rot scores in the aphanomyces root rot (*Aphanomyces eutiches*) nursery at Pullman, WA, in 1996. This cultivar is intended to replace Columbian and Alaska 81.

The following were developed by Milton C. Engelke, Texas A&M University, Research and Extension Center, 17360 Coit Road, Dallas, Texas 75252, United States; J.A. Reinert, Texas A&M University, Dept. of Soil and Crop Sciences, College Station, Texas 77843-6599, United States; B.A. Ruemmele, University of Rhode Island, Turfgrass Research and Extension, Kingston, Rhode Island 02881, United States; P.F. Colbaugh, Texas A&M University, Texas Agric. Exp. Sta., 17360 Coit Road, Dallas, Texas 75252, United States; K. B. Marcum, University of Arizona, Turfgrass Physiology, Tucson, Arizona, United States; R. H. White, Texas A&M University, Turfgrass Physiology, College Station,

Texas, United States; S.J. Anderson, Texas A&M University, Dept. of Soil & Crop Sciences, College Station, Texas 77843-2474, United States. Received 06/01/2001.

PI 619081. *Zoysia japonica* Steud.

Cultivar. "CROWNE"; DALZ8512. CV-213. Pedigree - Chance hybrid from maternal clone 220, an accession obtained from Beltsville, MD in 1981. Seed was harvested from an open pollinated maternal clone in a space plant nursery of 179 other *Zoysia* accessions. Coarse-textured, vegetatively propagated clone noted specifically for tolerance to drought conditions and low water use, excellent cold hardiness, and rapid recuperative ability. Intermediate in salt tolerance. Aggressive recovery growth from rhizomes and stolons, medium-coarse texture, good winter hardiness, good to excellent shade tolerance, and low water use requirement. Highly competitive to weed invasion under low management conditions. Harvest cycle can approach 8-12 months, in contrast to the industry standard Meyer that averages 15-24 months. Uniform in growth expression, genetically stable ($2n=40$), flowers prolifically, but has low self-fertility. Adapted to the Southern U.S. northward to central Kansas, based on National Turfgrass Evaluation Program trials conducted from 1991 through 1994. Suitable for use on golf course roughs, as well as home lawns, sports fields, industrial parks, and highway rights-of-way. Adapted to moderately shaded to full sun turf areas, and in areas where water quality and quantity is a problem. Optimum mowing height will range from 5.0 to 7.5 cm.

The following were developed by C. Meijer, B.V., Netherlands. Received 06/01/2001.

PI 619082 PVPO. *Solanum tuberosum* L.

Cultivar. "LADY CLAIRE". PVP 9900055.

The following were donated by H. Roger Boerma, University of Georgia, Department of Crop & Soil Science, 3111 Plant Sciences Building, Athens, Georgia 30602-7272, United States. Received 06/04/2001.

PI 619083. *Glycine max* (L.) Merr.

Cultivated. Danbaekkong; SY0115001. Collected in Korea, South.

The following were donated by Oregon State University, Oregon Agriculture Experiment Station, Corvallis, Oregon 97331, United States. Received 1971.

PI 619084. *Pisum sativum* L.

Cultivated. OREGON SUGAR POD. Pedigree - Derived from cross O.S.U. 102 x Dwarf Gray Sugar. 55 - 60 days to maturity. Plant short. Plant height 14 - less than 30". Sturdy. Stem zigzag. Leaves and stipules large. Node 1st first bloom 13 - 16. Pods borne singly or doubly. Pods 4" long x 7/8" wide. Smooth. High quality. Seeds medium large (approx. 1,400 per lb.). Slightly wrinkled or dimpled. Highly resistant to enation mosaic virus. Moderate resistance to pea streak virus complex. Resistant to common *Fusarium* pea wilt. Susceptible to *Fusarium* near-wilt. Susceptible to powdery mildew. Edible pod variety. Cultivated.

The following were developed by An Hang, USDA, ARS, National Small Grains Germplasm, Research Facility, Aberdeen, Idaho 83210, United States; George L. Hosfield, USDA, ARS, Michigan State University, Department of Crop & Soil Science, East Lansing, Michigan 48824-1325, United States; Matt Silbernagel, USDA, ARS, Vegetable Crop Production, IAREC, P.O. Box 30, Prosser, Washington 99350, United States; Phillip Miklas, USDA, ARS, Irrigated Agric. Research & Extension Ctr., 24106 North Bunn Road, Prosser, Washington 99350-9687, United States. Received 05/11/2001.

PI 619085. *Phaseolus vulgaris* L.

Cultivar. "ROJO CHIQUITO". CV-197; PVP 200300055. Pedigree - From a single F7 plant from the cross 'K-42/'Pompadour'. Closer to a small red seed type than any commercial dry bean class but very different in several respects. More upright plant habit (IIA) than typical commercial small reds. Pods are borne high enough to be directly harvested. This smaller size is characteristic of the 'Central American' small red market class. It will be the first small red cultivar release to possess dominant I gene resistance to seed borne bean common mosaic virus and has moderate resistance to curley top virus. Matures at 100 days after planting and 5 and 11 days later than NW-63 and LeBaron, respectively. Yield comparable to LeBaron in some years/locations but much lower than NW-63, UI-259 and Rufus. Seed size about 20 g per 100 seeds compared to 30 and 38 g for NW-63 and LeBaron, respectively. Seeds small and shiny and exhibits excellent quality in canning tests as it retains firmness and a very attractive bright red color after cooking.

The following were developed by Luther Talbert, Montana State University, Department of Plant Sciences, Bozeman, Montana 59717, United States; Greg D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Star Rt. 36, Havre, Montana 59501, United States; Joyce L. Eckhoff, Montana State University, Eastern Agric. Research Center, 1501 N. Central Avenue, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; Susan P. Lanning, Montana State University, Plant Sciences & Plant Pathology Department, Leon Johnson Hall, 324A, Bozeman, Montana 59717, United States; Robert N. Stougaard, Montana State University, Northwestern Agric. Research Center, 4570 MT Hwy 35, Kalispell, Montana 59901, United States; Michael Giroux, Montana State University, Dept. of Plant Sciences & Plant Pathology, 119 Ag Bioscience Facility, Bozeman, Montana 59717-3150, United States; Ken Kephart, Montana State University, MSU Southern Ag. Research Center, 748 Railroad Highway, Huntley, Montana 59037, United States; D. Habernicht, Montana State University, Plant Sciences Dept., Bozeman, Montana 59717, United States; W.E. Grey, Montana State University, Bozeman, Montana 59717, United States. Received 05/29/2001.

PI 619086. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "EXPLORER"; MTHW9710. CV-915; PVP 200300182. Pedigree - MT8182/Fortuna//Pondera/MT8182. Released 2001. Awne hard white spring wheat with tan-white straw and chaff. Kernels ovate, mid-long, with a mid-sized germ. Kernels have medium V-shaped crease with angular cheeks and a mid-sized brush with collar. Intermediate levels of stem-solidness over five locations, with an average score of 14.5 compared to hollow-stemmed Hi-Line with a score of 6.5. Not resistant to the wheat stem sawfly (*Cephus cinctus*). Resistant to stem

rust (*Puccinia graminus*) and stripe rust (*Puccinia striiformis*). Susceptible to damage caused by the Russian wheat aphid (*Diuraphis noxia*). Early maturity with average heading date of June 21, about 2 days earlier than Hi-Line and MTHW9420. Semi-dwarf, with average height of 73 cm, similar to MTHW9420 and Hi-Line. Yield averaged 4475 kg ha⁻¹ versus 4501 kg ha⁻¹ and 4556 kg ha⁻¹ for Hi-Line and MTHW9420, respectively. Grain volume weight average 799 kg m⁻³, identical to Hi-Line and 5 kg m⁻³ higher than MTHW9420. Grain protein percentage average 144 g kg⁻¹ versus 145 g kg⁻¹ and 135 g kg⁻¹ for Hi-Line and MTHW9420, respectively.

The following were developed by Monsanto Company, 800 North Lindbergh Blvd., St. Louis, Missouri 63167, United States. Received 06/07/2001.

PI 619087 PVPO. *Solanum tuberosum* L.
Cultivar. "NL10-ATL". PVP 9700231.

PI 619088 PVPO. *Solanum tuberosum* L.
Cultivar. "NL10-SUP". PVP 9700232.

The following were developed by Agripro Wheat, Unit of Advanta USA, United States. Received 06/07/2001.

PI 619089 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "NuFrontier". PVP 200100199. Pedigree - 2180/HBZ356A//Mesa.

The following were developed by Syngenta Seeds, Inc., United States. Received 06/07/2001.

PI 619090 PVPO. *Pisum sativum* L.
Cultivar. "SUGAR BOWL". PVP 200100200.

PI 619091 PVPO. *Glycine max* (L.) Merr.
Cultivar. "S00-A6". PVP 200100202.

PI 619092 PVPO. *Glycine max* (L.) Merr.
Cultivar. "S10-F2". PVP 200100203.

PI 619093 PVPO. *Glycine max* (L.) Merr.
Cultivar. "S16-Y6". PVP 200100204.

PI 619094 PVPO. *Glycine max* (L.) Merr.
Cultivar. "S30-Y8". PVP 200100205.

PI 619095 PVPO. *Glycine max* (L.) Merr.
Cultivar. "S38-E9". PVP 200100206.

The following were developed by CSIRO, Division of Plant Industry, General Post Office Box 1600, Canberra, Austr. Capital Terr. 2601, Australia. Received 06/07/2001.

PI 619096 PVPO. *Gossypium hirsutum* L.
Cultivar. "FM958". PVP 200100208.

PI 619097 PVPO. *Gossypium hirsutum* L.
Cultivar. "FM966". PVP 200100209.

The following were developed by Jimmie H. Hatchett, USDA-ARS, Dept of Entomology, Waters Hall, Manhattan, Kansas 66506-4004, United States; Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States; David D. Baltensperger, University of Nebraska, Panhandle Research, & Extension Center, Scottsbluff, Nebraska 69361-4939, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; B. Moreno-Sevilla, University of Nebraska, Department of Agronomy, Lincoln, Nebraska 68583, United States; John E. Watkins, University of Nebraska, Dept. of Plant Pathology, Lincoln, Nebraska 68583, United States; J. Krall, University of Wyoming, Research & Extension Center, R.1, Box 374, Torrington, Wyoming 88420, United States; Lenis A. Nelson, University of Nebraska, Department of Agronomy, 342 Keim Hall - E. Campus, Lincoln, Nebraska 68583, United States; R.W. Elmore, University of Nebraska, Dept. of Agronomy, Lincoln, Nebraska 68583, United States; R.N. Klein, University of Nebraska, Dept. of Agronomy, USDA-ARS, Lincoln, Nebraska 68583, United States; M.J. Shipman, USDA-ARS, University of Nebraska, Dept. of Agronomy and Horticulture, Lincoln, Nebraska 68583, United States. Received 06/08/2001.

PI 619098. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. Pureline. "WAHOO"; NE94654; NSGC 8747. PVP 200100237; CV-920. Pedigree - Arapahoe*2/Abilene. Released 2000. Hard red winter wheat. Awne, white-glumed. Medium maturity, about 0.5 d earlier flowering than Arapahoe. Moderate straw strength, similar to Arapahoe. Winter hardiness good to very good, similar to Abilene. Moderately resistant to stem rust (*Puccinia graminis*, most likely containing Sr6 and Sr24), leaf rust (*P. triticina*, most likely contains Lr16, Lr24, and possibly other leaf rust resistance genes), and Hessian fly (*Mayetiola Destructor* Say, similar to Arapahoe, and most likely contains the Marquillo-Kawvale genes for resistance), and susceptible to wheat soilborne mosaic virus, wheat streak mosaic virus, and barley yellow dwarf virus. Genetically lower in grain volume weight (57.2 lbs/bu, 73.8 kg/hl) similar to Arapahoe and Wesley, but lower than Culver, Millennium, Alliance, and Pronghorn.

The following were developed by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 06/14/2001.

PI 619099. *Lens culinaris* Medik. subsp. *culinaris*
Cultivar. "MASON"; LC960254. CV-12. Pedigree - Laird/Precoz. Averages 1 cm taller, flowers an average of one day later and matures one day earlier when compared to the Brewer check. Plants are strongly branched at the base which imparts a bushy structure that enables the canopy to remain somewhat erect during the growing season. Uniform large seeds (100 seeds weight an average of 7.0 g vs. 6.0 g for Brewer). Seeds large with yellow cotyledons and seed coats light green and lack mottling. Large seed size and lack of seedcoat mottling are features that should

appeal to markets in the U.S. and internationally. In cooking time tests from 1994-1996, required 22.0 minutes compared to 21.6 minutes for Brewer.

The following were developed by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 07/07/1993.

PI 619100. *Cicer arietinum* L.

Cultivar. "EVANS"; CA188163; W6 12523. CV-194. Pedigree - Flip 85-58/Surutato-77. Large seeded ascochyta blight resistant kabuli line. Unifoliate leaf structure, similar to Sanford and Dwelley, that differs from the fern leaf structure that is typical of UC-5, UC-27 and Spanish White. Plants are branched at the base and have an indeterminate flowering habit. Pods are rhomboid-ellipsoid and have glandular trichomes, which give them a pubescent appearance. Pods have one and often two seeds. Seeds average 46.1 g/100 seeds, which compares to 42.4 grams for Sanford and 49.1 grams for Dwelley. Flowers and matures 2-3 days earlier than Surutato-77 and Tammany and 5-7 days earlier than Sanford and Dwelley. Early flowering and early maturing are primary reasons for release. The medium-large light-cream-colored seeds are suited to the domestic canning industry and are readily accepted in international markets.

The following were developed by Daryl T. Bowman, North Carolina State University, Department of Crop Science, Box 8604, Raleigh, North Carolina 27695-8604, United States; Steven Leath, USDA, ARS, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695, United States; R.A. Navarro, North Carolina State University, North Carolina Agric. Exp. Station, Dept. of Crop Science, Raleigh, North Carolina 27695-7629, United States; Paul Murphy, North Carolina State University, Dept. of Crop Science, P.O. Box 7629, Raleigh, North Carolina 27695, United States. Received 06/14/2001.

PI 619101. *Avena sativa* L.

Cultivar. Pureline. "NC HULLESS"; NC95-6305N. CV-367. Pedigree - Tx81Ab2041/3/Ogle/2/NC 82-172/NC 81-333/4/Coker 84-27. Released 2001. Hulless (naked) fall sown oat. Adapted primarily to coastal plain of North Carolina. Multiflorous spikelets typically produce over 92% naked groats in combine samples. Heading date in lower coastal plains of North Carolina averages April 13 and plant height averages 90cm. Groat protein percentage averages 150 g kg⁻¹, and test weight generally falls in the 479 to 559 kg m⁻³ range.

The following were developed by Greg D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Patrick F. Hensleigh, Montana State University, Plant Science & Plant Pathology, 324A Leon Johnson Hall, Bozeman, Montana 59717, United States; Thomas K. Blake, Montana State University, Dept. of Plant Sciences & Plant Pathology, 109 Plant Biosciences Building, Bozeman, Montana 59717, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Star Rt. 36, Havre, Montana 59501, United States; Joyce L.

Eckhoff, Montana State University, Eastern Agric. Research Center, 1501 N. Central Avenue, Sidney, Montana 59270, United States; Leon E. Welty, Montana State University, Northwestern Agric. Research Center, Kalispell, Montana, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; Robert N. Stougaard, Montana State University, Northwestern Agric. Research Center, 4570 MT Hwy 35, Kalispell, Montana 59901, United States; Ken Kephart, Montana State University, MSU Southern Ag. Research Center, 748 Railroad Highway, Huntley, Montana 59037, United States; J.G.P. Bowman, Montana State University, Dept. of Animal and Range Sciences, Bozeman, Montana 59717, United States. Received 06/14/2001.

PI 619102. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "H3860224". CV-300. Pedigree - Lewis/Apex. Released 2002. Two-rowed, white-kerneled, midseason spring barley. Spikes midlax, midlong, seminodding to erect before and after maturity, similar to Apex. Spike has rough awns, glume awns are equal to the length of the moderately hairy glume. Kernels have adhering, finely wrinkled hulls. Rachillas have short hairs, approx. 2 cm shorter than Lewis at maturity.

The following were developed by Ferry-Morse Seed Company, Inc., P.O. Box 100, Mountain View, California 94042, United States. Received 06/13/2001.

PI 619103. *Apium graveolens* var. *dulce* (Mill.) Pers.

Cultivar. "Summit"; PVP 8300122; NSL 180746. PVP 8300122.

The following were developed by Asgrow Seed Company, Kalamazoo, Michigan, United States. Received 1975.

PI 619104. *Brassica oleracea* var. *botrytis* L.

Cultivar. "Olympus"; NSL 90480. PVP 7400052.

PI 619105. *Brassica oleracea* var. *botrytis* L.

Cultivar. "Snowflower"; NSL 91982. PVP 7400051.

The following were developed by North American Seed Co., Inc., United States. Received 1989.

PI 619106. *Brassica oleracea* var. *botrytis* L.

Cultivar. "Snowtop"; NSL 242187. PVP 8900166.

The following were developed by Ferry-Morse Seed Company, Inc., P.O. Box 100, Mountain View, California 94042, United States. Received 1983.

PI 619107. *Solanum lycopersicum* L.

Cultivar. "Apex 2000"; NSL 180750. PVP 8300120.

The following were developed by USDA, ARS, U.S. Water Conservation Laboratory, 4331 East Broadway Road, Phoenix, Arizona 85040, United States. Received 05/09/1990.

PI 619108. *Cuphea* hybrid

Cultivar. "Starfire"; No. 1070; AZ1070; Ames 22287; Ames 22430. Pedigree - *Cuphea ignea* (PI 534899) X *Cuphea angustifolia* (PI 534892). Released 1990. Intermediate in size to its two parents, 50 to 75 cm tall and 60 to 75 cm wide, with the spreading subshrub shape of the *C. ignea* parent. Leaves are dark green with a light-green lower surface as in the *C. ignea* parent, but are more narrowly lanceolate, 30 to 40 mm long and 12 to 20 mm wide. Flowers continuously once cuttings are established. Calyx tubes are striped pink on white, dorsally tipped in white, and 10 to 15 mm long, with a pronounced spur. Dorsal petals are white with a purple vein, ~5 mm long. Ventral petals are purple to almost white and are ~3 mm long. Less dense, but more vigorous, growth habit than its *C. ignea* parent. Particularly adapted as a potted plant and possibly would be useful as a hanging plant for greenhouse or household use. May have potential as a bedding plant but has not been evaluated for this purpose. Sterile hybrid, must be propagated vegetatively. Cuttings root readily with no chemical treatment of any kind when placed in potting soil and kept for 1 week to 10 days under intermittent mist at 20 to 25 C. Cuttings grow rapidly, reaching full growth and flower within 4 to 5 weeks when grown in greenhouse (20 to 25 C, ambient relative humidity 50% to 96%, and a 16-h light period with high-intensity, metal-vapor lights).

The following were collected by David Spooner, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706-1590, United States; Alberto Salas, International Potato Center, Avenida La Molina 1895, PO Box 1558, Lima, Lima 12, Peru. Received 05/01/1998.

PI 619109. *Solanum lignicaule* Vargas

Wild. SS 7211; Q 37659. Collected 03/03/1998 in Cuzco, Peru. Latitude 13° 24' 29" S. Longitude 71° 50' 46" W. Elevation 3460 m. Calca: Ruins of Pisac, located about 8 km drive on windy road bearing NW of Pisac, located below cliffs bearing ancient grave sites, behind or W of Ruins of Kkanankkey, adjacent to R o Kkllchakamayo. Growing in loose stones on slope. Leaves with distinctive odor. Flowers not present. Fruits maturing.

PI 619110. *Solanum brevicaule* Bitter

Wild. SS 7212; Q 37660. Collected 03/03/1998 in Cuzco, Peru. Latitude 13° 24' 29" S. Longitude 71° 50' 46" W. Elevation 3460 m. Calca: Ruins of Pisac, located about 8 km drive on windy road bearing NW of Pisac, located below cliffs bearing ancient grave sites, behind or W of Ruins of Kkanankkey, adjacent to R o Kkllchakamayo. Growing on loose stones on slope. Purple rotate corollas and green mottled spherical fruits present.

PI 619111. *Solanum brevicaule* Bitter

Wild. SS 7221; Q 37662. Collected 03/08/1998 in Cuzco, Peru. Latitude 13° 49' 28" S. Longitude 71° 49' 41" W. Elevation 2590 m. Paruro: 13.1 km S of Paruro on road to Colcha, at a place (no homes) called Cortina. Growing among piles of calcareous stones and in abandoned cultivated field. Corollas light purple, rotate. Fruits globose.

- PI 619112. *Solanum lignicaule* Vargas**
 Wild. SS 7222; Q 37663. Collected 03/08/1998 in Cuzco, Peru. Latitude 13° 49' 28" S. Longitude 71° 49' 41" W. Elevation 2590 m.
 Paruro: 13.1 km S of Paruro on road to Colcha, at a place (no homes) called Cortina. Growing among piles of calcareous stones. Flowers absent. Fruits globose.
- PI 619113. *Solanum buesii* Vargas**
 Wild. SS 7232; Q 37668. Collected 03/13/1998 in Cuzco, Peru. Latitude 13° 13' 27" S. Longitude 72° 30' 41" W. Elevation 3500 m.
 Urubamba: along Inca trail N and W of Machu Pichu, ca 100 m W of archaeological site of Conchamarca (in between archaeological sites of Phuyupatamarca and Sayacmarca), on both sides of trail. Growing among grasses in sunny area. Corollas purple, rotate with large acumens. Fruits conical.
- PI 619114. *Solanum velardei* Ochoa**
 Wild. SS 7240; Q 37672. Collected 03/22/1998 in Apurimac, Peru. Latitude 13° 30' S. Longitude 72° 48' W. Elevation 3140 m.
 Abancay: collected at Marchancay, ca. 5 km walk NW uphill of Cachora. Growing between rock cracks in organic soil. Corollas purple, rotate, Fruits globose, Plants to 50 cm tall.
- PI 619115. *Solanum* sp.**
 Wild. SS 7248; Q 37677. Collected 04/08/1998 in Moquegua, Peru. Latitude 16° 38' 50" S. Longitude 71° 6' 1" W. Elevation 3230 m.
 General Sanchez Cerro: from a point 37.5 km W of town square of Omate (by posted kilometer signs on road) walk downhill (S of road) ca 150 m. Growing in sandy soil on edges of cultivated fields. Corollas purple, rotate, Fruits maturing to mature, globose, verrucose.
- PI 619116. *Solanum acaule* Bitter**
 Wild. SS 7253; Q 37681. Collected 04/10/1998 in Arequipa, Peru. Latitude 15° 39' 7" S. Longitude 71° 25' 20" W. Elevation 4130 m. Caylloma: 5.0 km S of Pulpera on road to Arequipa. Growing along roadside in black organic soil. Plants abundant. Corollas blue. Fruits and flowers present.
- PI 619117. *Solanum megistacrolobum* Bitter f. *megistacrolobum***
 Wild. SS 7254; Q 37682. Collected 04/10/1998 in Arequipa, Peru. Latitude 15° 37' 20" S. Longitude 71° 26' 48" W. Elevation 4120 m. Caylloma: ca. 1 km up (walking W) R o Chacramayo, on S side of valley ca. 75 m from river, from a point ca. 1 km S of Pulpera. Growing under bushes. Flowers not present. Two globose fruits found. Leaves with spicy odor typical of this subspecies.
- PI 619118. *Solanum* sp.**
 Wild. SS 7256; Q 37683. Collected 04/16/1998 in Apurimac, Peru. Latitude 14° 4' 3" S. Longitude 72° 39' 36" W. Elevation 2940 m.
 Grau: located 5.6 km E of center of Vilcamabma, ca. 600 m W of bridge called Puente Wi irca, at margin of R o Chuquibambilla. Growing in rocky soil on slope. Plants 50 cm tall. Flowers absent. Fruits globose.

The following were collected by David Spooner, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706-1590, United States; Antonio Rivera-Pena, INIFAP, Programa Nacional de la Papa, Apdo.

Postal 31, Suc. "A", Metepec, Mexico, Mexico; Ronald van den Berg, Wageningen Agricultural University, Department of Plant Taxonomy, General Foulksweg 37, Wageningen, Gelderland 6700 ED, Netherlands. Received 11/13/1997.

PI 619119. *Solanum morelliforme* Bitter & Munch

Wild. RSSV 946; Q 37290. Collected 10/02/1997 in Veracruz, Mexico. Latitude 19° 37' 1" N. Longitude 97° 3' 29" W. Elevation 2300 m. On road from Perote to Jalapa just E of Toxtlacoaya, 3.6 km W of Las Vigas, 20 m off S side of road. Growing in pine litter with moss covering on soil covering volcanic rocks. Flowers not present. 15 fruits collected from three fruiting plants.

The following were donated by Stepan Kiru, N.I. Vavilov Institute of Plant Industry, Department of Tuber Crops, 44 Herzen Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 08/09/1999.

PI 619120. *Solanum tuberosum* L.

Cultivated. SKR 92/001; Q 42858. Pedigree - [(Sagitta x <Curier x S. dms> x Priekulskii) x [(Dunperl x S. dms) x Gloriosa] x Katahdin} x Nevskii) x Granata) x Palma. LB resistance. High yield, early.

PI 619121. *Solanum tuberosum* L.

Cultivated. SKR 92/002; Q 42859. Pedigree - {[<(S. vallis mex. x Sterkh) x Edelgrd> x Frugold] x Concordia} x Atzimba /x Delamo /x Bola /x Aralia. LB resistant; PVX; PVY resistant. High yield.

PI 619122. *Solanum tuberosum* L.

Cultivated. SKR 92/003; Q 42860. Pedigree - (S. andigena x S. berthaultii) x Lisera. Golden Nematode + PLRV.

PI 619123. *Solanum tuberosum* L.

Cultivated. SKR 92/004; Q 42861. Pedigree - [(S. vallis mex x Fungold) x Concordia) x Atzimba} x Decama.

PI 619124. *Solanum tuberosum* L.

Cultivated. SKR 92/007; Q 42864. Pedigree - [(Earlaine x S. vallis mex) x Detskoselsky] x Atzimba.

PI 619125. *Solanum tuberosum* L.

Cultivated. SKR 92/009; Q 42866. Pedigree - [(S. phureja x S. chacoense) x S. gibberullosum] x Mariella x Granola.

PI 619126. *Solanum tuberosum* L.

Cultivated. SKR 92/013; Q 42870. Pedigree - [Apta x (Granola x S. dms) x Atzimba/ x Lizetta. LB resistant.

PI 619127. *Solanum tuberosum* L.

Cultivated. SKR 92/014; Q 42871. Pedigree - [(S. vallis mex x Granola) x Atzimba] x Lizetta.

PI 619128. *Solanum tuberosum* L.

Cultivated. SKR 92/015; Q 42872. Pedigree - (Granola x S. dms) x Atzimba. LB resistant.

PI 619129. Solanum tuberosum L.

Cultivated. SKR 92/016; Q 42873. Pedigree - [(S. andigena x Earleine) x Atzimba] x Antinema. x Granola.

PI 619130. Solanum tuberosum L.

Cultivated. SKR 92/017; Q 42874. Pedigree - (DH S. andigena x S. rybinii) x Atzimba/ x Willia. LB resistant. Golden Nematode. High yield.

PI 619131. Solanum tuberosum L.

Cultivated. SKR 92/018; Q 42875. Pedigree - [(Zarevo x (Granola x S. dms)] x Nevskii. LB resistant. High yield.

PI 619132. Solanum tuberosum L.

Cultivated. SKR 92/024; Q 42878. Pedigree - [(S. andigenum x Advira) x (Atzimba x MPI6170) x Zarevo.

Unknown source. Received 08/15/1995.

PI 619133. Solanum tuberosum L.

Cultivar. "Yema de Huevo"; CIP 704218; BE-7623; Q 35735; Q 42840.

The following were donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619134. Solanum tuberosum L.

Cultivar. "Muru"; CIP 379735.1; Q 42818.

PI 619135. Solanum tuberosum L.

Landrace. "Yana"; CIP 379735.3; Q 42819.

PI 619136. Solanum tuberosum L.

Landrace. "Cruza 148"; CIP 720118; Q 42821.

The following were collected by Coleccion Program, Papa del Peru, E.E. La Molina, Lima, Peru. Donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619137. Solanum tuberosum L.

Landrace. CIP 700045; SA-450; Q 42822; Q 44466. Collected 09/13/2000 in Junin, Peru. Latitude 11° 49' 12" S. Longitude 75° 22' 48" W. Elevation 3300 m. P. Jauja. Est. Exp. El Mantaro.

The following were donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619138. Solanum x chaucha Juz. & Bukasov

Cultivar. "EE-1966"; CIP 700739; Q 42824.

The following were collected by Coleccion Program, Papa del Peru, E.E. La Molina, Lima, Peru. Donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619139. Solanum tuberosum L.

Landrace. CIP 701127; OJO DE BUEY; Q 42825. Collected 09/13/2000 in Junin, Peru. Latitude 11° 49' 12" S. Longitude 75° 22' 48" W. Elevation 3300 m. P. Jauja. Est. Exp. El Mantaro.

PI 619140. Solanum tuberosum L.

Landrace. CIP 701171; SANTANLALLA; Q 42826. Collected 09/13/2000 in Junin, Peru. Latitude 11° 49' 12" S. Longitude 75° 22' 48" W. Elevation 3300 m. P. Jauja. Est. Exp. El Mantaro.

PI 619141. Solanum tuberosum L.

Landrace. CIP 701241; HUAGALINA; Q 42827. Collected 09/13/2000 in Junin, Peru. Latitude 11° 49' 12" S. Longitude 75° 22' 48" W. Elevation 3300 m. P. Jauja. Est. Exp. El Mantaro.

PI 619142. Solanum tuberosum L.

Landrace. CIP 701488; BADULAQUE; Q 42828. Collected 09/13/2000 in Junin, Peru. Latitude 11° 49' 12" S. Longitude 75° 22' 48" W. Elevation 3300 m. P. Jauja. Est. Exp. El Mantaro.

The following were donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619143. Solanum x chaucha Juz. & Bukasov

Cultivar. "Huayro"; CIP 701524; Q 42829.

The following were collected by Coleccion Program, Papa del Peru, E.E. La Molina, Lima, Peru. Donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619144. Solanum stenotomum Juz. & Bukasov subsp. stenotomum

Landrace. CIP 701633; PIRAMPO; Q 42831. Collected 09/13/2000 in Junin, Peru. Latitude 11° 49' 12" S. Longitude 75° 22' 48" W. Elevation 3300 m. P. Jauja. Est. Exp. El Mantaro.

PI 619145. Solanum x chaucha Juz. & Bukasov

Landrace. CIP 701675; TARMENA; Q 42832. Collected 09/13/2000 in Junin, Peru. Latitude 11° 49' 12" S. Longitude 75° 22' 48" W. Elevation 3300 m. P. Jauja. Est. Exp. El Mantaro.

The following were collected by Carlos M. Ochoa, International Potato Center, Apartado 5969, Lima, Lima, Peru. Donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619146. Solanum x chaucha Juz. & Bukasov

Landrace. CIP 703300; PAQOCHA O MURU URENA; Q 42835. Collected 09/13/2000 in Pasco, Peru. Latitude 10° 31' 12" S. Longitude 76° 28' 48" W. Elevation 3800 m. P. Daniel Carri. Palca (Yanahuanca).

PI 619147. Solanum tuberosum L.

Landrace. CIP 703426; WAKAPA NAWIN; Q 42836. Collected 09/13/2000 in Huanuco, Peru. Latitude 9° 36' 36" S. Longitude 76° 56' 24" W. Elevation 3390 m. P. Huamalies. Chavin De Pariarca.

The following were collected by R.C. Notcutt, The Nursery, Woodbridge, England, United Kingdom. Donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619148. *Solanum tuberosum* L.

Landrace. CIP 704159; CORAZON ROSADO; Q 42838. Collected 09/13/2000 in Salta, Argentina. Latitude 22° 16' 12" S. Longitude 65° 10' 12" W. Elevation 3500 m. D. Santa Victor. Lizoite.

The following were donated by Danuta Sekrecka, Plant Breeding & Acclimatization Inst., Gene Bank Laboratory, Branch Division Bonin, Bonin, Poland. Received 09/12/2000.

PI 619149. *Solanum tuberosum* L.

Cultivar. "DG-D4-21"; Q 42810.

PI 619150. *Solanum tuberosum* L.

Cultivar. "97A-28"; Q 42811.

PI 619151. *Solanum tuberosum* L.

Cultivar. "97A-77"; Q 42816.

PI 619152. *Solanum tuberosum* L.

Cultivar. "Meduza"; Q 43097; Q 43040.

PI 619153. *Solanum tuberosum* L.

Cultivar. "Oktiabronck"; Q 43098; Q 43041.

PI 619154. *Solanum tuberosum* L.

Cultivar. "Pushkinec"; Q 43099; Q 43042.

PI 619155. *Solanum tuberosum* L.

Cultivar. "Rezerv"; Q 43100; Q 43043.

PI 619156. *Solanum tuberosum* L.

Cultivar. "Dobro"; Q 43101; Q 43044.

PI 619157. *Solanum tuberosum* L.

Cultivar. "Talovsky"; Q 43102; Q 43045.

The following were donated by Oscar A. Hidalgo, International Potato Center, Apartado 5969, Lima, Lima, Peru. Received 09/13/2000.

PI 619158. *Solanum tuberosum* L.

Landrace. "V-3"; CIP 378650.1; Q 42817.

The following were collected by David Spooner, USDA, ARS, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706-1590, United States; Antonio Rivera-Pena, INIFAP, Programa Nacional de la Papa, Apdo. Postal 31, Suc. "A", Metepec, Mexico, Mexico; Ronald van den Berg, Wageningen Agricultural University, Department of Plant Taxonomy, General Foulksweg 37, Wageningen, Gelderland 6700 ED, Netherlands. Received 11/13/1997.

PI 619159. *Solanum x edinense* P. Berthault

Wild. RSSV 974; Q 37335. Collected 10/20/1997 in Mexico, Mexico. Latitude 19° 4' 37" N. Longitude 99° 50' 52" W. Elevation 3100 m. At El Capulin, a small settlement 21.3 km S of La Puerta (on Rt. 134), in Parque Nacional Nevado de Toluca, on W-facing lower slopes of volcano. Growing in rich organic soil about house and fields, in area of pine and fir woods, with *S. demissum*. Eleven tubers (red skin, white flesh) collected from one plant.

The following were developed by University of Nebraska, Nebraska Agr. Exp. Sta., Lincoln, Nebraska, United States; Terrance P. Riordan, Nebraska Agricultural Experiment Station, University of Nebraska, 377 Plant Science, Lincoln, Nebraska 68583-0724, United States; R.C. Shearman, University of Nebraska-Lincoln, 377 Plant Science, Lincoln, Nebraska 68583-0724, United States; S. Severmutlu, University of Nebraska, Dept. of Agronomy and Horticulture, Lincoln, Nebraska 68583, United States; C. Rodgers, Seeds West Inc., 508 East 16th Street, Yuma, Arizona 68583, United States. Received 06/22/2001.

PI 619160. *Bouteloua dactyloides* (Nutt.) Columbus

Cultivar. "BOWIE"; NTG-5. PVP 200100201; CV-241. Pedigree - Two male clones, 84-3428 and 84-3162 and two female clones, 84-25-2 and 84-304 were planted in a polycross at a ratio of 8:1. Superior turfgrass quality and density and wide range of adaptation. Dark-green color comparable to Tatanka. In Oklahoma 1997-98 exhibited longer stolon internodes (21.3mm) than Tatanka(16.4mm), but shorter stolon internodes than Bison (24.4mm) and similar to Cody. Stolon diameter smaller (3.3mm) compared to Bison (4.1mm), Cody (3.6mm), Texoka (3.5mm), similar to Tatanka. Shoot leaf length (13.7mm) shorten than Texoka (16.3mm) but longer than Tatanka (10.1mm) and similar to Bison and Cidy. Wider leaf (1.2mm) width than Tatanka (1.0mm) and cody (1.0mm), similar to Texoka and Bison. Canopy ht (14.7cm). Plant ht. (19.6cm). Has shown drought tolerance and excellent cold tolerance for a warm season grass. Has improved frost tolerance and excellent winter survival.

The following were donated by Roger D. Way, Cornell University, New York State Agric. Exp. Station, Department of Horticulture, Geneva, New York 14456-0462, United States. Received 06/24/1985.

PI 619161. *Malus domestica* Borkh.

Cultivar. GMAL 1027; Lyons. Pedigree - Chance seedling discovered about 1940. Fruit size too small, 65-70 mm. Skin 70-100% attractive shade of red, striped. Shape conic. Flesh semifirm, cream- colored. Flavor subacid. Eating quality fair. Harvest season mid-September, 3 wks before Delicious. Tree: productive annual cropping. Fruits hang to tree after they ripen. Small, attractive color.

The following were donated by T. Sanada, Fruit Tree Research Station, Ministry of Agric., Forestry and Fishing, Division of Fruit Breeding, Yatabe, Tsukuba, Ibaraki 305, Japan. Received 01/07/1988.

PI 619162. *Malus x asiatica* Nakai

Cultivar. "RINKI"; BE-1196; GMAL 2172; Q 26755; *M. asiatica* 'Rinki'.

The following were developed by James A. LaMondia, Connecticut AES, Valley Laboratory, Cook Hill Road, Box 248, Windsor, Connecticut 06095, United States. Received 06/27/2001.

PI 619163. *Nicotiana tabacum* L.

Cultivar. "SCANTIC". CV-122. Pedigree - Inbred derived from a bulk system of modified single seed descent. Three crosses between wilt-susceptible Connecticut broadleaf tobacco lines and the wilt-resistant cultivar C2 (C2 x Winn; C2 x Gogulski; and C2 x Gradowski) were selected for wilt resistance. A Connecticut broadleaf cigar wrapper tobacco developed with resistance to *Fusarium wilt* (*Fusarium oxysporum*). Wilt resistant under greenhouse and field conditions. Reduced sensitivity to weather fleck caused by ozone. Susceptible to tobacco mosaic virus. Agronomic characteristics and cured leaf quality evaluated under both experimental plots and commercial conditions. Over 20% yield increase in comparison to the current wilt-resistant standard, regardless of whether soils were infested with the pathogen or not. Yield increases over the standard wilt-susceptible cultivar approx. 5% in the absence of disease and dramatically different (up to nearly 100%) in *F. oxysporum*-infested soil.

The following were developed by Richard Berberet, Oklahoma State University, Department of Entomology & Plant Pathology, Room 127 NRC, Stillwater, Oklahoma 74078-0464, United States; John L. Caddel, Oklahoma State University, Oklahoma Cooperative Extension Service, Department of Plant & Soil Sciences, Stillwater, Oklahoma 74078-0507, United States; Ali A. Zarrabi, Oklahoma State University, Department of Entomology & Plant Pathology, 127 Noble Research Center, Stillwater, Oklahoma 74078-0464, United States. Received 06/27/2001.

PI 619164. *Medicago sativa* L. subsp. *sativa*

Breeding. "OK 206". GP-344. Pedigree - Developed by 2 cycles of phenotypic recurrent selection for resistance to blue alfalfa aphid. Parents included 7 - 16% each of 5472, Aggressor, Apollo Supreme, Cimarron, Garst 630, Magnum III, WL 320, Good as Gold CUF 101, and OK 51. Broad gene base population that provides resistance to the blue alfalfa aphid (*Acyrtosiphon kondoi*), biotype BAOK90, and the spotted aphid (*Therioaphis maculata*). Demonstrates good yields in Oklahoma and is intended as source population for use in alfalfa breeding programs where multiple pest-resistance should include resistance to the biotype of blue alfalfa aphid first discovered in 1990.

PI 619165. *Medicago sativa* L. subsp. *sativa*

Breeding. "OK 207". GP-345. Pedigree - Developed by 2 cycles of phenotypic recurrent selection for resistance to blue alfalfa aphid. Parents included 7 - 16% each of 5472, Aggressor, Apollo Supreme, Cimarron, Garst 630, Magnum III, WL 320, and Ok 51. Broad gene base population that provides resistance to the blue alfalfa aphid (*Acyrtosiphon kondoi*), biotype BAOK90, and the spotted alfalfa aphid (*Therioaphis maculata*). Demonstrates good yields in Oklahoma and is intended as source population for use in alfalfa breeding programs where multiple pest-resistance should include resistance to the biotype of the blue alfalfa aphid first discovered in 1990.

The following were developed by Greg D. Kushnak, Montana State University, Western Triangle Agric. Research Center, P.O. Box 1474, Conrad, Montana 59425, United States; Phil L. Bruckner, Montana State University, Dept. of Plant Sciences & Plant Pathology, 407 Leon Johnson Hall, Bozeman, Montana 59717, United States; Eugene A. Hockett, USDA, ARS, Montana State University, Plant and Soil Science Department, Bozeman, Montana 59717, United States; N.R. Riveland, Williston Research Extension Center, North Dakota Agric. Exp. Sta., 14120 Highway 2, Williston, North Dakota 58801, United States; G.R. Carlson, Montana State University, Northern Agric. Research Center, Star Rt. 36, Havre, Montana 59501, United States; Joyce L. Eckhoff, Montana State University, Eastern Agric. Research Center, 1501 N. Central Avenue, Sidney, Montana 59270, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; Robert N. Stougaard, Montana State University, Northwestern Agric. Research Center, 4570 MT Hwy 35, Kalispell, Montana 59901, United States; J.E. Berg, Montana State University, Dept. of Plant, Soil & Environmental Sciences, Bozeman, Montana 59717, United States; Ken Kephart, Montana State University, MSU Southern Ag. Research Center, 748 Railroad Highway, Huntley, Montana 59037, United States; D. Habernicht, Montana State University, Plant Sciences Dept., Bozeman, Montana 59717, United States. Received 06/27/2001.

PI 619166. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "BigSky"; MT9432. PVP 200300290; CV-924. Pedigree - NuWest / Tiber. Released 2001. Broadly-adapted, high-yielding HRWW wheat line with medium maturity, good foliar disease resistance, and dual purpose (bread and Asian noodles) end-use quality. Relative to leading cultivars currently in production within Montana, exhibits a superior combination of high grain yield, high test weight, and high grain protein. Higher yielding but similar to Tiber in many respects, with broad adaptation, good winter hardiness, high test weight, and stiff straw. Test weight, grain protein, and milling and baking qualities are within acceptable ranges for export or domestic high-quality bread flour-production. Exhibits relatively high transient post-harvest dormancy similar to Tiber. Resistant to stem rust but susceptible to leaf and stripe rust. Foliar disease resistance is good (Septoria and Tan spot).

PI 619167. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "NuSky"; MTW9441. CV-925. Pedigree - NuWest / Tiber. Released 2001. High-yielding, medium-maturity hard white winter wheat line with good winter hardiness, medium to high grain protein, and excellent dual purpose (bread and Asian noodles) end-use quality. Appearance, field performance, and end-use quality characteristics are similar to NuWest in most regards with exception that head approx. 1 day later than NuWest. Excellent milling wheat with bread baking and Asian noodle characteristics similar to NuWest. Like both parents, is resistant to preharvest sprouting with relatively high transient post-harvest dormancy. Coleoptile length is short. Resistant to stem rust but susceptible to leaf and stripe rust. Foliar disease resistance is good (Tan spot).

The following were donated by Toma Dimitrovski, Faculty of Agriculture and Forestry, University of Skopje, Skopje, Macedonia. Received 07/09/2001.

PI 619168. *Malus sylvestris* (L.) Mill.

Wild. GMAL 2524.a.

The following were developed by H. Thomas Stalker, North Carolina State University, Department of Crop Science, Box 7629, Raleigh, North Carolina 27695-7620, United States; M.K. Beute, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695-7629, United States; B.B. Shew, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695-7629, United States; K.R. Barker, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695-7629, United States. Received 06/08/2001.

PI 619169. *Arachis hypogaea* L.

Breeding. GP-NC WS 5. GP-103. Pedigree - *A. hypogaea* (PI 261942) x *A. cardenasii* (GKP 10017, PI 262141). Botanically belongs to the subsp. *hypogaea* var. *hypogaea*. Growth habit semi-erect. Main stem apparent at maturity. Pods deeply constricted and mostly two-seeded, but may be one-seeded. Testa smooth and uniform tan color. Seeds average 42.9 g 100-1. Low yielding. Maturity 8-10 d later than Florigiant. Fewer galls, egg masses, and eggs g-1 root than the moderately resistant *A. hypogaea* lines PI 259572 and PI 259639, and expresses the Z3 RAPD marker band. Moderate to high levels of resistance to *Cercospora arachidicola*, but is highly susceptible to southern stem rot (*Sclerotium rolfsii*) and *Cylindrocladium* black rot (*Cylindrocladium crotalariae*).

PI 619170. *Arachis hypogaea* L.

Breeding. GP-NC WS 6. GP-104. Pedigree - *A. hypogaea* (PI 261942) x *A. cardenasii* (GKP 10017, PI 262141). Botanically intermediate between subsp. *hypogaea* and *fastigiata* and has decumbent growth habit. Flowers on main stem, and vegetative nodes on lateral branches are mixed with short runs of reproductive and alternating reproductive vegetative nodes. Main stem averages 28 cm long and apparent at maturity. Pods deeply constricted, averaging 196 cm long and 0.96 cm wide. Testa tan. Seeds average 25.9 g 100-1. Low yielding and matures 4-5 d later than Florigiant. Few galls, egg masses, and eggs g-1 root, and formed few nematodes in roots 1-10 d following soil inoculation with *M. arenaria* juveniles. Plants have a characteristic band of molecular weight 265 when analyzed with the Z3 RAPD primer. Highly resistant to southern corn rootworm, moderately high resistance to potato leafhopper, corn earworm, and early leaf spot, but is highly susceptible to southern stem rot.

The following were developed by H. Thomas Stalker, North Carolina State University, Department of Crop Science, Box 7629, Raleigh, North Carolina 27695-7620, United States; Robert E. Lynch, USDA, ARS, Insect Biology & Population Management, Research Laboratory, Tifton, Georgia 31793-0748, United States. Received 06/08/2001.

PI 619171. *Arachis hypogaea* L.

Breeding. GP-NC WS 7. GP-105. Pedigree - *A. hypogaea* (PI 261942) x *A. cardenasii* (GKP 10017, PI 262141). Botanically belongs to the subsp. *fastigiata*. Growth habit prostrate. Vegetative reproductive nodes on lateral branches are in a sequential pattern. Main stem approx. 22 cm long and apparent at maturity. Maturity about 5 d later than Florigiant. Most pods one-seeded, but some are two-seeded with a deep constriction. All have pronounced beaks, many trichomes, and average 13.9 mm long and 9.8 mm wide. Seeds short and broad, have pink testa, and average 24.1 g 100-1. Yield potential low but has very high levels of resistance to

southern corn rootworm, corn earworm, and potato leafhopper. Resistance to corn earworm is antibiosis. Susceptible to thrips, fall armyworms, velvetbean caterpillar, root knot nematodes (*M. arenaria* and *M. hapla*), and southern stem rot (*Sclerotium rolfsii*).

PI 619172. *Arachis hypogaea* L.

Breeding. GP-NC WS 8. GP-106. Pedigree - *A. hypogaea* (PI 261942) x *A. cardenasii* (GKP 10017, PI 262141). Botanically intermediate between subsp. *hypogaea* and *fastigiata*. Flowers not produced on the main stem, but vegetative reproductive nodes on lateral branches are in a sequential pattern. Growth habit prostrate. Maturity similar to Florigiant. Main stem apparent at maturity. Pods two-seeded, deeply constricted, glabrous, and beaked. Yield potential low. Seeds small, averaging 30 g 100-1, short and broad and have tan testa. Very high levels of resistance to southern corn rootworm, high levels of resistance to corn earworm, and resistance to fall armyworm and velvetbean caterpillar. Susceptible to thrips and to early leaf spot (*C. arachidicola*).

PI 619173. *Arachis hypogaea* L.

Breeding. GP-NC WS 9. GP-107. Pedigree - *A. hypogaea* (PI 261942) x *A. cardenasii* (GKP 10017, PI 262141). Botanically belongs to the subsp. *fastigiata*. Vegetative reproductive nodes on lateral branches sequential. Growth habit decumbent. Plants do not completely cover the soil surface between 91 cm rows during the growing season, but main stem apparent at maturity. Maturity about 5 d later than Florigiant. Pods deeply constricted, have inconspicuous beaks, and average 16.3 mm long and 10.4 mm wide. Seeds average 33.3 g 100-1, short and broad, and have pink testa. Yield potential low. Very high levels of resistance to southern corn rootworm, corn earworm, and potato leafhopper. Resistance to corn earworm is antibiosis. Moderate levels of resistance to *C. arachidicola* and to fall armyworm, but is susceptible to thrips and *M. arenaria*.

PI 619174. *Arachis hypogaea* L.

Breeding. GP-NC WS 10. GP-108. Pedigree - *A. hypogaea* (PI 261942) x *A. cardenasii* (GKP 10017, PI 262141). Botanically intermediate between subsp. *hypogaea* and *fastigiata*. Flowers not produced on the main stem, but vegetative reproductive nodes on lateral branches are sequential. Growth habit decumbent. Main stem, approx. 20 cm high, apparent at maturity. Medium size plants nearly cover the soil surface between 91 cm rows by maturity. Stems hairy and have some red pigmentation. Maturity approx. 10 d later than Florigiant. About half of the pods one-seeded and the others two-seeded. Pods deeply constricted with inconspicuous beaks and average 18.1 mm long and 10.9 mm wide. Seeds short and broad, have pink testa, and average 26.5 g 100-1. Yield potential low. Very high levels of resistance to potato leafhopper, southern corn rootworm, and corn earworm. Resistant to the fall armyworm, but susceptible to thrips and southern stem rot.

The following were developed by H. Thomas Stalker, North Carolina State University, Department of Crop Science, Box 7629, Raleigh, North Carolina 27695-7620, United States; Thomas G. Isleib, North Carolina State University, Department of Crop Science, Box 7629, Raleigh, North Carolina 27695-7629, United States; M.K. Beute, North Carolina State University, Dept. of Plant Pathology, Raleigh, North Carolina 27695-7629, United States; B.B. Shew,

PI 619175. *Arachis hypogaea* L.

Breeding. GP-NC WS 11. GP-109. Pedigree - *A. hypogaea* (NC 6//NC Ac 3033) x GP-NC WS 1. Botanically belongs to the *A. hypogaea* subsp. *hypogaea* var. *hypogaea*. Medium size plants do not completely fill 91 cm rows by maturity. Main stem about 27 cm high. Plants require about 150 d to maturity. Most pods graded to fancy size, averaging 36.3 mm long and 16.3 mm wide. Pods two-seeded and deeply constricted with pronounced beaks. Testa tan and smooth, and average 86.6 100-1. Seed size significantly greater than previously released early leaf spot resistant interspecific hybrid lines. Yield averages 2645 kg ha⁻¹ compared to 3531 for NC7. Higher levels of resistance to *C. arachidicola* than previously released interspecific hybrid derivatives and *A. hypogaea* leaf spot-resistant lines.

PI 619176. *Arachis hypogaea* L.

Breeding. GP-NC WS 12. GP-110. Pedigree - *A. hypogaea* (NC 6//NC Ac 3033) x GP-NC WS 1. Botanically belongs to the *A. hypogaea* subsp. *hypogaea* var. *hypogaea*. Medium to small plants do not completely fill 91 cm rows by maturity. Main stem about 24 cm long and is not apparent at maturity. Plants require about 150 d to maturity. Most pods graded to fancy size, and average 36.1 mm long and 15.0 mm wide. Pods two-seeded and moderately constricted with inconspicuous beaks. Testa tan and smooth. Yield averages 2688 kg ha⁻¹ as compared to 3531 kg ha⁻¹ for NC7 and seeds average 83.10 g 100-1. Significantly higher levels of resistance to *C. arachidicola* than resistant *A. hypogaea* lines or previously released interspecific hybrid derivatives. Moderate levels of resistant to *C. personatum*.

PI 619177. *Arachis hypogaea* L.

Breeding. GP-NC WS 13. GP-111. Pedigree - *A. hypogaea* (NC 5 //PI 270806) x GP-NC WS 4. Botanically is intermediate between subsp. *hypogaea* and *fastigiata*. No flowers produced on the main stem, but vegetative reproductive nodes on lateral branches have a sequential pattern. Growth habit semi-erect, bunchy-type. Medium to large plants do not completely fill 91 cm rows by maturity. Main stem, about 28 cm long, is not apparent at maturity. Plants require about 150 d to mature. Pods average 35.1 mm long, 15.1 mm wide, and are two-seeded, deeply constricted with pronounced beaks. Pod yield averages 2675 kg ha as compared to 3531 kg ha⁻¹ for NC7. Testa tan and may split at or before maturity. High levels of early leaf spot resistance and few sporulating lesions. Moderate to high levels of resistance to *C. personatum*, which is not significantly different from the resistant cultivar Southern Runner.

PI 619178. *Arachis hypogaea* L.

Breeding. GP-NC WS 14. GP-112. Pedigree - *A. hypogaea* (NC 6//PI 270806) x *A. cardenasii* GP-NC WS 4. Botanically belongs to the *A. hypogaea* subsp. *hypogaea* var. *hypogaea*. Plant size medium to large. Main stem, about 30 cm high, is not apparent at maturity. Requires 152+ d to mature. Pods, averaging 37.8 mm long and 15.5 mm wide, are two-seeded and deeply constricted with pronounced beaks. Testa tan and smooth, and commonly split by maturity. Seeds average 72.3 g 100-1. Pod yield averages 3013 kg ha⁻¹ compared to 3531 kg ha⁻¹ for NC7. Highly resistant to early (*C. arachidicola*) and late leaf spot (*C. personatum*). Based on subjective ratings for early leaf spot resistance, significantly more

resistant than *A. hypogaea* lines and previously released interspecific hybrid derivatives, and expresses moderate levels of resistance to late leaf spot.

PI 619179. *Arachis hypogaea* L.

Breeding. GP-NC WS 15. GP-113. Pedigree - *A. hypogaea* (NC 6//PI 270806) x *A. cardenasii* GP-NC WS 4. Botanically belongs to the *A. hypogaea* subsp. *hypogaea* var. *hypogaea*. Medium to large plants do not completely fill 91 cm rows by maturity. Main stem, about 37 cm high, is not apparent at maturity. Plants require about 150 d to mature. Pods average 39.2 mm long and 16.9 mm wide, are two-seeded and deeply constricted with pronounced beaks. Most grade to fancy size. Seeds average 71 g 100⁻¹. Yields average 2700 kg ha⁻¹ as compared to 3531 kg ha⁻¹ for NC7. Testa tan and smooth. Very high levels of resistance to *C. arachidicola* in the field, expressed as small lesions. Based on subjective ratings and numbers of lesions, significantly more resistant than *A. hypogaea* lines are previously released interspecific hybrids.

The following were developed by M.A. Afzal, Bangladesh Agricultural Research Institute, Pulses Research Centre, Joydebpur, Gazipur, Bangladesh; Md. Abu Bakr, Bangladesh Agricultural Research Institute, Pulses Research Centre, Gazipur, Bangladesh; M. Motior Rahman, Bangladesh Agricultural Research Institute, Pulses Research Center, Gazipur, Bangladesh; Nusrat Karim Luna, Bangladesh Agricultural Research Institute, Pulses Research Centre, Gazipur, Bangladesh. Received 06/06/2001.

PI 619180. *Vigna mungo* (L.) Hepper var. *mungo*

Cultivar. "BARIMASH-2". CV-196. Pedigree - Advance lines BMA-2141 x BMA-2140 (collected from India). Growth habit erect and attains height of 33-35 cm. Flowers 35-40 days after emergence and reaches physiological maturity 70-75 days after emergence. Leaves trifoliolate, alternate, and green. Leaf pubescence present. Petioles short and purple-green. Corolla yellowish-green. Raceme position above the canopy. Mature pods black and heaving hair. Seeds drum-shaped and blackish. 100 seed weight of about 4.2 g. Resistance to yellow mosaic virus (YMV) and cercospora leaf spot (CLS). Rates 0 on 0 to 5 rating scale for both YMV and CLS. Seeds have 86.2% kernel content, and produce 71.8% head dhal (intact cotyledon after splitting) using traditional method of dehulling. Approx. 33 min. to cook and shows solid dispersion of 27.4%. Contains 22.9% protein and 47.0% carbohydrate.

The following were developed by A. Sarker, Int. Center for Agricultural Research in the Dry Areas, P.O. Box 5466, Aleppo, Syria; M.A. Afzal, Bangladesh Agricultural Research Institute, Pulses Research Centre, Joydebpur, Gazipur, Bangladesh; Md. Abu Bakr, Bangladesh Agricultural Research Institute, Pulses Research Centre, Gazipur, Bangladesh; M. Motior Rahman, Bangladesh Agricultural Research Institute, Pulses Research Center, Gazipur, Bangladesh; Nusrat Karim Luna, Bangladesh Agricultural Research Institute, Pulses Research Centre, Gazipur, Bangladesh; M.S. Aktar, Bangladesh Agricultural Research Institute, Pulses research Centre, Gazipur, Bangladesh. Received 06/06/2001.

PI 619181. *Vigna mungo* (L.) Hepper var. *mungo*

Cultivar. "BARIMASH-3". CV-207. Pedigree - Two advance lines BMA 2140 x BMA-2038 (collected from India). Growth habit erect and attains a height

of 35-38 cm. Flowers 34-45 days after emergence and reaches physiological maturity 70-75 days after emergence. Leaves trifoliate, alternate, and green. Leaf pubescence present. Petioles short and purple-green. Corolla yellowish-green. Raceme position above the canopy. Mature pods black and heaving hair. Seeds drum-shaped and blackish. 100 seed weight of about 4.2 g. Resistance to yellow mosaic virus (YMV) and cercospora leaf spot (CLS). Rated 0 on 0 to 5 rating scale for both diseases. Seed have 86.1% kernel content, but produce 72.66% head dhal (intact kernel after splitting) using traditional method of dehulling. Approx. 34 min. to cook and shows solid dispersion of 31%. Contains 23% protein and 47.0% carbohydrate.

The following were developed by Dale L. Reeves, South Dakota State University, Dept. of Plant Science, Plant Sci. Bldg., Box 2140C, NPB 247, Brookings, South Dakota 57007, United States. Received 07/10/2001.

PI 619182. *Avena sativa* L.

Breeding. Pureline. SD 89210; NSGC 8748. Pedigree - MN//Coker/Cayuse/3/Dal/Nodaway 70/4/Spear/Kelsey//Nodaway 70/MN. MN = Otter//Garland/PI267989. Spring oat. Early maturity, good test weight high groat %, high beta glucan, moderately high oil. Susceptible to lodging, resistant to loose smut, susceptible to BYDV, good crown rust resistance.

PI 619183. *Avena sativa* L.

Breeding. Pureline. SD 94004; NSGC 8749. Pedigree - Don/4/ND75043-22/Moore//Steele/3/Don/PI502958. Spring oat. Midseason maturity, white hulls, very high test weight, medium height. Resistant to loose smut, moderately resistant to crown rust, moderately susceptible to BYDV, susceptible to stem rust.

PI 619184. *Secale cereale* L. subsp. *cereale*

Breeding. Population. SD 83-3; NSGC 8750. Pedigree - Musketeer/dwarfs obtained from Grant McLeod, Swift Current, Saskatchewan. Dwarf selections were 8093A, 8093B4, 8093C, 8094F4, 8093G4. Crosses were bulked. Winter rye. The progeny were grown under isolation for 15 years. Plots were thinly planted every year with the identified tall plants rogued before pollination. The goal was to develop a semi-dwarf, winter-hardy rye for South Dakota. Selected a minimum of 200 plants each year.

The following were donated by Mark Roh, USDA, ARS, U.S. National Arboretum, Building 010A, Room 238, BARC-W, Beltsville, Maryland 20705, United States. Received 04/24/2000.

PI 619185. *Zea mays* L. subsp. *mays*

Cultivar. Population. "Black"; Q 42636.

PI 619186. *Zea mays* L. subsp. *mays*

Cultivar. Population. "Coffee"; Q 42637.

PI 619187. *Zea mays* L. subsp. *mays*

Cultivar. Population. "Red"; Q 42638.

PI 619188. Zea mays L. subsp. mays
Cultivar. Population. "White"; Q 42639.

PI 619189. Zea mays L. subsp. mays
Cultivar. Population. "Yellow"; Q 42640.

The following were donated by Norman F. Weeden, Cornell University, New York State Agric. Exp. Station, Department of Horticultural Sciences, Geneva, New York 14456-0462, United States; Cheng Suozhan, Chinese Academy of Agric. Sciences, Institute of Pomology, Zhengzhou, Henan, China. Received 07/19/2001.

PI 619190. Malus x micromalus Makino
Uncertain. GMAL 1882.a.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 07/24/2001.

PI 619191 PVPO. Lactuca sativa L.
Cultivar. "HERITAGE". PVP 200100210.

The following were developed by Seed Research of Oregon, Inc., Corvallis, Oregon, United States. Received 07/24/2001.

PI 619192 PVPO. Lolium perenne L.
Cultivar. "SR 4500". PVP 200100211.

The following were developed by Holden's Foundation Seeds, Inc., United States. Received 07/24/2001.

PI 619193 PVPO. Zea mays L. subsp. mays
Cultivar. "LH239". PVP 200100212.

The following were developed by Stoneville Pedigreed Seed Company, Stoneville, Mississippi, United States. Received 07/24/2001.

PI 619194 PVPO. Gossypium hirsutum L.
Cultivar. "ST 4793R". PVP 200100213.

The following were developed by Syngenta Seeds, Inc., United States. Received 07/24/2001.

PI 619195 PVPO. Phaseolus vulgaris L.
Cultivar. "PALATI". PVP 200100214.

PI 619196 PVPO. Phaseolus vulgaris L.
Cultivar. "ESQUIRE"; SB 4247. PVP 200100215.

The following were developed by Monsanto Company, 800 North Lindbergh Blvd., St. Louis, Missouri 63167, United States. Received 07/24/2001.

PI 619197 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "MITCHELL"; M95-2883. PVP 200100216. Pedigree - E87-1508(Magnum/Purdue101)/OH394. Soft red winter wheat.

PI 619198 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "NuHorizon". PVP 200100217. Pedigree - Vona/3/Nadadores 63/CO652643//Centurk/4/N84-0758/5/Arlin.

PI 619199 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "DUMAS". PVP 200100218. Pedigree - 84PYI002-261[F2 SPS102/TAMW101]/84PDO007-161(RPB77-56/Mustang//W80-425)//N84-0758/W81-29 7-3(Stallion sib).

PI 619200 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "CHARTER". PVP 200100219. Pedigree - 87PYI140-100(MN72506/Thunderbird)/87F27515<Mustang//TAMW101/Roussalka /3/Hawk/Amigo).

The following were developed by Delta and Pine Land Company, Scott, Mississippi, United States. Received 07/24/2001.

PI 619201 PVPO. *Gossypium hirsutum* L.

Cultivar. "PM 1199 RR". PVP 200100222.

The following were developed by Monsanto Company, 800 North Lindbergh Blvd., St. Louis, Missouri 63167, United States. Received 07/24/2001.

PI 619202 PVPO. *Solanum tuberosum* L.

Cultivar. "NL20-SHE". PVP 9800106.

The following were developed by Richard Berberet, Oklahoma State University, Department of Entomology & Plant Pathology, Room 127 NRC, Stillwater, Oklahoma 74078-0464, United States; John L. Caddel, Oklahoma State University, Oklahoma Cooperative Extension Service, Department of Plant & Soil Sciences, Stillwater, Oklahoma 74078-0507, United States; Ali A. Zarrabi, Oklahoma State University, Department of Entomology & Plant Pathology, 127 Noble Research Center, Stillwater, Oklahoma 74078-0464, United States. Received 06/23/2001.

PI 619203. *Medicago sativa* L. subsp. *sativa*

Breeding. OK 190. GP-346. Pedigree - Source material screened for resistance to: blue alfalfa aphids, included Aggressor, Apollo Supreme, Arrow, Cimarron, Cimarron VR, CUF 101, Garst 630, OK 169, WL 317, WL 320, WL 322 HQ, and 555; phytophthora root rot included Cimarron, Wl 320, and WAPH-1(2) germplasm. 579 plants were transplanted to an isolated field and interpollinated. Parents traced to 25% 555, 18% unreleased populations, 8% each Cimarron and WL 320, 7% CUF 101, and 5% each Arrow and OK 169. Provides a combination of a broad genetic base, pest resistance and production potential needed in alfalfa for the southern Great Plains. Result of the interpollination of 579 plants derived from the convergence of three lines of pest resistance breeding: 1)resistance to the blue alfalfa aphid, spotted alfalfa aphid, and phytophthora root rot. The percentages of seedlings exhibiting

resistance after infestation with aphids collected in Oklahoma were: blue alfalfa aphid-OK 190=13, CUF 101(R)(12)=25, and Arc(S)=6; spotted alfalfa aphid-OK 190=55, Baker(R)=50, and Caliverde(S)=2. Based on parental sources, should provide resistance to bacterial wilt, verticillium wilt, fusarium wilt, anthracnose, phytophthora root rot, and pea aphid, and a low or moderate level of resistance to alfalfa stem nematode and aphanomyces root rot. Flower color predominately purple (>95%) with some variegated flowers and a trace of white and yellow flowers. Fall dormancy similar to Legend, approx. 4 (1 to 9 se, where 9 is very non dormant).

The following were developed by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Donated by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Received 07/09/2001.

PI 619204. *Helianthus annuus* L.

Breeding. Pureline. RHA 419. GP-259. Pedigree - F4-derived F6 fertility restorer germplasm selected from the cross RHA 373/ARG 1575-2. RHA 373 is a restorer line released by USDA and the North Dakota Agric. Exp. Sta. in 1990. ARG 1575-2 is a bulk of 41 self-pollinated F5 plants derived from the cross cms HA 89/accession *Helianthus argophyllus* Raf.-1575 (PI 468651) and was released by USDA and the North Dakota Agric. Exp. Sta. in 1989. Fertility restorer line. Homozygous for resistance to races Pla 300, Pla 700, Pla 730, and Pla 770 of downy mildew, and thus would provide protection against metalxyl resistant strains of these races. Upper stem branching conditioned by a recessive gene and are homozygous for fertility restoration of the PET1 cytoplasmic male sterility. Approx. 137 cm in height.

The following were developed by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Received 07/09/2001.

PI 619205. *Helianthus annuus* L.

Breeding. Pureline. RHA 420. GP-260. Pedigree - F4-derived F6 fertility restorer germplasm selected from the cross RHA 373/ARG 1575-2. RHA 373 is a restorer line released by USDA and the North Dakota Agric. Exp. Sta. in 1990. ARG 1575-2 is a bulk of 41 self-pollinated F5 plants derived from the cross cms HA 89/accession *Helianthus argophyllus* Raf.-1575 (PI 468651) and was released by USDA and the North Dakota Agric. Exp. Sta. in 1989. Plants comprising PI 468651 were collected along a sandy beach near Daytona, FL, in 1980. Fertility restorer line. Homozygous for resistance to races Pla 300, Pla 700, Pla 730, and Pla 770 of downy mildew, and thus would provide protection against metalxyl resistant strains of these races. Upper stem branching conditioned by a recessive gene and are homozygous for fertility restoration of the PET1 cytoplasmic male sterility. Approx. 137 cm in height.

The following were developed by Thomas Gulya, USDA, ARS, North Dakota State University, Northern Crop Science Laboratory, Fargo, North Dakota 58105, United States; Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States; Gerald Seiler, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, University Station, Fargo, North Dakota 58105, United States. Donated by Jerry F. Miller, USDA, ARS, Northern Crop Science Laboratory, P.O. Box 5677, Fargo, North Dakota 58105, United States. Received 07/09/2001.

PI 619206. *Helianthus annuus* L.

Breeding. Pureline. RHA 428. GP-261. Pedigree - F7 derived F8 fertility restorer germplasm selected from the cross RHA 801//RHA 365/PI 413157. PI 413157 is a wild *Helianthus annuus* L. accession collected in New Mexico with approx. 65% of plants resistant to race Pla 730 of downy mildew. Pollen from resistant plants of PI 413157 was collected and crossed to RHA 365. RHA 365 is a single-headed restorer line released by USDA-ARS in 1988. F1 plants of the cross RHA 365/PI 413157 were tested for resistance to race Pla 730 of downy mildew and resistant plants were self-pollinated. The F2 generations of this cross was grown in the field at Fargo, ND, in 1992 and plants with the single-headed characteristic and no anthocyanin in seed of plants were identified and self-pollinated. The F3 seed derived from F2 heads was planted in the greenhouse in the spring of 1993 and tested for resistance to race Pla 730 downy mildew. Pollen was collected from resistant plants and crossed to RHA 801. RHA 801 is a recessive branched fertility restorer line released by USDA-ARS in 1980. Fertility restorer line. Resistant to races PLA 300, Pla 700, Pla 730, and Pla 770 of downy mildew and provide protection against metalxyl resistant strains of these races. Resistant plants were increased by self-pollination and bulked.

The following were developed by HZPC Holland B.V., Netherlands. Received 07/26/2001.

PI 619207 PVPO. *Solanum tuberosum* L.

Cultivar. "CARLITA". PVP 9700113.

The following were donated by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States. Received 09/21/1995.

PI 619208. *Prunus cerasus* L.

Cultivar. GPRU 61. Collected in Kazakhstan.

The following were collected by Philip L. Forsline, USDA, ARS, Cornell University, Plant Genetic Resources Unit, Geneva, New York 14456-0462, United States. Received 10/31/1996.

PI 619209. *Prunus mahaleb* L.

Wild. KAZ 96 09-03; GPRU 62. Collected 09/15/1996 in Kazakhstan. Latitude 42° 19' N. Longitude 70° 22' E. Elevation 1010 m. Talasky Alatan Province. Located in "Reserve" Aksu Jabagli. Collected on North Slope of deep canyon, near a river bed. Soil: fine, stoney.

Incline 5%, North, open area. Rainfall 320 mm. Dominant tree sp: Malus;
Assoc. -Prunus mahaleb. Very clean of insect and disease.

The following were donated by USDA, ARS, Fruit Laboratory, Plant Germplasm
Quarantine Office, Beltsville, Maryland 20705-2350, United States. Received
02/13/1997.

PI 619210. Prunus cerasus L.
Cultivar. "Pandy 35"; Q 22897A; GPRU 66.

The following were donated by Dan Thompson, Agriculture Canada, Center for
Plant Health, Saanichton Plant Quarantine Station, Sidney, British Columbia
V8L 1H3, Canada. Received 09/11/1997.

PI 619211. Prunus cerasus L.
Cultivar. SCH 11-44-4; Q1180-13; GPRU 67; Pandy 279.

PI 619212. Prunus cerasus L.
Cultivar. SCH 12-27-2; Q1227-01; GPRU 68; Pandy 48.

PI 619213. Prunus cerasus L.
Cultivar. SCH 11-26-3; Q1227-02; GPRU 69; Pandy BB119.

The following were donated by Pam Waterworth, USDA, APHIS, Plant Germplasm
Quarantine Center, Building 580, Barc-East, Beltsville, Maryland 20705-2350,
United States. Received 03/02/1998.

PI 619214. Prunus cerasus L.
Cultivar. Q22549A1; GPRU 70; M-209. Collected in Hungary.

PI 619215. Prunus cerasus L.
Cultivar. Q24350D1; GPRU 71; Nana. Collected in Romania.

PI 619216. Prunus cerasus L.
Cultivar. Q24420B; GPRU 72; Kelleris 14. Collected in Serbia.

The following were donated by Amy F. Iezzoni, Michigan State University,
Department of Horticulture, East Lansing, Michigan 48823, United States.
Received 02/16/1999.

PI 619217. Prunus cerasus L.
Cultivar. GPRU 73; Pitic de Iasi.

PI 619218. Prunus cerasus L.
Cultivar. GPRU 74; I 24 (63).

PI 619219. Prunus cerasus L.
Cultivar. GPRU 75; I 13 (61).

PI 619220. Prunus cerasus L.
Cultivar. GPRU 76; Erdi Nagygyumolesu.

PI 619221. *Prunus cerasus* L.
Cultivar. GPRU 77; Lebedyanskaya o.p. 26e-2-51.

PI 619222. *Prunus cerasus* L.
Cultivar. GPRU 78; Mari Timpurii.

PI 619223. *Prunus cerasus* L.
Cultivar. GPRU 79; Rexelle.

PI 619224. *Prunus cerasus* L.
Cultivar. GPRU 80; HY 38/13 o.p. III-18-12; Itt 18 (12).

PI 619225. *Prunus cerasus* L.
Cultivar. GPRU 81; Crisana.

The following were donated by Raymond G. Mock, USDA, ARS, Fruit Laboratory, Plant Germplasm Quarantine Office, Beltsville, Maryland 20705-2350, United States. Received 03/24/2001.

PI 619226. *Prunus cerasus* L.
Cultivar. Q 37420B; GPRU 85.

PI 619227. *Prunus cerasus* L.
Cultivar. 37421a1; GPRU 96; Pamjet Vavilova.

PI 619228. *Prunus canescens* Bois
Wild. GPRU 97; 39515b.

PI 619229. *Prunus* sp.
Rootstock. 39520b; GPRU 98; VSL 1. Cherry type.

PI 619230. *Prunus maximowiczii* Rupr.
Wild. GPRU 99; 39652a.

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; David R. Porter, USDA, ARS, 1301 N. Western Road, Stillwater, Oklahoma 74075-2714, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; C. James Peterson, Oregon State University, Crop & Soil Science Dept., 107 Crop Science Bldg., Corvallis, Oregon 97331-3002, United States. Received 08/01/2001.

PI 619231. *Triticum aestivum* L. subsp. *aestivum*
Breeding. Pureline. N96L9970; NSGC 8751. GP-747. Pedigree - GRS 1201/TAM 202. Released 2002. Hard red winter wheat. Carries 1AL.1RS translocation. Resistance (derived from GRS1201) to greenbug biotypes B, C, E, G, and I.

The following were developed by Clay Sneller, University of Arkansas, Department of Agronomy, Fayetteville, Arkansas 72701, United States. Received 01/21/2000.

PI 619232. *Glycine max* (L.) Merr.
Cultivar. Pureline. "UARK-5896"; SY0002003.

The following were developed by C.E. Caviness, Arkansas Agr. Exp. Sta., University of Arkansas, 115 Plant Science Building, Fayetteville, Arkansas 72701, United States. Donated by Clay Sneller, University of Arkansas, Department of Agronomy, Fayetteville, Arkansas 72701, United States. Received 08/01/2001.

PI 619233. *Glycine max* (L.) Merr.
Cultivar. Pureline. "Narrow-M"; SY0117001. Metribuzin tolerant selection from Narrow.

The following were donated by Asian Vegetable Research and Development Center, P.O. Box 42, Shanhua, Tainan, Taiwan; Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

PI 619234. *Amaranthus spinosus* L.
Wild. A75-78; RRC 114; RRC 78S-114; Ames 2052. Collected 09/01/1977 in Sumatra, Indonesia. Latitude 1° 7' 12" N. Longitude 104° 7' 12" E. Elevation 24 m. Batang. The seeds are dark brown (looks black), flowers green, leaves green. The RRC class type is: weed. Spiny and shatters; is a potential weed problem. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619235. *Amaranthus spinosus* L.
Wild. A75-79; RRC 115; RRC 78S-115; Ames 2053. Collected 09/01/1977 in Thailand. Latitude 18° 47' N. Longitude 98° 59' E. Chiang Mai. The seeds are black, flowers green, leaves green. The RRC class type is: weed. Spiny and shatters; is a potential weed problem. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619236. *Amaranthus caudatus* L.
Cultivated. A75-86; RRC 122; RRC 78S-122; Ames 2059; A-90. Collected 09/01/1977 in India. The seeds are white, flowers green, leaves green. The RRC class type is: South American. There are some 'edulis' segregates. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States; R.R. Harwood, Winrock International, Petit Jean Mt., Morrilton, Arkansas 72110, Morrilton, Arkansas, United States. Received 02/20/1981.

PI 619237. *Amaranthus hypochondriacus* L.
Cultivated. RRC 124; RRC 78S-124; matia; Ames 2061. Collected 09/01/1977 in Nepal. Elevation 975 m. Charijari (Charyari). Planted in June and July, harvested in December. The seeds are white, flowers red and green, leaves green. The RRC class type is: Nepan grain. The plants are very late maturing. Observations from Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619238. *Amaranthus dubius* Mart. ex Thell.
Cultivated. RRC 131; RRC 78S-131; lalte; Ames 2068. Collected 09/01/1977 in Nepal. Rampuj. The seeds are black, flowers green, leaves green. The RRC class type is vegetable. It has very large leaves. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. The stem has some red as observed at the Plant Introduction Station in Ames, Iowa.

PI 619239. *Amaranthus hypochondriacus* L.
Cultivated. RRC 138; RRC 78S-138; Ames 2071. Collected 09/01/1977 in Nepal. Latitude 27° 43' N. Longitude 85° 19' E. Kathmandu. The seeds are brown, flowers red, leaves green and rufescent. The RRC class type is: Nepal grain. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619240. *Amaranthus hypochondriacus* L.
Breeding. RRC 142; RRC 78S-142; Ames 2076. Collected 09/01/1977 in Nepal. Latitude 27° 43' N. Longitude 85° 19' E. Kathmandu. The seeds are brown, flowers red and green, leaves green and rufescent. The RRC class type is: Nepal spike. The Nepal class type has some short segregates. It may also contain some crop x weed hybrids. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were collected by R.R. Harwood, Winrock International, Petit Jean Mt., Morrilton, Arkansas 72110, United States. Donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

PI 619241. *Amaranthus hypochondriacus* L.
Cultivated. RRC 145; RRC 78S-145; Ames 2082; ICAR 21962. Collected 09/01/1977 in Unknown. The seeds are white, flowers green, leaves green. The RRC class type is: Nepal. It is very late maturing. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619242. *Amaranthus hypochondriacus* L.
Breeding. RRC 146; RRC 78S-146; Ames 2083; ICAR 21937. Collected 09/01/1977 in Unknown. The seeds are white and brown, flowers green and pink, leaves green. The RRC class type is Nepal prima. Prima class type has low seed yield and some interesting short segregates. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619243. *Amaranthus hypochondriacus* L.
Cultivated. RRC 149; RRC 78S-149; Ames 2086. Collected 09/01/1977 in Nepal. Latitude 29° 50' N. Longitude 80° 42' E. Elevation 1219 m. Mankot, Chauri, Jahari. The seeds are white and gold, flowers red, leaves green. The RRC class type is: Nepal. It is late maturing and predominately white seeded. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619244. *Amaranthus hypochondriacus* L.
Cultivated. RRC 151; RRC 78S-151; Ames 2087; ICAR 21790. Collected 09/01/1977 in Unknown. The seeds are white, flowers red and green, leaves green. The RRC class type is: Nepal. Observations from the

Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog.
Emmaus, PA.

PI 619245. *Amaranthus hypochondriacus* L.

Breeding. RRC 153; RRC 78S-153; Ames 2088; ICAR 21919. Collected 09/01/1977 in Nepal. The seeds are white, flowers red, leaves green. The RRC class type is: both Nepal and spike. The spike type is excellent, and there are white seeded dwarf plants. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619246. *Amaranthus hypochondriacus* L.

Cultivated. RRC 156; RRC 78S-156; Ames 2090; ICAR 21948. Collected 09/01/1977 in Nepal. The seeds are white, flowers green, leaves green. The RRC class type is: Nepal. It is very late maturing. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

PI 619247. *Amaranthus hypochondriacus* L.

Cultivated. RRC 173A; RRC 78S-173A; Ames 2095; A-881. Collected 10/1977 in Mexico. Pedigree - Segregated from RRC 173 at the RRC. The seeds are brown and white, flowers green and red, leaves green and rufescent. The RRC class type is: Nepal. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. The seeds are mostly white, with translucent perisperm. Flower color is green and red. The stem is red. Leaf color is green and rufescent-green with red overtones.

PI 619248. *Amaranthus hypochondriacus* L.

Cultivated. RRC 173B; RRC 78S-173B; Ames 2096; A-881. Collected 10/1977 in Mexico. Pedigree - Segregated from RRC 173 at the RRC. The seeds are brown and white, flowers green and red, leaves green and rufescent. The RRC class type is: Nepal. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. The seeds are mostly white, with opaque perisperm. The stems are red or green, the leaves are green with faint red underneath.

PI 619249. *Amaranthus hypochondriacus* L.

Cultivated. RRC 173C; RRC 78S-173C; Ames 2097; A-881. Collected 10/1977 in Mexico. Pedigree - Segregated at the RRC from RRC 173. This is from the brown seeds that were sent to the NPGS in 1981. The yellow and white seeds were segregated at the RRC as other accessions. The seeds are brown and white, flowers green and red, leaves green and rufescent. The RRC class type is: Nepal. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA. The seed color is mostly brown. Flower color is green and red. Leaf color is green and rufescent-green with red overtones, and dark red undersides.

PI 619250. *Amaranthus hypochondriacus* L.

Breeding. "K 116"; RRC K116; RRC 80S-K116; Hy002; Ames 2265. Pedigree - The original seed packet has "F5: late bushy X African grain type". In RRC terms this would be a cross between a bushy Mexican A. hypochondriacus and a black seeded African vegetable A. cruentus. The

seeds are gold, the leaves green, the flowers are red, green and pink. It matures late but dries down. The plants are approximately 1/3 all green, and 2/3 with red coloring, as observed in a greenhouse 1981 Ames, Iowa.

The following were developed by HZPC Holland B.V., Netherlands. Received 08/09/2001.

PI 619251 PVPO. *Solanum tuberosum* L.
Cultivar. "PLATINA". PVP 9800157.

The following were donated by Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States; Tamil Nadu Agricultural University, Horticulture Department, Coimbatore, Tamil Nadu 641 003, India. Received 02/20/1981.

PI 619252. *Amaranthus tricolor* L.
Cultivated. A14; RRC 198; RRC 78S-198; Ames 2111. The seeds are black, flowers mixed, leaves mixed. The RRC class type is weedy. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were donated by S.N. Lohani, Department of Agronomy, Kathmandu, Nepal; Rodale Research Center, Rodale Press, Box 323, RD 1, Kutztown, Pennsylvania 19530, United States. Received 02/20/1981.

PI 619253. *Amaranthus hypochondriacus* L.
Landrace. S. No. 1; NA6001/77; RRC 243; RRC 78S-243; Ames 2155. Collected 1977 in Nepal. Elevation 2286 m. Dansago. The seeds are white and brown, flowers red and green, leaves variegated. The RRC class type is Nepal. It is very late maturing with some dark-seeded segregates. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619254. *Amaranthus hypochondriacus* L.
Landrace. S. No. 2; NA6002/77; RRC 244; RRC 78S-244; Ames 2156. Collected 1977 in Nepal. Latitude 27° 57' N. Longitude 85° 56' E. Elevation 2072 m. Tatopani, Jumla District. The seeds are white and brown, flowers red, leaves variegated. The RRC class type is: Nepal. It is late maturing and similar to RRC 243 (PI 619253). Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619255. *Amaranthus hypochondriacus* L.
Landrace. S.No.4; NA6004/77; RRC 246; RRC 78S-246; Ames 2158. Collected 1977 in Nepal. Latitude 29° 16' N. Longitude 82° 13' E. Elevation 2438 m. Dita, Jumla District. The seeds are white, flowers red, leaves variegated. The RRC class type is: Nepal. Similar to RRC 243 (PI 619253). Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619256. *Amaranthus hypochondriacus* L.
Landrace. S.No.5; NA6005/77; RRC 247; RRC 78S-247; Ames 2159. Collected 1977 in Nepal. Latitude 29° 2' N. Longitude 82° 47' E. Elevation

2438 m. Tibrikot, Jumla District. The seeds are white and brown, flowers red, leaves green and variegated. The RRC class type is: Nepal. Similar to RRC 243 (PI 619253). Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619257. *Amaranthus hypochondriacus* L.

Landrace. NA6006/77; RRC 248; RRC 78S-248; Ames 2160. Collected 1977 in Nepal. Bonaguan. The seeds are white and brown, flowers red, leaves green and variegated. The RRC class type is Nepal. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619258. *Amaranthus hypochondriacus* L.

Landrace. S.No.12; NA6012/77; RRC 254; RRC 78S-254; Ames 2166. Collected 1977 in Nepal. Latitude 29° 12' N. Longitude 81° 53' E. Elevation 1645 m. Nagma, Jumla District. The seeds are white to brown, flowers green, leaves green. The RRC class type is: Nepal. It is late maturing and fairly uniform except for seed color. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619259. *Amaranthus hypochondriacus* L.

Breeding. S.No.24; NA6306/77; RRC 266; RRC 78S-266; Ames 2178. Collected 1977 in Nepal. Latitude 28° 2' N. Longitude 84° 37' E. Elevation 914 m. Sandu, Dailakh District. The seeds are white, flowers red, leaves green. The RRC class type is: spike. It may have some Lygus resistance and shows some dry-down. It has some gold and brown seeded segregates. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619260. *Amaranthus hypochondriacus* L.

Landrace. S.No.27; NA5002/77; RRC 269; RRC 78S-269; Ames 2181. Collected 1977 in Nepal. Elevation 2438 m. Jufal, Dolpa District. The seeds are white, flowers red, leaves green. The RRC class type is Nepal, spike. The Nepal type is very late maturing. The spike type has high seed yield. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619261. *Amaranthus hypochondriacus* L.

Landrace. S.No.29; NA2301/77; RRC 271; RRC 78S-271; Ames 2183. Collected 1977 in Nepal. Elevation 1584 m. Santu Market, Rasua District. The seeds are white, flowers green and pink, leaves green. The RRC class type is: Nepal, spike. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619262. *Amaranthus hypochondriacus* L.

Landrace. S.No.32; NA5801/77; RRC 274; RRC 78S-274; Ames 2185. Collected 1977 in Nepal. Elevation 2133 m. Humla District. The seeds are white and brown, flowers green and pink, leaves green. The RRC class type is: Nepal, spike. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619263. *Amaranthus hypochondriacus* L.

Landrace. S.No.35; NA5804/77; RRC 277; RRC 78S-277; Ames 2188. Collected 1977 in Nepal. Elevation 2133 m. Humla District. The seeds are white and brown, flowers red and green, leaves green. The RRC class type is: Nepal, spike. The spike type had high yield. Observations from the

Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619264. *Amaranthus caudatus* L.

Landrace. NA4902/77; RRC 279; RRC 78S-279; Ames 2190. Collected 1977 in Nepal. Mustang District. The seeds are pink, flowers red, leaves green. The RRC class type is: South American. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619265. *Amaranthus hypochondriacus* L.

Landrace. NA6014/77; RRC 282; RRC 78S-282; Ames 2193. Collected 1977 in Nepal. Dungsawai. The seeds are brown and white, flowers red and pink, leaves green. The RRC class type is Nepal. It segregates for bushiness. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

PI 619266. *Amaranthus hypochondriacus* L.

Landrace. S.No.41; NA3401/77; RRC 283; RRC 78S-283; Ames 2194. Collected 1977 in Nepal. Latitude 26° 58' N. Longitude 85° 9' E. Elevation 914 m. Batra, Bara district. The seeds are white, flowers red, leaves green. The RRC class type is: Nepal. Observations from the Rodale Research Center, 1988 Rodale Amaranth Germplasm Catalog. Emmaus, PA.

The following were developed by R.J. Kratochvil, University of Maryland, Maryland Agric. Exp. Station, College Park, Maryland 20742, United States; Arvydas Grybauskas, University of Maryland, Dept Natural Resource Sciences, 2102 Plant Science Bldg., College Park, Maryland 20742-4452, United States; D.J. Sammons, Purdue University, Administration Bldg., Rm 26, West Lafayette, Indiana 47907-1168, United States; Jose Costa, University of Maryland, PSLA Department, Plant Sciences Bldg. Room 2102, College Park, Maryland 20742-4452, United States; A. Cooper, University of Maryland, Dept. of Natural Resource Sciences and Landscape, Architecture, College Park, Maryland 20742-4452, United States; E. Shirley, University of Maryland, Dept. of Natural Resource Sciences and Landscape, Architecture, College Park, Maryland 20742-4452, United States. Received 08/16/2001.

PI 619267. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "CATCHPENNY"; MD881007-6. PVP 200300292; CV-298. Pedigree - Post/4/Jotun/3/Hudson//VA67-42-47/Rapidan/5/Sussex/Nomini. Released 2001. Six rowed, feed winter barley. Coleoptile green, juvenile plants have prostrate habit, leaves glabrous, auricles translucent, collar closed and anthocyanin absent. Nodes green, flag leaf short, narrow and erect at boot stage. Spikes awnless and compact of medium length. Kernels white, semiwrinkled, covered, of medium size and short haired rachilla present. Adapted to mid-Atlantic region.

The following were collected by Kenton L. Chambers, Oregon State University, Botany/Plant Pathology, 2082 Cordley Hall, Corvallis, Oregon 97331-2902, United States. Developed by Yale University, New Haven, Connecticut, United States. Donated by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/26/1988.

PI 619268. *Pycnanthemum beadleii* (Small) Fernald
Breeding. P-78-1. Collected 08/23/1963 in North Carolina, United States.
Latitude 35° 9' N. Longitude 83° 27' W. Roadsides in Macon
County. Pedigree - Selected from the wild.

The following were collected by Kenton L. Chambers, Oregon State University,
Botany/Plant Pathology, 2082 Cordley Hall, Corvallis, Oregon 97331-2902,
United States. Donated by Henrietta Chambers, National Germplasm Repository,
33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received
04/05/1989.

PI 619269. *Pycnanthemum californicum* Torr. ex Durand
Breeding. P-80. Collected in California, United States. Latitude 40°
59' 44" N. Longitude 122° 25' 5" W. North of LaMoine, CA at Pollard
Flat. Developed in United States. Pedigree - Selected from the wild.

The following were collected by R.B. Channell. Developed by Yale University,
New Haven, Connecticut, United States. Donated by Henrietta Chambers,
National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon
97333-2521, United States. Received 04/26/1988.

PI 619270. *Pycnanthemum muticum* (Michx.) Pers.
Breeding. P-91a. Collected 04/09/1967 in Tennessee, United States.
Latitude 36° 30' 31" N. Longitude 85° 16' 59" W. Ozone,
Cumberland County, Tennessee. Pedigree - Selected from the wild.

The following were collected by R. Keith Carr. Developed by Yale University,
New Haven, Connecticut, United States. Donated by Henrietta Chambers,
National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon
97333-2521, United States. Received 04/26/1988.

PI 619271. *Pycnanthemum torreyi* Benth.
Breeding. P-99-1. Collected 08/20/1969 in Tennessee, United States.
Latitude 36° 9' 47" N. Longitude 85° 30' 7" W. Cookeville, low
roadside. Pedigree - Selected from the wild.

The following were collected by Carr; Hunter; Wooden. Developed by Henrietta
Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon
97333-2521, United States. Received 04/26/1988.

PI 619272. *Pycnanthemum curvipes* (Greene) E. Grant & Epling
Breeding. P-102-8. Collected in Georgia, United States. Pedigree - OP
seed from seedling selection from wild Georgian seedlot. Original clone
collected by Hunter, Wooden and Carr, selected by H.L. Chambers at Stone
Mtn, DeKalb Co.

The following were collected by M.J. Murray, Unknown. Developed by Henrietta
Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon
97333-2521, United States. Donated by Henrietta Chambers, National Germplasm
Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States.
Received 04/26/1988.

PI 619273. *Pycnanthemum muticum* (Michx.) Pers.

Breeding. P-113-1. Collected 10/17/1976 in North Carolina, United States. Roadside ditch, Blue Ridge Parkway. Pedigree - Seedling selection from seedlot collected from the wild.

PI 619274. *Pycnanthemum muticum* (Michx.) Pers.

Breeding. P-113-2. Collected 10/17/1976 in North Carolina, United States. Roadside ditch, Blue Ridge Parkway. Pedigree - Seedling Selection from seedlot collected from the wild.

The following were developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/26/1988.

PI 619275. *Pycnanthemum pycnanthemoides* (Leavenw.) Fernald

Breeding. P-115-1. Collected in United States. Pedigree - Selected from the wild.

The following were collected by M.J. Murray, Unknown. Donated by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/26/1988.

PI 619276. *Pycnanthemum beadleii* (Small) Fernald

Breeding. P-116-4. Developed in United States. Collected 10/17/1976 in North Carolina, United States. Latitude 36° 26' N. Longitude 81° 30' W. Ashe County, North Carolina. Pedigree - Seedling selection from seedlot originally collected wild.

The following were developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/26/1988.

PI 619277. *Pycnanthemum beadleii* (Small) Fernald

Breeding. P-116-5. Collected 10/17/1976 in North Carolina, United States. Latitude 36° 26' N. Longitude 81° 30' W. Ashe County, North Carolina. Pedigree - Seedling selection from seedlot originally collected wild.

PI 619278. *Pycnanthemum setosum* Nutt.

Breeding. 1598. Collected 09/13/1958 in New Jersey, United States. Latitude 39° 41' N. Longitude 74° 15' W. Manahawkin, in weedy field adjacent to Pine-Oak woods. Pedigree - Selected from the wild.

PI 619279. *Pycnanthemum beadleii* (Small) Fernald

Breeding. 1657-2. Collected 06/22/1968 in South Carolina, United States. Ceasar's Head, off private road just south of rock outcrop. Pedigree - Selected from the wild.

PI 619280. *Pycnanthemum loomisii* Nutt.

Breeding. 1662-3. Collected in Tennessee, United States. Pedigree - Selected from the wild.

PI 619281. *Pycnanthemum floridanum* E. Grant & Epling
Breeding. 1676. Collected 07/03/1978 in Florida, United States. Latitude
29° 39' 6" N. Longitude 82° 19' 20" W. Gainesville. Pedigree -
Selected from the wild.

The following were collected by M.J. Murray, Unknown. Donated by Henrietta
Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon
97333-2521, United States. Received 04/26/1988.

PI 619282. *Pycnanthemum muticum* (Michx.) Pers.
Breeding. P-117-3. Developed in United States. Collected 03/12/1976 in
Florida, United States. Latitude 29° 42' N. Longitude 82° 20' W.
Alachua County, Florida. Pedigree - Seedling selection from seedlot
originally collected wild.

PI 619283. *Pycnanthemum muticum* (Michx.) Pers.
Breeding. P-117-4. Developed in United States. Collected 03/12/1976 in
Florida, United States. Latitude 29° 39' 6" N. Longitude 82° 19'
20" W. Gainesville, Alachua County, Florida. Pedigree - Seedling
selection from seedlot originally collected wild.

The following were developed by Henrietta Chambers, National Germplasm
Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States.
Received 05/03/1988.

PI 619284. *Pycnanthemum tenuifolium* Schrad.
Breeding. P 79. Collected 08/03/1963 in Connecticut, United States.
Roadside, Baldwin Parkway. Pedigree - Selected from the wild.

PI 619285. *Pycnanthemum muticum* (Michx.) Pers.
Breeding. 1560. Collected 07/29/1958 in Connecticut, United States.
Roadsides, Baldwin Parkway, Connecticut. Pedigree - Selected from the
wild.

PI 619286. *Pycnanthemum muticum* (Michx.) Pers.
Breeding. 1607. Collected 10/08/1958 in Connecticut, United States.
Roadsides, Baldwin Parkway, Connecticut. Pedigree - Selected from the
wild.

PI 619287. *Pycnanthemum tenuifolium* Schrad.
Breeding. 1586. Collected 08/22/1958 in Connecticut, United States. Old
Lime, CT in weedy field at highway junction. Pedigree - Selected from
the wild.

PI 619288. *Pycnanthemum virginianum* (L.) T. Durand & B. D. Jacks. ex B. L. Rob.
& Fernald
Breeding. 1600. Collected 09/21/1958 in Connecticut, United States.
Latitude 41° 21' 9" N. Longitude 73° 0' 28" W. Woodbridge, CT in
marshy field at highway junction. Pedigree - Selected from the wild.

PI 619289. *Pycnanthemum tenuifolium* Schrad.
Breeding. 1663. Collected 08/18/1968 in Tennessee, United States.
Latitude 36° 3' 43" N. Longitude 88° 5' 30" W. Camden, TN, in
upland woods along I40. Pedigree - Selected from the wild.

The following were collected by Kenton L. Chambers, Oregon State University, Botany/Plant Pathology, 2082 Cordley Hall, Corvallis, Oregon 97331-2902, United States. Developed by Yale University, New Haven, Connecticut, United States. Donated by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/03/1988.

PI 619290. *Pycnanthemum* hybrid

Breeding. Hybrid 2423A; 2423A. Collected 08/19/1965 in Illinois, United States. Latitude 39° 52' N. Longitude 88° 51' 14" W. Along fence lines in Sangamon River valley, Illinois. Lat/lon accurate to Sangamon, Illinois, near Sangamon River. Pedigree - Natural *P. pilosum* x *P. virginianum* hybrid.

The following were developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/03/1988.

PI 619291. *Pycnanthemum beadleii* (Small) Fernald

Breeding. 1657. Collected 06/21/1968 in South Carolina, United States. Ceasar's Head, roadside and trail borders near rock outcrop. Pedigree - Selected from the wild.

PI 619292. *Pycnanthemum* hybrid

Breeding. Hybrid 86-10. Collected 07/13/1976. Pedigree - 2x *P. muticum* x *P. montanum* (Parents 1666-1 x 1649-1).

PI 619293. *Pycnanthemum* hybrid

Breeding. Hybrid 91-1. Collected 07/13/1976. Pedigree - *P. montanum* x 2x *P. muticum* (Parents 1649-1 x P-85).

The following were collected by Jon J. Hamer, Ohio State University, Dept. Botany, Athens, Ohio 45701, United States. Received 01/11/1990.

PI 619294. *Pycnanthemum verticillatum* (Michx.) Pers.

Wild. Collected 09/05/1986 in Ohio, United States. Latitude 39° 15' N. Longitude 82° 10' W. Athens Co., OH along roadside of Co. Rd. 79. Pedigree - Collected from the wild in Ohio.

PI 619295. *Pycnanthemum flexuosum* (Walter) Britton et al.

Wild. Collected 08/18/1988 in Georgia, United States. Latitude 31° 30' N. Longitude 82° 50' W. Coffee Co. in meadow adjacent to the Satilla River. Pedigree - Collected from the wild in Georgia.

PI 619296. *Pycnanthemum loomisii* Nutt.

Wild. Collected 12/28/1987 in Tennessee, United States. Latitude 35° 5' N. Longitude 87° W. Giles Co. on embankment along edge of wooded area. Pedigree - Collected from the wild in Tennessee.

PI 619297. *Pycnanthemum curvipes* (Greene) E. Grant & Epling

Wild. Collected 09/03/1989 in Tennessee, United States. Latitude 36° 10' N. Longitude 87° 5' W. Cheatham Co. near 'Narrows of the Harpeth Historic Site'. Pedigree - Collected from the wild in Tennessee.

- PI 619298. *Pycnanthemum curvipes*** (Greene) E. Grant & Epling
Wild. Collected 08/29/1989 in Tennessee, United States. Latitude 35° 10' N. Longitude 84° 30' W. Polk Co. along embankment at Lake Ocoee. Pedigree - Collected from the wild in Tennessee.
- PI 619299. *Pycnanthemum montanum*** Michx.
Wild. Collected 08/29/1989 in North Carolina, United States. Latitude 36° 5' N. Longitude 81° 55' W. Avery Co. along Blue Ridge Pkwy at Chestoa View. Pedigree - Collected from the wild in North Carolina.
- PI 619300. *Pycnanthemum muticum*** (Michx.) Pers.
Wild. Collected 08/29/1989 in North Carolina, United States. Latitude 36° 25' N. Longitude 81° 10' W. Alleghany Co. along Blue Ridge Pkwy at edge of a woods. Pedigree - Collected from the wild in North Carolina.
- PI 619301. *Pycnanthemum pycnanthemoides*** (Leavenw.) Fernald
Wild. Collected 08/29/1989 in North Carolina, United States. Latitude 36° 25' N. Longitude 81° 10' W. Alleghany Co. along Blue Ridge Pkwy at edge of a woods. Pedigree - Collected from the wild in North Carolina.

The following were developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/16/1990.

- PI 619302. *Pycnanthemum californicum*** Torr. ex Durand
Breeding. Collected 05/14/1990. Pedigree - Open pollinated seed of CPYC 2.
- PI 619303. *Pycnanthemum hybrid***
Breeding. Hybrid 64-3; 64-3. Pedigree - P-91a x P-80 (2x muticum x californicum).
- PI 619304. *Pycnanthemum hybrid***
Breeding. Hybrid 64-5; 64-5. Pedigree - P-91a x P-80 (2x muticum x californicum).

The following were collected by W.J. Crins, 3370 S. Service Rd., Burlington, Ontario L7N 3M6, Canada. Received 11/26/1990.

- PI 619305. *Pycnanthemum incanum*** Michx.
Wild. Collected 1990 in Ontario, Canada. Latitude 43° 18' N. Longitude 79° 45' W. Burlington Bay Bluffs, in woods of Quercus, Sumac, Pinus. Pedigree - Collected from the wild in Ontario. Endangered in Canada. From the only extant population.

The following were collected by L. Scott Ranger, 1963 Ferry Dr. NE, Marietta, Georgia 30066, United States. Received 02/24/1992.

- PI 619306. *Pycnanthemum curvipes*** (Greene) E. Grant & Epling
Wild. Collected 02/05/1992 in Georgia, United States. Latitude 33° 59' 1" N. Longitude 84° 34' 31" W. Cobb Co., Kennesaw Mtn. Nat'l Battlefield Park. Pedigree - Collected from the wild in Georgia.

The following were developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/26/1988.

- PI 619307. *Pycnanthemum beadleii*** (Small) Fernald
Breeding. Pedigree - Increased seed of CPYC 1. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619308. *Pycnanthemum muticum*** (Michx.) Pers.
Breeding. Pedigree - Increased seed of CPYC 6. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619309. *Pycnanthemum torreyi*** Benth.
Breeding. Pedigree - Increased seed of CPYC 8. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619310. *Pycnanthemum muticum*** (Michx.) Pers.
Breeding. Pedigree - Increased seed of CPYC 13. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619311. *Pycnanthemum muticum*** (Michx.) Pers.
Breeding. Pedigree - Increased seed of CPYC 14. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619312. *Pycnanthemum pycnanthemoides*** (Leavenw.) Fernald
Breeding. Pedigree - Increased seed of CPYC 15. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619313. *Pycnanthemum beadleii*** (Small) Fernald
Breeding. Pedigree - Increased seed of CPYC 22. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619314. *Pycnanthemum beadleii*** (Small) Fernald
Breeding. Pedigree - Increased seed of CPYC 23. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619315. *Pycnanthemum setosum*** Nutt.
Breeding. Pedigree - Increased seed of CPYC 24. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619316. *Pycnanthemum beadleii*** (Small) Fernald
Breeding. Pedigree - Increased seed of CPYC 26. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619317. *Pycnanthemum floridanum*** E. Grant & Epling
Breeding. Pedigree - Increased seed of CPYC 30. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619318. *Pycnanthemum muticum*** (Michx.) Pers.
Breeding. Pedigree - Increased seed of CPYC 31. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619319. *Pycnanthemum muticum*** (Michx.) Pers.
Breeding. Pedigree - Increased seed of CPYC 32. (This accession was part of the PL,SD 'breakout' - 1992).

- PI 619320. *Pycnanthemum muticum*** (Michx.) Pers.
Breeding. Pedigree - Increased seed of CPYC 35. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619321. *Pycnanthemum muticum*** (Michx.) Pers.
Breeding. Pedigree - Increased seed of CPYC 36. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619322. *Pycnanthemum tenuifolium*** Schrad.
Breeding. Pedigree - Increased seed of CPYC 37. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619323. *Pycnanthemum virginianum*** (L.) T. Durand & B. D. Jacks. ex B. L. Rob. & Fernald
Breeding. Pedigree - Increased seed of CPYC 38. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619324. *Pycnanthemum tenuifolium*** Schrad.
Breeding. Pedigree - Increased seed of CPYC 39. (This accession was part of the PL,SD 'breakout' - 1992).
- PI 619325. *Pycnanthemum beadleii*** (Small) Fernald
Breeding. Pedigree - Increased seed of CPYC 41. (This accession was part of the PL,SD 'breakout' - 1992).

The following were donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 03/23/1992.

- PI 619326. *Pycnanthemum tenuifolium*** Schrad.
Uncertain. Sample No. 77; Ames 4373. Collected 1991 in Ontario, Canada. Latitude 43° 6' N. Longitude 79° 3' W. Niagara Falls, Ontario, Canada. Pedigree - Unknown. For bee pasture test. From 1985 Seed Exchange of the Niagara Parks Commission School of Horticulture.
- PI 619327. *Pycnanthemum tenuifolium*** Schrad.
Wild. Sample No. 1; Ames 4557. Collected 1991 in Missouri, United States. Latitude 39° 39' 44" N. Longitude 94° 14' 11" W. Elevation 294 m. Growing on edge of prairie at Wallace State Park Clinton Co., Cameron East Quad, T56N R30W, SE1/4 of NW1/4 of Sec 24. Growing with Aster, Rhus glabra, and Solidago canadensis. Pedigree - Collected from the wild in Missouri. For bee pasture testing.
- PI 619328. *Pycnanthemum tenuifolium*** Schrad.
Wild. Sample No. 6; Ames 4562. Collected 1991 in Kansas, United States. Latitude 38° 52' N. Longitude 94° 52' W. Elevation 305 m. Growing in virgin prairie at The Prairie Center, Johnson Co. De Soto Quad, T13S R23E, NE1/4 of NE1/4 of Sec. 31. Growing with big bluestem, Sorghastrum and Solidago. Pedigree - Collected from the wild in Kansas. For bee pasture testing.
- PI 619329. *Pycnanthemum tenuifolium*** Schrad.
Wild. Sample No. 10; Ames 4566. Collected 1991 in Kansas, United States. Latitude 37° 53' N. Longitude 95° 17' W. Elevation 330 m. Growing in roadside ditch. Allen Co., Bronson Quad E edge of NE1/4

of NE1/4 of Sec 32, T24S R21E. Growing with *Salvia azurea*, *Baptisia leuchantha*, *Morus alba*, and *Helianthus*. Pedigree - Collected from the wild in Kansas. For bee pasture testing.

PI 619330. *Pycnanthemum tenuifolium* Schrad.

Wild. Ames 4577. Collected 1991 in Minnesota, United States. Latitude 44° 51' 32" N. Longitude 93° 36' 4" W. Growing in prairie. Minnesota Landscape Arboretum Chanhassen. Pedigree - Collected from the wild in Minnesota. For bee pasture testing.

PI 619331. *Pycnanthemum virginianum* (L.) T. Durand & B.D. Jacks. ex B.L. Rob. & Fernald

Wild. Ames 4579. Collected 1991 in Michigan, United States. Latitude 42° 18' 3" N. Longitude 83° 40' 5" W. Growing on shore of Willow Pond. Matthaei Botanical Gardens Ann Arbor, Washtenaw Co. Pedigree - Collected from the wild in Michigan. For bee pasture testing.

The following were collected by Dorothy Barringer, Wildflowers from Nature's Way, RR 1, Woodburn, Iowa 50276, United States. Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 03/23/1992.

PI 619332. *Pycnanthemum tenuifolium* Schrad.

Wild. Ames 4717. Collected 1991 in Iowa, United States. Pedigree - Collected from the wild in Iowa. For bee pasture testing.

The following were collected by Paul Sorensen, Northern Illinois University, Dept. of Biological Sciences, DeKalb, Illinois 60115-2861, United States. Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 03/23/1992.

PI 619333. *Pycnanthemum virginianum* (L.) T. Durand & B.D. Jacks. ex B.L. Rob. & Fernald

Wild. Ames 4991. Collected 1991 in Illinois, United States. Pedigree - Collected from the wild in Illinois. For bee pasture testing. From type plant of forma *citriodora*, see *Rhodora* 83:145-146 1981.

The following were donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 03/23/1992.

PI 619334. *Pycnanthemum pilosum* Nutt.

Cultivated. No. 339; Ames 5021. Collected 1991 in Michigan, United States. Latitude 42° 43' 52" N. Longitude 84° 28' 42" W. Beal Garden, Michigan State University, East Lansing. Pedigree - Uncertain. For bee pasture testing.

The following were collected by William W. Roath, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States; Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States.

Donated by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 03/23/1992.

PI 619335. *Pycnanthemum pilosum* Nutt.

Uncertain. R-W 37; Ames 7909. Collected 1991 in Illinois, United States. Latitude 38° 17' N. Longitude 87° 59' W. Elevation 125 m. Growing in brushy vine patch along railroad right-of-way 2.3 miles NNE of center of Grayville, Grayville Quad, Edwards Co. T3S R14W NE1/4 of NE1/4 of Sec 9. Area dominated by *Lonicera japonica*, *Campsis radicans* & *Rubus flagellaris*. Pedigree - Unknown.

The following were developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 07/29/1992.

PI 619336. *Pycnanthemum curvipes* (Greene) E. Grant & Epling

Breeding. Collected 10/30/1991. Pedigree - Increased seed from CPYC 51.

PI 619337. *Pycnanthemum floridanum* E. Grant & Epling

Breeding. Collected 10/30/1991. Pedigree - Increased seed from CPYC 30.

PI 619338. *Pycnanthemum muticum* (Michx.) Pers.

Breeding. Collected 10/02/1989. Pedigree - Increased seed from CPYC 35.

PI 619339. *Pycnanthemum hybrid*

Breeding. Hybrid 5-3. Collected 1969. Pedigree - 4x *muticum* x *beadlei*. Grown in Corvallis garden.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Developed by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 09/23/1992.

PI 619340. *Pycnanthemum incanum* Michx.

Cultivated. Collected 09/18/1992. Latitude 44° 33' 53" N. Longitude 123° 15' 37" W. H. L. Chambers' garden - Corvallis, Oregon. Pedigree - Original material collected from the wild - CPYC 61. Open pollinated, but probably not crossed due to distance from other *Pycnanthemum* spp.

The following were donated by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 04/11/1994.

PI 619341. *Pycnanthemum pycnanthemoides* (Leavenw.) Fernald

Cultivated. Collected 1993 in Virginia, United States. Latitude 37° 17' N. Longitude 76° 44' W. Elevation 0 m. Original seek collected in Russell County, Virginia. Off Hwy 65 near US 58, about 4 miles on Brick Church Rd; near cemetery. Calcareous roadside. Garden in Williamsburg, Virginia. Other/collector number: Rexford H. Talbert #5.

The following were collected by Henrietta Chambers, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 05/31/1995.

PI 619342. *Pycnanthemum beadlei* (Small) Fernald
Wild. Collected 05/18/1995 in North Carolina, United States.

PI 619343. *Pycnanthemum loomisii* Nutt.
Cultivated. Collected 05/18/1995 in Tennessee, United States.

PI 619344. *Pycnanthemum tenuifolium* Schrad.
Wild. Collected 10/09/1995 in Connecticut, United States.

PI 619345. *Pycnanthemum incanum* Michx.
Wild. Collected 10/09/1995 in Connecticut, United States.

The following were donated by Boleslaw Jablonski, Instytut Sadownictwa i Kwiaciarnictwa, ul. Kazimierska nr 2, Pulawy, Lublin 24-100, Poland. Received 03/21/1989.

PI 619346. *Pycnanthemum californicum* Torr. ex Durand
Ames 10214. Pedigree - Collected from the wild in Poland.

The following were collected by Mark P. Widrlechner, USDA, ARS, Iowa State University, Regional Plant Introduction Station, Ames, Iowa 50011-1170, United States. Received 01/08/1991.

PI 619347. *Pycnanthemum pilosum* Nutt.
Wild. Ames 14437. Collected 10/14/1991 in Missouri, United States.
Latitude 37° 32' N. Longitude 90° 11' W. Elevation 820 m. Spiva
Azalea Park, Madison County, Missouri T33N R8E N1/2 SE1/4 Sec.20.
Pedigree - collected from the wild.

The following were donated by Boleslaw Jablonski, Instytut Sadownictwa i Kwiaciarnictwa, ul. Kazimierska nr 2, Pulawy, Lublin 24-100, Poland. Received 01/12/1992.

PI 619348. *Pycnanthemum californicum* Torr. ex Durand
Ames 20122. Pedigree - collected from the wild.

Unknown source. Received 09/11/1985.

PI 619349. *Pycnanthemum virginianum* (L.) T. Durand & B.D. Jacks. ex B.L. Rob. & Fernald
Ames 4554. Collected in North Dakota, United States. Pedigree - collected from the wild.

Unknown source. Received 09/25/1985.

PI 619350. *Pycnanthemum tenuifolium* Schrad.
Ames 4578. Collected in Missouri, United States. Pedigree - collected from the wild.

Unknown source. Received 09/28/1987.

PI 619351. *Pycnanthemum virginianum* (L.) T. Durand & B.D. Jacks. ex B.L. Rob. & Fernald
Ames 7894. Collected in Missouri, United States. Pedigree - collected from the wild.

Unknown source. Received 10/20/1987.

PI 619352. *Pycnanthemum virginianum* (L.) T. Durand & B.D. Jacks. ex B.L. Rob. & Fernald
Ames 7989. Collected in Iowa, United States. Pedigree - collected from the wild.

The following were developed by Lynn W. Gallagher, University of California, Department of Plant Sciences, One Shields Ave., Davis, California 95616, United States; Lee F. Jackson, University of California, Department of Plant Sciences, One Shields Avenue, Davis, California 95616-8780, United States; H.E. Vogt, University of California, Department of Plant Sciences, Davis, California 95616, United States; Y. Paul Puri, University of California, Tulelake Field Station, Tulelake, California 96134, United States. Received 08/24/2001.

PI 619353. *Hordeum vulgare* L. subsp. *vulgare*
Cultivar. Pureline. "UC 969"; UCD 95-2407; NSGC 8752. CV-305. Pedigree - Smal/Sunbar 401/3/UC 337. Released 2001. Six-row spring feed barley. Early maturity and intermediate in height. Moderately resistant to BYDV, leaf rust, scald, and net blotch. Moderately susceptible to existing races of stripe rust, but crop loss is avoided because of early maturity. Intended for marginal areas, primarily those environments having low soil moisture.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; William A. Berzonsky, North Dakota State University, 307G Loftsgard Hall, Plant Sciences Dept., Fargo, North Dakota 58105, United States. Received 08/24/2001.

PI 619354. *Triticum aestivum* L. subsp. *aestivum*
Breeding. Pureline. 99ID388; NSGC 8753. GP-748. Pedigree - Kanto 107/MN2540/3/BaiHuo5/K94H115//IDO469. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619355. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID389; NSGC 8754. GP-749. Pedigree - Kanto 107/MN2540/3/BaiHuo5/K94H115//IDO469. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619356. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID435; NSGC 8755. GP-750. Pedigree - Bai Huo/L910097//Kanto107/3/Kanto 107/Yanshi9. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619357. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID450; NSGC 8756. GP-751. Pedigree - BaiHuo3/Cimarron//MN91227/3/Kanto107. Released 2002. Spring habit waxy wheat (amylose-free).

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 08/24/2001.

PI 619358. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID454; NSGC 8757. Pedigree - Bai Huo 3/Cimarron//MN91227/3/Kanto 107. Spring habit waxy wheat (amylose-free).

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; William A. Berzonsky, North Dakota State University, 307G Loftsgard Hall, Plant Sciences Dept., Fargo, North Dakota 58105, United States. Received 08/24/2001.

PI 619359. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID477; NSGC 8758. GP-752. Pedigree - BaiHuo/Chris//Kanto 107. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619360. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID484; NSGC 8759. GP-753. Pedigree - BaiHuo/L910097//Kanto 107/3/Bai Huo3/Cimarron//MN91227. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619361. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID490; NSGC 8760. GP-754. Pedigree - BaiHuo/Kanto 107//Express. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619362. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID496; NSGC 8761. GP-755. Pedigree - BaiHuo/Kanto 107//Express. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619363. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID498; NSGC 8762. GP-756. Pedigree - BaiHuo/Kanto 107//Express. Released 2002. Spring habit waxy wheat (amylose-free).

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 08/24/2001.

PI 619364. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID510; NSGC 8763. Pedigree - Bai Huo/Kanto 107, F3//Express. Spring habit waxy wheat (amylose-free).

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; William A. Berzonsky, North Dakota State University, 307G Loftsgard Hall, Plant Sciences Dept., Fargo, North Dakota 58105, United States. Received 08/24/2001.

PI 619365. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID516; NSGC 8764. GP-757. Pedigree - KY87C-42-8-5/Collin//ACMajestic/3/Kanto 107/Bai Huo. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619366. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID520; NSGC 8765. GP-758. Pedigree - KY87C-42-8-5/Collin//AC Majestic/3/Kanto 107/BaiHuo. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619367. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID524; NSGC 8766. GP-759. Pedigree - KY87C-42-8-5/Collin//AC Majestic/3/Kanto 107/BaiHuo. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619368. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID529; NSGC 8767. GP-760. Pedigree - KY87C-42-8-5/Collin//AC Majestic/3/Kanto 107/BaiHuo. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619369. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID536; NSGC 8768. GP-761. Pedigree - KY87C-42-8-5/Collin//AC Majestic/3/Kanto 107/BaiHuo. Released 2002. Spring habit waxy wheat (amylose-free).

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 08/24/2001.

PI 619370. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID546; NSGC 8769. Pedigree - Penawawa/NE92608//BaiHuo/3/BaiHuo4/Kanto 107//A92-3327/Kanto 107. Spring habit waxy wheat (amylose-free).

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States; P. Stephen Baenziger, University of Nebraska, Department of Agronomy, 362D Plant Science Bldg., Lincoln, Nebraska 68583-0915, United States; Don V. McVey, USDA, ARS, University of Minnesota, Cereal Rust Laboratory, St. Paul, Minnesota 55105, United States; O.K. Chung, USDA-ARS, U.S. Grain Marketing Research Lab., Hard Winter Wheat Quality Lab., Manhattan, Kansas 66506, United States; William A. Berzonsky, North Dakota State University, 307G Loftsgard Hall, Plant Sciences Dept., Fargo, North Dakota 58105, United States. Received 08/24/2001.

PI 619371. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID548; NSGC 8770. GP-762. Pedigree - Penawawa/NE92608//BaiHuo/3/BaiHuo4/Kanto 107//A92-3327/Kanto 107. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619372. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID554; NSGC 8771. GP-763. Pedigree - Kanto 107/BaiHuo//BaiHuo/Russ. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619373. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID569; NSGC 8772. GP-764. Pedigree - BaiHuo/Kanto 107//ACMajestic. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619374. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID590; NSGC 8773. GP-765. Pedigree - BaiHuo/ACMajestic//Kanto 107/MN2540. Released 2002. Spring habit waxy wheat (amylose-free).

PI 619375. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 99ID594; NSGC 8774. GP-766. Pedigree - BaiHuo/Gunnar//Kanto 107/Penawawa. Released 2002. Spring habit waxy wheat (amylose-free).

The following were developed by Robert A. Graybosch, USDA-ARS, University of Nebraska, 314 Biochem Hall, Lincoln, Nebraska 68583, United States. Received 08/24/2001.

PI 619376. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. NWX008068; NSGC 8775. Pedigree - BaiHuo/Kanto 107//Ike. Winter habit waxy wheat (amylose-free).

PI 619377. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. NWX008069; NSGC 8776. Pedigree - BaiHuo/Kanto 107//Ike. Winter habit waxy wheat (amylose-free).

- PI 619378. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. NWX008070; NSGC 8777. Pedigree - Bai Huo/Kanto 107//Ike. Winter habit waxy wheat (amylose-free).
- PI 619379. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. NWX008075; NSGC 8778. Pedigree - Bai Huo/Kanto 107//Ike. Winter habit waxy wheat (amylose-free).
- PI 619380. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. NWX008093; NSGC 8779. Pedigree - Bai Huo Mai/Ike. Winter habit waxy wheat (amylose-free).
- PI 619381. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. NWX008094; NSGC 8780. Pedigree - Bai Huo Mai/Ike. Winter habit waxy wheat (amylose-free).
- PI 619382. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. NWX008106; NSGC 8781. Pedigree - Bai Huo Mai/Ike. Winter habit waxy wheat (amylose-free).
- PI 619383. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. NWX008109; NSGC 8782. Pedigree - Bai Huo/Kanto 107//Ike. Winter habit waxy wheat (amylose-free).
- PI 619384. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. NWX008118; NSGC 8783. Pedigree - Bai Huo/Kanto 107//Ike. Winter habit waxy wheat (amylose-free).

The following were developed by Marcial A. Pastor-Corrales, International Center for Tropical Agriculture, Apartado Aereo 6713, Cali, Valle, Colombia. Donated by Jim D. Kelly, Michigan State University, Department of Crop & Soil Science, 370 Plant & Soil Sci. Bldg. MSU, East Lansing, Michigan 48824-1325, United States. Received 1999.

- PI 619385. *Phaseolus vulgaris* L.**
Cultivated. AB 136 (differential); W6 21630. Anthracnose differentials.
- PI 619386. *Phaseolus vulgaris* L.**
Cultivated. Cornell 49242 (differential); W6 21631. Anthracnose differentials.
- PI 619387. *Phaseolus vulgaris* L.**
Cultivated. G 2333 (differential); W6 21632. Anthracnose differentials.
- PI 619388. *Phaseolus vulgaris* L.**
Cultivated. Kaboon (differential); W6 21633. Anthracnose differentials.
- PI 619389. *Phaseolus vulgaris* L.**
Cultivated. MDRK (differential); W6 21634. Anthracnose differentials.
- PI 619390. *Phaseolus vulgaris* L.**
Cultivated. MEX 222 (differential); W6 21635. Anthracnose differentials.
- PI 619391. *Phaseolus vulgaris* L.**
Cultivated. Michilite (differential); W6 21636. Anthracnose differentials.

PI 619392. Phaseolus vulgaris L.

Cultivated. PI 207262 (differential); W6 21637. Anthracnose differentials.

PI 619393. Phaseolus vulgaris L.

Cultivated. PM Perry Marrow (differential); W6 21638. Anthracnose differentials.

PI 619394. Phaseolus vulgaris L.

Cultivated. TO (differential); W6 21639. Anthracnose differentials.

PI 619395. Phaseolus vulgaris L.

Cultivated. TU (differential); W6 21640. Anthracnose differentials.

PI 619396. Phaseolus vulgaris L.

Cultivated. Widusa (differential); W6 21641. Anthracnose differentials.

The following were developed by Buck Semillas S.A., Buenos Aires, Argentina. Received 09/07/2001.

PI 619397 PVPO. Triticum aestivum L. subsp. aestivum

Cultivar. "BUCK PRONTO". PVP 200100067. Pedigree - Victoria INTA/6/Buck Relen//Rafaela MAG/Buck Pampero/3/Pitic 62//Bage//Klein Petiso/4/Maya'S'/5/Buck Pucara.

The following were developed by Stoneville Pedigreed Seed Company, Stoneville, Mississippi, United States. Received 09/07/2001.

PI 619398. Gossypium hirsutum L.

Cultivar. "ST 2454R". PVP 200100223.

The following were developed by S&W Seed Company, United States. Received 09/07/2001.

PI 619399 PVPO. Medicago sativa L.

Cultivar. "SW9720". PVP 200100224.

The following were developed by Pure Line Seeds, Inc., P.O. Box 8866, Moscow, Idaho 83843, United States. Received 09/07/2001.

PI 619400 PVPO. Phaseolus vulgaris L.

Cultivar. "KEEPER". PVP 200100225.

The following were developed by Enza Zaden De Enkhuizer Zaadhandel B.V., Enkhuizen, North Holland, Netherlands. Received 09/07/2001.

PI 619401 PVPO. Lactuca sativa L.

Cultivar. "COASTAL STAR". PVP 200100226.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 09/07/2001.

PI 619402 PVPO. Sorghum bicolor (L.) Moench **subsp. bicolor**
Cultivar. "PHBR76JJIE". PVP 200100228.

PI 619403 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH6WR". PVP 200100229.

PI 619404 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH4V6". PVP 200100230.

PI 619405 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH7CH". PVP 200100231.

PI 619406 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH5TG". PVP 200100232.

PI 619407 PVPO. Zea mays L. **subsp. mays**
Cultivar. "PH4GP". PVP 200100233.

The following were developed by Charles M. Taliaferro, Oklahoma State University, Plant and Soil Science Department, 368 Agricultural Hall, Stillwater, Oklahoma 74078-6028, United States; J.A. Anderson, Oklahoma State University, Horticulture & Landscape Dept., Stillwater, Oklahoma 74078, United States; Michael Anderson, Oklahoma State University, Department of Plant and Soil Sciences, 368 Ag Hall, Stillwater, Oklahoma 74078, United States; D.L. Martin, Oklahoma State University, Horticulture & Landscape Dept., Stillwater, Oklahoma 74078, United States; G.F. Bell, Oklahoma State University, Horticulture & Landscape Dept., Stillwater, Oklahoma 74078, United States. Received 09/07/2001.

PI 619408. Cynodon dactylon (L.) Pers. **var. dactylon**
Cultivar. "YUKON"; OKS 91-11. CV-43; PVP 200100234. Pedigree -
Synthesized from six clonal parent plants (18-10, 24-6, 43-10, 49-5, 49-10) selected in 1990 from a broad genetic base population which had undergone two cycles of recurrent selection for increased fertility and turf quality. The breeding population had been developed in the early 1980's from winter hardy germplasm accessions and breeding lines identified as having seed production capability. Seed propagated, highly freeze tolerant relative to other bermudagrasses, and has good turf quality. Adapted throughout the U.S. where bermudagrass is grown, but is best adapted to the northern half of the zone of bermudagrass use and is expected to perform best relative to other turf bermudagrass cvs. in this region. Produces a dense, dark green, relatively fine-textured sod. Good resistance to spring dead spot disease (*Ophiosphaerella herpotricha*). Seedling and mature plants grow more slowly than many seed-propagated bermudagrass cvs. such as NuMex Sahara and other cvs. emanating from bermudagrass naturalized to the southwestern U.S.

The following were developed by Pickseed West, Inc., P.O. Box 888, 33149 Highway 99E, Tangent, Oregon 97389, United States. Received 09/07/2001.

PI 619409 PVPO. Festuca arundinacea Schreb.
Cultivar. "MUSTANG 3". PVP 200100235.

The following were developed by Asgrow Seed Company, Kalamazoo, Michigan, United States. Received 09/07/2001.

PI 619410. *Zea mays* L. subsp. *mays*
Cultivar. "6077". PVP 200100240.

The following were developed by Ag Biotech of Oregon, Inc., Oregon, United States. Received 09/07/2001.

PI 619411 PVPO. *Lolium perenne* L.
Cultivar. "DANDY II". PVP 200100241.

PI 619412 PVPO. *Lolium perenne* L.
Cultivar. "STELLAR". PVP 200100242.

The following were developed by Ted P. Wallace, Mississippi State University, Mississippi Agric. & Forestry Exp. Stn., P.O. Box 9555, Mississippi State, Mississippi 39762, United States; B.W. White, Mississippi State University, Mississippi Agric. & Forestry Exp. Sta. Variety Evaluations, P.O. Box 9811, Mississippi State, Mississippi 39762, United States; J.E. Hollowell, Pioneer Hi-Bred International, Inc., Crop Genetics Research & Development, West Memphis, Arkansas 72303, United States. Received 09/07/2001.

PI 619413. *Gossypium hirsutum* L.
Cultivar. "MISCOT 8806". CV-118; PVP 200100243. Pedigree - DES 119/Tamcot CDP37HPIH-1-1-86. Combines high lint yield with desirable fiber characteristics. Primary advantage is combination of high lint yield with reduced fiber micronaire values.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 09/07/2001.

PI 619414 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PH5W4". PVP 200100244.

PI 619415 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PH6WG". PVP 200100245.

PI 619416 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PH726". PVP 200100246.

The following were developed by Pioneer Hi-Bred International, Department of Corn Breeding, Union City, Tennessee, United States. Received 09/07/2001.

PI 619417 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "PH7CP". PVP 200100247.

The following were collected by Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Alicia Massa, USDA, ARS, FRRL, Utah State University, Forage

and Range Research Laboratory, Logan, Utah 84322-6300, United States; Raul Lira, INIA Kampenaike, Angamos 1056, Casilla 277, Punta Arenas, Magallanes, Chile; Mercedes Masco, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Gabriel Oliva, INTA, E.E.A. Santa Cruz, CC 332, Rio Gallegos, Santa Cruz 9400, Argentina; Ivette Sequel, CRI Carillanca, General Lopez, IX Region, Temuco, La Araucania, Chile. Received 10/23/2001.

PI 619418. Anthoxanthum odoratum L.

Wild. PRO 96-93. Collected 02/29/1996 in Chile. Latitude 54° 48' 30" S. Longitude 67° 32' 20" W. Tierra del Fuego, Cantera beginning of Rio Lasifashaj, 15 km northwest from Bahia Brown. Mountain slopes 10% N-NW, clay soil, very stony with moderate drainage. Wildland seed, 100% seed maturity, plants common at site, 0.45 m tall. Wide leaves, similar to Bromus. Could be good forage.

The following were developed by Sunderman Breeding, Inc., United States. Received 09/07/2001.

PI 619419 PVPO. Triticum aestivum L. subsp. aestivum

Cultivar. Pureline. "DECLO"; 215-B. PVP 200100249. Pedigree - Neeley/2*Stephens//2*Borah//ID180.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 09/07/2001.

PI 619420 PVPO. Zea mays L. subsp. mays

Cultivar. "PH581". PVP 200100250.

PI 619421 PVPO. Zea mays L. subsp. mays

Cultivar. "PH3PV". PVP 200100251.

PI 619422 PVPO. Zea mays L. subsp. mays

Cultivar. "PH77V". Utility Patent 6740795; PVP 200100252.

PI 619423 PVPO. Zea mays L. subsp. mays

Cultivar. "PH6KW". PVP 200100253.

PI 619424 PVPO. Zea mays L. subsp. mays

Cultivar. "PH5WB". PVP 200100254.

PI 619425 PVPO. Zea mays L. subsp. mays

Cultivar. "PH6ME". PVP 200100255.

The following were developed by Western Plant Breeders, Inc., Phoenix, Arizona, United States. Received 09/07/2001.

PI 619426 PVPO. Triticum aestivum L. subsp. aestivum

Cultivar. Pureline. "KEYSTONE"; FA 998-743. PVP 200100256. Pedigree - Lars/Sharpshooter. Hard red spring wheat.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 09/07/2001.

PI 619427 PVPO. *Lactuca sativa* L.
Cultivar. "PACER". PVP 200100259.

The following were developed by Resource Seeds, Inc., United States. Received 09/07/2001.

PI 619428 PVPO. *Triticum aestivum* L. subsp. *aestivum*
Cultivar. "BONUS". PVP 9900402. Pedigree - Cleo/Inia//Probrand
775/Klasic.

The following were developed by Lloyd W. Rooney, Texas A&M University, 17360 Coit Road, Dallas, Texas 75252, United States; A. J. Bockholt, Texas A&M University, Soil and Crop Sciences Department, College Station, Texas 77843-2474, United States; Javier Betran, Texas A&M University, Corn Breeding and Genetics, Department of Soil and Crop Sciences, College Station, Texas 77843-2474, United States; F. Fojt III, Texas A&M University, Soil & Crop Sciences Dept., College Station, Texas 77843-2474, United States; Ralph D. Waniska, Texas A&M University, Department of Crop & Soil Sciences, Cereal Quality Lab, College Station, Texas 77843-2474, United States. Donated by Javier Betran, Texas A&M University, Corn Breeding and Genetics, Department of Soil and Crop Sciences, College Station, Texas 77843-2474, United States. Received 08/20/2001.

PI 619429. *Zea mays* L. subsp. *mays*
Breeding. Inbred. Tx802. PL-308. Pedigree - Pob65-2-1-2-1-1-B-#-B-B.
Maize parental line with yellow grained vitreous grain texture and high lysine endosperm. Carries the opaque-2 mutation and has a hard flinty endosperm. Adapted to Southern U.S. areas. Intermediate maturity ~ 1 to 2 days later than B73 in College Station, TX conditions. Flowers earlier than tropical and subtropical QPM inbreds. Ears thin with few kernel rows and white cobs (pp). Kernels yellow with a flint to semiflint endosperm texture. Plants small to medium size with low ear placement and nice aspect and green color. Stands very well with low incidence of root and stalk lodging. Tassels small with relatively few numbers of branches in comparison with other QPM germplasm. An intermediate pollen shedder. Lysine contents of 0.45 grams over 100 grams of sample that constitutes at 50% more lysine content than standard non-QPM inbreds. Susceptible to common smut and Fusarium stalk rots.

The following were developed by A. J. Bockholt, Texas A&M University, Soil and Crop Sciences Department, College Station, Texas 77843-2474, United States; Gary Odvody, Texas A&M University, Texas AgriLife Rsch & Extn Ctr, 10345 State Highway 44, Corpus Christi, Texas 78406-1412, United States; Javier Betran, Texas A&M University, Corn Breeding and Genetics, Department of Soil and Crop Sciences, College Station, Texas 77843-2474, United States; F. Fojt III, Texas A&M University, Soil & Crop Sciences Dept., College Station, Texas 77843-2474, United States. Donated by Javier Betran, Texas A&M University, Corn Breeding and Genetics, Department of Soil and Crop Sciences, College Station, Texas 77843-2474, United States. Received 08/20/2001.

PI 619430. *Zea mays* L. subsp. *mays*
Breeding. Inbred. Tx807. PL-309. Pedigree - Pob63-17-1-1-1-1-1-#-#-B-B.
Maize parental line with white grain, high lysine and hard endosperm. Carries the opaque-2 mutation and has a hard flinty endosperm. Adapted

to Southern U.S. areas. Intermediate maturity~2days later than B73 in the College Station, TX conditions. Flowers earlier than tropical and subtropical QPM inbreds. Ears thin and short with few kernel rows. Cobs white (pp), and thin. Kernels flint with bright white color (yyy). Plants short with nice aspect and green color. Ear placement is low. An intermediate pollen shedder and has poor grain yield. Lysine contents of 0.48 grams over 100 grams of sample. Constitutes at 60% more lysine content than standard non-QPM inbreds. (0.30 g/1000 g sample). Inbred line per se appears to be resistant to *Aspergillus flavus* infection and aflatoxin. Hybrids have desirable agronomic traits showing shorter plants, lower ear placement, earlier maturity, lower moisture content at harvest, less root and stalk lodging, easier pericarp removal, greater test weights, and greater hardness than other QPM hybrids. Hybrids have lower weight of 1000 kernels, and greater susceptibility to common smut.

The following were developed by Lloyd W. Rooney, Texas A&M University, 17360 Coit Road, Dallas, Texas 75252, United States; A. J. Bockholt, Texas A&M University, Soil and Crop Sciences Department, College Station, Texas 77843-2474, United States; Javier Betran, Texas A&M University, Corn Breeding and Genetics, Department of Soil and Crop Sciences, College Station, Texas 77843-2474, United States; F. Fojt III, Texas A&M University, Soil & Crop Sciences Dept., College Station, Texas 77843-2474, United States. Donated by Javier Betran, Texas A&M University, Corn Breeding and Genetics, Department of Soil and Crop Sciences, College Station, Texas 77843-2474, United States. Received 08/20/2001.

PI 619431. *Zea mays* L. subsp. *mays*

Breeding. Inbred. Tx811. PL-310. Pedigree - (Mo17/Pob67)-2-2-2-1-1-#-#-B-B. Maize parental line with white grain and high lysine. Carries the opaque-2 mutation and has a semiflint endosperm. Adapted to Southern U.S. areas. Intermediate/late maturity~3 days later than B73 in College Station, TX conditions. Flowers earlier than tropical and subtropical QPM inbreds. Ears thick with 10 kernel rows. Cobs white (pp), thick and fragile. Kernels semiflint with soft tips and bright white color (yyy). Plants medium size, with nice aspect and green color, which is maintained during the grain drying down. Ear placement low. Tassals open with relatively high number of branches. Good pollen shedder. Lysine contents of 0.46 grams over 100 grams of sample. Constitutes 53% more lysine content than standard non-QPM inbreds. Inbred line per se appears to be susceptible to *Aspergillus flavus* infection and aflatoxin production.

The following were developed by A. E. Hall, University of California, Department of Botany & Plant Sciences, Riverside, California 92521, United States; H.O.A. Elawad, Elobeid Research Station, P.O. Box 429, Elobeid, Sudan. Received 08/23/2001.

PI 619432. *Vigna unguiculata* (L.) Walp.

Cultivar. "Ein El Gazal"; UCR 1-12-3. CV-199. Pedigree - Selected from a population produced from a cross in 1977 between a California cultivar, CB5, as the female parent and a breeding line from Senegal, Bambey 23, as the male parent. Erect, indeterminate cowpea with synchronous flowering. At El Obeid in the Sudan, begins flowering 41 to 48 days

after sowing and plants reach physiological maturity 60 to 71 days after sowing. Cream seed with a blackeye and a rough seed coat. Average seed weight of 186 mg/seed when grown in northern Kordofan in the Sudan.

The following were developed by Edwin T. Bingham, University of Wisconsin, Dept. of Agronomy, 453 Moore Hall, Madison, Wisconsin 53706, United States. Received 08/07/2001.

PI 619433. *Medicago sativa* L. subsp. *sativa*

Genetic. WI-Mutable 2; c2-m2. GS-1. Pedigree - Contains about 50% Vernal, 25% Saranac, and 25% unknown germplasm. Segregating for a mutable allele (c2-m2) at the C2 locus that behaves as a transposable element. About 70% of the plants are white flowered, 20% are mutable with streaks and sectors of purple pigment in otherwise white flower petals, and 5% are purple where reversion to purple took place in gametogenesis. Fertility and adaptation are similar to Vernal and Saranac.

PI 619434. *Medicago sativa* L. subsp. *sativa*

Genetic. WI-Mutable 3; c2-m3. GS-2. Pedigree - Contains about 50% Vernal, 25% Saranac, and 25% unknown germplasm. Segregating for a mutable allele (c2-m3) at the C2 locus that behaves as a transposable element. About 70% of the plants are white flowered, 20% are mutable with streaks and sectors of purple pigment in otherwise white flower petals, and 5% are purple where reversion to purple took place in gametogenesis. Fertility and adaptation are similar to Vernal and Saranac.

The following were developed by James L. Brewbaker, University of Hawaii, Dept. of Horticulture, 3190 Maile Way, Honolulu, Hawaii 96822, United States. Received 08/09/2001.

PI 619435. *Zea mays* L. subsp. *mays*

Cultivar. Population. NE-EDR_{sul}; Hawaii 01-401. Pedigree - This sugary-1 population was bred in Hawaii thru 13 cycles of recurrent full-sib selection from crosses in 1975 of 12 tropical sul composites bred in Hawaii with 10 elite SX sul temperate hybrids. Broad based sugary-1 population bred in Hawaii and released after 13 cycles of full-sib selection from crosses of 10 elite temperate SX hybrids with 12 tropical U. Hawaii populations chosen largely for their high tolerance to diseases, insects and stresses. Major diseases for which resistance was selected in Hawaii include Maize Mosaic Virus, *Fusarium moniliforme*, *Physoderma maidis* and *Puccinia polysora* and *P. sorghi*.

PI 619436. *Zea mays* L. subsp. *mays*

Cultivar. Population. NE-EDR_{bt1}; Hawaii 01-361. Pedigree - This brittle 1 population was bred in Hawaii from crosses of NE-EDR_{sul} with Hi bt COMP 3 followed by 5 backcrosses and 8 sibs to homozygosity (bt1/bt1_{Sul}/Sul). Five backcross conversion to brittle 1 of the population NE-EDR_{sul}, released after 14 breeding cycles including inbreeding to achieve homozygosity (bt1/bt1_{Sul}/Sul). Resembles the parental population in agronomic traits and broad spectrum of disease tolerance, but with reduced field germination (avg. 75%) of untreated

seeds. In Hawaii the plants are tall (2.5 to 3m), rarely tillered, and reach mid-silk in ~55 days. Ears have high husk cover, are ~18 cm long and rank from good to excellent in table qualities.

The following were developed by Juan C. Rosas, Escuela Agricola Panamericana, El Zamorano, P.O. Box 93, Tegucigalpa, Francisco Morazan, Honduras; R. Araya, Estacion Experimental Fabio Baudrit, Universidad de Costa Rica, A. Postal 183-4050, Alajuela, San Jose, Costa Rica; J.C. Hernandez, Direccion de Investigaciones Agricolas, Ministerio de Agricultura y Ganaderia, San Jose, Costa Rica. Received 08/22/2001.

PI 619437. *Phaseolus vulgaris* L.

Cultivar. "BRIBRI"; MD 23-24. CV-201. Pedigree - F1 (RAB 310 x XAN 155) x F1 (DOR 391 x POMPADOUR G). Small red bean (race Mesoamerica), midseason, bean golden yellow mosaic virus resistant and heat tolerant. Indeterminate bush, short vine type II growth habit. Well adapted to low-intermediate (<1200m) altitude bean production regions of Costa Rica and Honduras, including to low fertility soils. Dry seeds shiny red, ovoid shaped and 20 grams per 100 seeds.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619438. *Agropyron cristatum* (L.) Gaertn.

Wild. X97-150; W6 20298. Collected 08/1997 in Xinjiang, China. Latitude 44° 37' 8" N. Longitude 81° 31' 51" E. Elevation 1950 m. 10 km east of Salimu Lake, Xinjiang. Very xeric site in rain shadow of Tian Shan Mountains. In depression that would collect snow and runoff. Sandy soil with rocks 2-30 cm diameter. Slope is 5% with east to northeast aspect.

PI 619439. *Poa pratensis* subsp. *angustifolia* (L.) Dumort.

Wild. X97-108; W6 20271. Collected 08/1997 in Xinjiang, China. Latitude 43° 20' 31" N. Longitude 81° 49' 1" E. Elevation 1710 m. 20 km north of Tekes County, Xinjiang. Ungrazed hillside with failed evergreen tree planting on pass through mountains. Silt loam soil. Moderately dense vegetation with a high proportion of forbs. Slope is 20% with north to northwest aspect.

PI 619440. *Agropyron cristatum* (L.) Gaertn.

Wild. X97-074; W6 20248. Collected 08/1997 in Xinjiang, China. Latitude 42° 52' 39" N. Longitude 80° 52' 48" E. Elevation 1620 m. 30 km southwest of Zhaosu County, Xinjiang. Ungrazed dryland meadow. Very dry site in rain shadow of Tian Shan Mountains. Clay loam soil. Slope is 1% with southwest aspect.

PI 619441. *Agrostis gigantea* Roth

Wild. X97-045; W6 20229. Collected 08/1997 in Xinjiang, China. Latitude 43° 9' 24" N. Longitude 80° 51' 8" E. Elevation 1830 m. 20 km

north of Farm No. 77, 38 km west of Zhaosu County, Xinjiang. Wet floodplain across stream. No slope.

PI 619442. *Agrostis gigantea* Roth

Wild. X97-099; W6 20264. Collected 08/1997 in Xinjiang, China. Latitude 43° 9' 52" N. Longitude 81° 37' 12" E. Elevation 1320 m. 40 km east Zhaosu County, Xinjiang. Ungrazed meadow that will be cut for hay. Lush vegetation, silt loam soil. Slope is 2% with southwest aspect. Near Suasu River.

PI 619443. *Agrostis gigantea* Roth

Wild. X97-031; W6 20222. Collected 08/1997 in Xinjiang, China. Latitude 43° 11' 19" N. Longitude 81° 7' 52" E. Elevation 1980 m. 3 km north of Zhaosu County, Xinjiang. In tree rows consisting of *Populus* spp. about 6 m tall and Siberian elm about 2-3 m tall along main road to Zhaosu County. Not grazed, no slope.

PI 619444. *Agrostis gigantea* Roth

Wild. X97-116; W6 20275. Collected 08/1997 in Xinjiang, China. Latitude 44° 13' 10" N. Longitude 81° 9' 30" E. Elevation 990 m. 45 km northeast of Huocheng County, Xinjiang. Hay meadow next to mountain-fed stream. Ungrazed, will be cut for hay. Clay loam soil. No slope.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619445. *Pseudoroegneria spicata* (Pursh) A. Love

Wild. Acc:158; 9040451; W6 20906. Collected in Nevada, United States. Latitude 40° 0' N. Longitude 116° 7' W. Eureka County.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619446. *Phleum phleoides* (L.) H. Karst.

Wild. X97-135; W6 20290. Collected 08/1997 in Xinjiang, China. Latitude 43° 28' 4" N. Longitude 81° 6' 38" E. Elevation 2040 m. 55 km south of Yili City, Xinjiang. Dry hillside, stoney soil, grazed moderately. Slope is 30% with south to southeast aspect.

PI 619447. *Melica transsilvanica* Schur

Wild. X97-085; W6 20255. Collected 08/1997 in Xinjiang, China. Latitude 43° 2' 42" N. Longitude 81° 18' 23" E. Elevation 1880 m. 30 km east of Zhaosu County, Xinjiang. Ungrazed hillside, rocky soil underlain with shale, very xeric site. Slope is 40% with south aspect.

PI 619448. *Phleum pratense* L.

Wild. X97-081; W6 20252. Collected 08/1997 in Xinjiang, China. Latitude 43° 1' 42" N. Longitude 81° 18' 23" E. Elevation 1880 m. 30 km

east of Zhaosu County. Ungrazed hillside, silt loam about 30 inches deep underlain with clay. Slope is 40% with north aspect.

PI 619449. *Phleum phleoides* (L.) H. Karst.

Wild. X97-121; W6 20280. Collected 08/1997 in Xinjiang, China. Latitude 43° 29' 16" N. Longitude 81° 7' 4" E. Elevation 1800 m. 50 km south of Yili City, Xinjiang. Hillside with sandy loam soil and shale fragments measuring 2 to 15 cm length. Moderately grazed. Slope is 45% with west aspect.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619450. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-933; W6 20917. Collected in Colorado, United States. Latitude 38° 26' N. Longitude 106° 46' W. Between mile markers 6 and 7 on Highway 114 (Kreuger Ranch entrance), Gunnison County. riparian site (Tomichi Creek).

PI 619451. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-938; W6 20918. Collected in Colorado, United States. Latitude 39° 41' N. Longitude 107° 55' W. 2 miles southeast of Rio Blanco County line on Highway 13 in Garfield County.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 619452. *Phleum phleoides* (L.) H. Karst.

Wild. VIR D37; W6 17808. Collected 07/20/1995 in Russian Federation. Latitude 44° 21' 24" N. Longitude 40° 43' 30" E. Elevation 450 m. pH 5.8.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States; Michael D. Casler, University of Wisconsin, Department of Agronomy, 1575 Linden Drive, Madison, Wisconsin 53706-1597, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 12/14/1993.

PI 619453. *Psathyrostachys juncea* (Fisch.) Nevski

Uncertain. AJC-599; W6 14628. Collected 05/16/1989 in Russian Federation. Latitude 43° 15' N. Longitude 75° 57' E. Kazakhstan Inst. of Fodder Crops, Alma Ata. Origin: Induced tetraploid "No. 11-30". 1988 seed.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

- PI 619454. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1268; W6 20981. Collected in Idaho, United States. Latitude 43° 51' N. Longitude 116° 36' W. Above A-line canal off Freeze-Out Road in Gem County.
- PI 619455. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-970; W6 20919. Collected in Idaho, United States. Latitude 46° 31' N. Longitude 116° 37' W. Highway 12 at approximately mile marker 25 (Nez Perce County). West bank of Clearwater River. Dense monoculture.
- PI 619456. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1218; W6 20978. Collected in Idaho, United States. Latitude 43° 42' N. Longitude 116° 13' W. Junction of Cartwright Road and Pierce Park Road in Ada County.
- PI 619457. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1177; W6 20965. Collected in Idaho, United States. Latitude 43° 47' N. Longitude 116° 32' W. Little Land and Livestock Ranch "Upper Sheep Trail" in Canyon County.
- PI 619458. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1213; W6 20975. Collected in Idaho, United States. Latitude 43° 27' N. Longitude 115° 56' W. 1.4 miles northwest of junction of Mayfield Road and Slater Creek Road in Elmore County.
- PI 619459. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1182; W6 20968. Collected in Idaho, United States. Latitude 43° 30' N. Longitude 116° 8' W. East of Boise at I-84 mile marker 60 in Ada County.
- PI 619460. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1216; W6 20977. Collected in Idaho, United States. Latitude 43° 40' N. Longitude 116° 11' W. Boise. 1.2 miles above Simplot Lane on Bogus Basin Road in Ada County.
- PI 619461. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1220; W6 20980. Collected in Idaho, United States. Latitude 43° 33' N. Longitude 116° 6' W. Highland Valley Road 0.2 miles northeast of junction with Highway 21 in Ada County.
- PI 619462. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1211; W6 20974. Collected in Idaho, United States. Latitude 43° 24' N. Longitude 115° 52' W. 3 miles southeast of Mayfield in Elmore County.
- PI 619463. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1209; W6 20972. Collected in Idaho, United States. Latitude 43° 17' N. Longitude 115° 50' W. Ditto Creek Road in Elmore County.
- PI 619464. *Elymus multisetus*** (J. G. Sm.) Burt Davy
Wild. T-1179; W6 20967. Collected in Idaho, United States. Latitude

43° 48' N. Longitude 116° 37' W. Little Land and Livestock Ranch
"Lower Hatley" in Canyon County.

PI 619465. *Elymus multisetus* (J. G. Sm.) Burt Davy
Wild. T-1219; W6 20979. Collected in Idaho, United States. Latitude
43° 42' N. Longitude 116° 16' W. Hill Road 2.3 miles north of
the junction of Hill Road and Seaman's Gulch Road in Ada County.

PI 619466. *Elymus multisetus* (J. G. Sm.) Burt Davy
Wild. T-1165; W6 20964. Collected in Idaho, United States. Latitude
42° 59' N. Longitude 115° 16' W. Southwest of King Hill 2.2
miles off I-84 exit in Elmore County.

PI 619467. *Elymus multisetus* (J. G. Sm.) Burt Davy
Wild. T-1178; W6 20966. Collected in Idaho, United States. Latitude
43° 49' N. Longitude 116° 35' W. Little Land and Livestock Ranch
"Middle Hatley" in Gem County.

The following were donated by Robert Aline, RAGT, Centre de recherche, Le
Bourg, Druelle, France. Received 11/19/1990.

PI 619468. *Lolium multiflorum* Lam.
Cultivar. "Ansyl"; W6 6257. Is a tetraploid.

PI 619469. *Lolium multiflorum* Lam.
Cultivar. "Idyl"; W6 6259. Developed in France. Is a tetraploid.

PI 619470. *Lolium multiflorum* Lam.
Cultivar. "Ruten"; W6 6260. Developed in France. Is a diploid.

PI 619471. *Lolium multiflorum* Lam.
Cultivar. "Fastyl"; W6 6263. Developed in France. Is a diploid.

PI 619472. *Lolium multiflorum* Lam.
Cultivar. "Energyl"; W6 6262. Developed in France. Is a diploid.

PI 619473. *Lolium multiflorum* Lam.
Cultivar. "Vertyl"; W6 6261. Developed in France. Is a diploid.

The following were donated by I.C.C.P.T., Research Institute for Cereals, &
Industrial Crops, Fundulea, Calarasi, Romania. Received 02/18/1992.

PI 619474. *Lolium perenne* L.
Cultivated. W6 10031; RAIAR.

The following were donated by Doina Silistru, Statinua de Cercetare si
Productie, Pentru Cultura Pajistilor Vaslui, Str. Stefan cel Mare nr. 256,
Vaslui, Vaslui 6510, Romania. Received 1995.

PI 619475. *Agropyron cristatum* var. *pectinatum* (M. Bieb.) Tzvelev
Uncertain. "I.C.A. 104"; W6 19159.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Mohamed Chakroun, INRAT, Forage Improvement Laboratory, Rue Hadi Karray, Ariana, Tunisia; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States. Received 08/19/1994.

PI 619476. *Festuca arundinacea* Schreb.

Wild. T070.CPG94; 136309; W6 16044. Collected 06/25/1994 in Tunisia. Latitude 37° 13' 58" N. Longitude 9° 42' 27" E. Elevation 14 m. Near Bizerte, 13 k west of Bizerte on C51, 1 k from site 26. Grazed. Slope 0-5%, aspect S. Area open. Soil heavy clay, pH 9.5+. Rainfall 600 mm. Moist, alluvial fan, edge of salt lake zone. Vegetation closed, seasonal tall grass. Surrounding veg. dryland wheat. Population abundance frequent, distribution patchy. Growth habit erect.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619477. *Poa pratensis* L.

Wild. 96N-327; W6 19802. Collected 09/1996 in Mongolia. Latitude 49° 33' 14" N. Longitude 90° 22' 24" E. Elevation 1478 m. Bayan-Olgii Aimag, hay meadow in a wide open valley. Soils are deep. Valley is basically flat and drawing toward Aichit Nuur to the southeast. DOMINANT VEG: *Carex melanantha*, *Hordeum bogdani*, *Agrostis clavata*, *Elymus sibiricus*, *Potentilla anserina* ECOLOGICAL ZONE: Mountain steppe.

PI 619478. *Agropyron cristatum* (L.) Gaertn.

Wild. 96N-204; W6 19696. Collected 08/1996 in Mongolia. Latitude 48° 46' 35" N. Longitude 97° 42' 18" E. Elevation 1841 m. Undisturbed steppe with slight south aspect. Sandy soils with some gravel. South aspect with 1% slope, sandy soil. DOMINANT VEG: *Stipa capillata*, *Agropyron cristatum*, *Thermopsis dahurica*, *Carex duriscula*, *Poa attenuata*, *Artemisia commutata* ECOLOGICAL ZONE: Steppe.

PI 619479. *Agropyron michnoi* Roshev.

Wild. 96N-349; W6 19823. Collected 09/1996 in Mongolia. Latitude 48° 27' 56" N. Longitude 91° 23' 43" E. Elevation 1355 m. Hovd Aimag, 6 km to the southwest of Har-Us beside the road to Bayan Hongor on a flat plain. 1% northeast slope. Site has a rock strewn surface with gravel/sand soil. DOMINANT VEG: *Caragana pygmae*, *Caragana stenophylla*, *Cleistogenes squarrosa*, *Ceratoides papposa*, *Allium anisopodium*, *Agropyron michnoi* ECOLOGICAL ZONE: Desert steppe.

The following were collected by Peter Cunningham, Dept. of Agriculture & Rural Affairs, Pastoral Research Institute, P.O. Box 180, Hamilton, Victoria 3300, Australia; Mohamed Chakroun, INRAT, Forage Improvement Laboratory, Rue Hadi Karray, Ariana, Tunisia; Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States. Received 08/19/1994.

PI 619480. *Festuca arundinacea* Schreb.

Wild. T004.CPG94; 136243; W6 15978. Collected 06/21/1994 in Tunisia.

Latitude 36° 49' 29" N. Longitude 10° 58' 47" E. Elevation 18 m.
Near Skalba, 5 k west of Menzer Temine on C45. Grazed. Slope 0-5%,
aspect NE. Area open. Soil clay, vertisol, pH 8.5+. Rainfall 425 mm.
Moist, floodplain. Vegetation closed, seasonal tall grass. Surrounding
veg. agriculture, orchard. Dominant herb/grass sp. couch, bermuda grass.
Population abundance frequent, distribution patchy. Growth habit erect.

PI 619481. *Festuca arundinacea* Schreb.

Wild. T010.CPG94; 136249; W6 15984. Collected 06/21/1994 in Tunisia.
Latitude 36° 48' 59" N. Longitude 10° 59' 23" E. Elevation 6 m.
Near skalba, 4 k west of Menzer Temine on C45. Grazed. Slope 6-10%,
aspect NE. Open. Soil clay, vertisol, hydromorphic, pH 8.5. Rainfall 425
mm. Moist, ravine. Vegetation closed, seasonal tall grass. Surrounding
veg. agricultural, dryland wheat. Dominant herb/grass sp. couch,
bermuda. Population abundance frequent, distribution patchy. Growth
habit erect.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural
Research Center, Post Office Box E, Union, Oregon 97833, United States;
Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah
State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619482. *Leymus chinensis* (Trin.) Tzvelev

Wild. 96S-107; W6 19626. Collected 09/1996 in Mongolia. Latitude 48°
10' N. Longitude 91° 45' 21" E. Elevation 1335 m. Khovd Aimag,
Buyant Sum, experimental area about 10 km north of the aimag center. 0%
slope. Wide valley bottom that is currently being used for growing
vegetables and making hay. Soils are alluvial and are coarse brown
sandy loams. DOMINANT VEG: Vegetables and annual grasses.

PI 619483. *Psathyrostachys juncea* (Fisch.) Nevski

Wild. 96N-331; W6 19806. Collected 09/1996 in Mongolia. Latitude 49°
29' 14" N. Longitude 90° 7' 58" E. Elevation 2002 m. Bayan-Olgii
Aimag, very gravelly hillside 16 km southwest of Noguunnuur and 21 km
west of Achit Nuur. 10% to 15% east slope. Site is about 0.5 km from
the base of the mountain and to the east of the road and receives about
150 mm annual precipitation. Soil is gravel overlaying a thin layer of
tan soil. DOMINANT VEG: *Poa attenuata*, *Agropyron cristatum*, *Stipa*
glareosa, *Caragans leucophloea*, *Heteropappus hispidus*. ECOLOGICAL ZONE:
Mountain steppe.

PI 619484. *Psathyrostachys juncea* (Fisch.) Nevski

Wild. 96N-312; W6 19789. Collected 09/1996 in Mongolia. Latitude 50°
40' 15" N. Longitude 91° 11' 12" E. Elevation 1878 m. Uvs Aimag, 14
km east of south end of Uureg Nuur and 97 km northeast of Hovd.
Northeast-southwest canyon along the Ulaangom-Hovd road. Canyon sides are
steep (30-50% slope), rocky outcrops. Soils are rock, gravel, and
sand. Collection made on both sides of canyon. DOMINANT VEG:
Achnatherum splendens, *Stipa capillata*, *Agropyron cristatum*, *Artemisia*
frigida, *Caragana bungei*, *Caragana stenophylla*, *Heteropappus hispidus*
ECOLOGICAL ZONE: Mountain steppe.

PI 619485. *Leymus chinensis* (Trin.) Tzvelev

Wild. 96S-181; W6 19678. Collected 08/1996 in Mongolia. Latitude 44°
52' 43" N. Longitude 98° 27' 51" E. Elevation 2150 m. Bayanhongor
Aimag, Bayantsagaan Sum, 30 km east of the aimag center. 1% west slope.

High desert pediment slope. Soils are fluvents with alluvia materials consisting of meta-sediments. Surface soils are gray silts and coarse, gravelly stabilized dune sands. DOMINANT VEG: *Reaumuria soongarica*/*Achnatherum splendens*, *Elymus chinensis*, *Artemisia* spp.

PI 619486. *Leymus chinensis* (Trin.) Tzvelev

Wild. 96N-274; W6 19760. Collected 08/1996 in Mongolia. Latitude 49° 45' 11" N. Longitude 94° 11' 44" E. Elevation 1201 m. Uvs Aimag, 17 km northwest of Beruunturuun and 28 km southeast of Bay An Nuur. Large flat area of abandoned wheat fields along the road. Soils are tan and appear well drained. Aspect is essentially flat. DOMINANT VEG: *Leymus chinensis*, *Elymus dahuricus*, *Setaria*, *Chenopodium* ECOLOGICAL ZONE: Steppe.

PI 619487. *Psathyrostachys juncea* (Fisch.) Nevski

Wild. 96N-300; W6 19780. Collected 08/1996 in Mongolia. Latitude 49° 51' 50" N. Longitude 92° 4' 35" E. Elevation 1078 m. Uvs Aimag, immediately west of Ulaangom airport runway and between runway and perimeter fence. Aspect is flat and soils are sand and gravel. DOMINANT VEG: *Achnatherum splendens*, *Heteropappus hispidus*, *Potentilla biforca* ECOLOGICAL ZONE: Steppe.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 619488. *Agropyron cristatum* subsp. *brandzae* (Pantu & Solacolu) Melderis

Wild. B96-82; W6 19290. Collected 07/1996 in Bulgaria. Latitude 42° 5' 52" N. Longitude 24° 27' 25" E. Elevation 304 m. 2 km southwest of Nobusevo, 1km east of Ispershovo. Rocky, grassy hillside. Very arid. 6-7% slope. Alkaline soil (pH 9.5). northwest. Sample.3. different. populations at same site. Combine all Samples?.

The following were donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619489. *Elymus elymoides* (Raf.) Swezey **subsp. *elymoides***

Wild. 9019224; Acc:1126; W6 20982. Collected in Montana, United States. Latitude 45° 52' 13" N. Longitude 112° 5' 44" W. Elevation 1520 m. Northeast of Whitehall in Jefferson County. T4N R3W Section 4. Received as: *Elymus elymoides* var. *hystrix*.

The following were collected by Kay H. Asay, USDA, ARS, Forage & Range Research Unit, Utah State University, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 10/25/1993.

PI 619490. Bromus erectus Huds.

Uncertain. JA-332; VIR U-0134719; K-41882; W6 13190. Collected 01/1993 in Hungary.

The following were donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619491. Elymus elymoides (Raf.) Swezey **subsp. elymoides**

Wild. 9019222; Acc:1131; W6 20985. Collected in Wyoming, United States. Latitude 42° 32' 16" N. Longitude 110° 6' 50" W. Elevation 2097 m. 4 miles south of Big Piney. T29N 111W Section 20. Received as: *Elymus elymoides* var. *hystrix*.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619492. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-975; W6 20924. Collected in Washington, United States. Latitude 47° 20' N. Longitude 118° W. 3 miles northwest of town of Sprague on Highway 23 in Lincoln County.

PI 619493. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-990; W6 20939. Collected in Washington, United States. Latitude 47° 17' N. Longitude 119° 35' W. 1 miles southwest of Ephrata on Highway 283 at railroad trestle in Grant County.

PI 619494. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-982; W6 20931. Collected in Washington, United States. Latitude 47° 22' 48" N. Longitude 118° 31' 12" W. 13.5 miles southwest of Harrington on Highway 28 in Lincoln County.

PI 619495. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-974; W6 20923. Collected in Washington, United States. Latitude 47° 11' N. Longitude 117° 52' W. Highway 23 between mile markers 33 and 34 in Whitman County.

PI 619496. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-1003; W6 20952. Collected in Washington, United States. Latitude 46° 18' N. Longitude 118° 17' W. 2.5 miles east of Prescott on Highway 124 in Walla Walla County.

PI 619497. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-997; W6 20946. Collected in Washington, United States. Latitude 46° 42' N. Longitude 118° 26' W. 0.5 miles west of junction of Highway 260 and Highway 261 on Highway 260 in Franklin County.

PI 619498. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-988; W6 20937. Collected in Washington, United States. Latitude 47° 46' N. Longitude 118° 43' W. North edge of Wilbur on Highway 174 (golf course) in Lincoln County.

PI 619499. Leymus cinereus (Scribn. & Merr.) A. Love

Wild. T-977; W6 20926. Collected in Washington, United States. Latitude

47° 33' N. Longitude 118° 11' W. 6 miles northeast of Harrington on Highway 28 in Lincoln County.

- PI 619500. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-994; W6 20943. Collected in Washington, United States. Latitude 46° 46' N. Longitude 117° 42' W. 4 miles southwest of town of Dusty on Highway 127 in Whitman County.
- PI 619501. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-987; W6 20936. Collected in Washington, United States. Latitude 47° 51' N. Longitude 119° 7' W. 7 miles south of Electric City opposite Banks Lake in Grant County.
- PI 619502. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-984; W6 20933. Collected in Washington, United States. Latitude 47° 25' N. Longitude 119° 18' W. 10 miles east of Highway 28 and Highway 17 junction on Highway 28 in Grant County.
- PI 619503. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-978; W6 20927. Collected in Washington, United States. Latitude 47° 47' N. Longitude 118° 10' W. 10 miles north of town of Davenport on Highway 25 in Lincoln County.
- PI 619504. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-993; W6 20942. Collected in Washington, United States. Latitude 46° 46' N. Longitude 118° 2' W. 0.5 miles east of Highway 26 bridge over Palouse River in Whitman County.
- PI 619505. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-986; W6 20935. Collected in Washington, United States. Latitude 47° 36' N. Longitude 119° 23' W. 20 miles north of Soap Lake on Highway 17 in Grant County.
- PI 619506. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-991; W6 20940. Collected in Washington, United States. Latitude 46° 46' N. Longitude 118° 20' W. 1.5 miles west of town of Washtucna on Highway 26 in Adams County.
- PI 619507. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-999; W6 20948. Collected in Washington, United States. Latitude 46° 14' N. Longitude 120° 25' W. 13 miles south of town of Toppenish on Highway 97 in Yakima County.
- PI 619508. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-998; W6 20947. Collected in Washington, United States. Latitude 46° 29' N. Longitude 119° 1' W. 16 miles south of town of Connell on Highway 395 in Franklin County.
- PI 619509. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-972; W6 20921. Collected in Washington, United States. Latitude 47° 2' N. Longitude 117° 30' W. Between towns of Steptoe and St. John on Highway 23 in Whitman County.
- PI 619510. *Leymus cinereus*** (Scribn. & Merr.) A. Love
Wild. T-976; W6 20925. Collected in Washington, United States. Latitude 47° 24' N. Longitude 118° 10' W. 14 miles northwest of town of Sprague in Lincoln County.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 1994.

PI 619511. *Poa* sp.

Wild. WJK94-T12; W6 16221. Collected 05/28/1994 in Turkey. Latitude 38° 38' N. Longitude 34° 48' E. Elevation 1300 m. Around caves at Uchisar in Nevisehir Province.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619512. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-1006; W6 20954. Collected in Oregon, United States. Latitude 45° 27' N. Longitude 117° 21' W. 4 miles west of town of Enterprise on Highway 3 in Wallowa County.

PI 619513. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-1009; W6 20956. Collected in Oregon, United States. Latitude 45° 2' N. Longitude 117° 39' W. 2 miles north of Medical Springs on Highway 203.

The following were collected by N. Jacobsen. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619514. *Kengyilia stenachyra* (Keng) J. L. Yang et al.

Wild. H9146; W6 22128. Collected 08/17/1990 in Gansu, China. Latitude 35° 18' N. Longitude 102° 30' E. Elevation 3000 m. water reservoir at Xiahe.

Unknown source. Received 11/20/1999.

PI 619515. *Kengyilia rigidula* (Keng) J. L. Yang et al.

Wild. H9159A; W6 22132.

Unknown source. Received 11/20/1999.

PI 619516. *Elymus nutans* Griseb.

Wild. H8916; W6 22108.

Unknown source. Received 11/20/1999.

PI 619517. *Kengyilia rigidula* (Keng) J. L. Yang et al.

Wild. H9159B; W6 22133.

The following were collected by R. von Bothmer. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619518. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev Wild. H7343; W6 22071. Collected 08/21/1986 in Sichuan, China. Latitude 33° 14' N. Longitude 104° 6' E. Elevation 2100 m. Nanping co, Yu Wa village, NW Nanping, edge of field, along stream. Lat/lon accurate to Nanping.

The following were collected by C. Baden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619519. *Elymus nutans* Griseb. Wild. H8772; W6 22105. Collected 08/26/1989 in Xinjiang, China. Latitude 47° 43' N. Longitude 86° 53' E. Elevation 450 m. Burqin co, just outside Burqin near Ertix He river, river bank w. P.

The following were collected by R. von Bothmer; Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619520. *Elymus nutans* Griseb. Wild. H8061; W6 22084. Collected 08/31/1988 in Sichuan, China. Latitude 32° 0' N. Longitude 102° 40' E. Elevation 3300 m. Barkam co, Shuajingsi, km stone 749. Ploidy: 6x.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619521. *Elymus nutans* Griseb. Wild. H8930; W6 22114. Collected 1989 in Sichuan, China. Latitude 31° 49' 48" N. Longitude 100° 30' 36" E. Elevation 3740 m. Lu Huo co., 47 km from Lu Huo to Seda co.

PI 619522. *Elymus nutans* Griseb. Wild. H8985; W6 22124. Collected 1989 in Xizang, China. Elevation 4100 m. Gongjue co., Xiang bei qu.

PI 619523. *Elymus strictus* (Keng) A. Love Wild. H8982; W6 22123. Collected 1989 in Xizang, China. Elevation 3400 m. Changdu co., near Changdu bridge, west river bank.

The following were collected by N. Jacobsen. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619524. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev
Wild. H9218; W6 22134. Collected 08/30/1990 in Xinjiang, China.
Elevation 1750 m. Bagdas, E Hami, apricot plantation.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619525. *Elymus nutans* Griseb.
Wild. H9015; W6 22126. Collected 1989 in Xizang, China. Elevation 3100 m. Tianxiu co., Chuan-Tibet road, 28th Daoban.

The following were collected by R. von Bothmer. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619526. *Elymus nutans* Griseb.
Wild. H8370; W6 22101. Collected 09/21/1988 in Xizang, China. Latitude 29° 57' 36" N. Longitude 93° 5' 24" E. Elevation 3600 m. 27 km W Gongbogyamda.

PI 619527. *Elymus nutans* Griseb.
Wild. H8275; W6 22098. Collected 09/15/1988 in Xizang, China. Latitude 29° 39' N. Longitude 91° 6' E. Elevation 4460 m. 112 km from Lhasa, Gangbala Mtn., S side.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619528. *Elymus antiquus* (Nevski) Tzvelev
Wild. H8928; W6 22113. Collected 1989 in Sichuan, China. Latitude 31° 25' 48" N. Longitude 100° 24' E. Elevation 3190 m. Lu Huo co., Chuan-chang road, 20 km W of Lu Huo.

PI 619529. *Elymus nutans* Griseb.
Wild. H8969; W6 22119. Collected 1989 in Xizang, China. Elevation 3400 m. Jiangda co., 72 km from Dege to Jiangda, Ailalashan mtn.

The following were collected by R. von Bothmer; Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619530. *Elymus nutans* Griseb.
Wild. H8232; W6 22096. Collected 09/12/1988 in Xizang, China. Elevation 4020 m. 78 km NW Lhasa, km stone 1853.

PI 619531. *Elymus nutans* Griseb.
Wild. H8218; W6 22095. Collected 09/12/1988 in Xizang, China. Latitude

29° 56' N. Longitude 90° 47' E. Elevation 3700 m. 44 km NW Lhasa towards Yangbajain, km stone 1890.

PI 619532. *Elymus nutans* Griseb.

Wild. H8243; W6 22097. Collected 09/12/1988 in Xizang, China. Elevation 4150 m. Yangbajain.

PI 619533. *Elymus nutans* Griseb.

Wild. H8144; W6 22090. Collected 09/09/1988 in Xizang, China. Latitude 29° 14' N. Longitude 91° 48' E. Elevation 3470 m. Nedong (=Zedong), at Zedong Hotel.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619534. *Elymus pseudonutans* A. Love

Wild. H8977; W6 22121. Collected 1989 in Xizang, China. Elevation 4100 m. Gongjue co., Xiang bei qu.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619535. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-1007; W6 20955. Collected in Oregon, United States. Latitude 45° 17' N. Longitude 118° 2' W. 0.5 miles off I-84 on Highway 203 towards Union in Union County.

PI 619536. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-1001; W6 20950. Collected in Oregon, United States. Latitude 45° 57' N. Longitude 119° 2' W. 4.5 miles southwest of Oregon/Washington border on Highway 730 in Umatilla County.

PI 619537. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-1005; W6 20953. Collected in Oregon, United States. Latitude 45° 30' N. Longitude 117° 17' W. 5 miles north of town of Enterprise on Highway 3 in Wallowa County.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619538. *Agrostis gigantea* Roth

Wild. X97-060; W6 20241. Collected 08/1997 in Xinjiang, China. Latitude 42° 59' 58" N. Longitude 81° 6' 39" E. Elevation 1650 m. 10 km south of Zhaosu County, Xinjiang. Meadow on valley floor. Silt loam soil. Grazed very lightly. Cut for hay. Slope is 1% with north aspect.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 619539. *Phleum alpinum* L.

Wild. VIR D140B; W6 17785. Collected 08/30/1995 in Russian Federation. Latitude 43° 56' N. Longitude 40° 14' 6" E. Elevation 1820 m. Maykop. 140 km SE of Goozeripl. Previously grazed, now deferred. Slope 0-5% to 6-10%, aspect W. Soil loam with gravel, pH 3.9-4.2, black schists, metamorphic crystal rock in layers. Site moist, lower slope. Vegetation closed, evergreen tall grass. Meadow, mostly grasses. Surrounding vegetation open deciduous forest with closed lower layers. Dominant tree species *Betula* sp., *Abies* sp., *Acer* sp., *Fagus* sp. Dominant shrub species *Laurocerasus* sp., *Rhododendron* sp. Dominant herb/grass species mainly grass meadow, *Calamagrostis* sp., *Agrostis* sp. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619540. *Poa attenuata* Trin.

Wild. 96N-332; W6 19807. Collected 09/1996 in Mongolia. Latitude 49° 27' 28" N. Longitude 90° 6' 5" E. Elevation 2248 m. Bayan-Olgii Aimag, 23 km west from Achit Nuur and 20 km southwest of Nogoonnuur Steep rocky canyon with the road in the bottom. 15% to 20% east slope. Sides of the canyon are very steep more than 50% and very rocky. Soils are gravel overlying a light tan soil. Drought tolerant turf. DOMINANT VEG: *Poa altaica*, *Koeleria gracilis*, *Agropyron cristatum*, *Artemisia pectinata* ECOLOGICAL ZONE: Mountain steppe.

PI 619541. *Agropyron cristatum* (L.) Gaertn.

Wild. 96N-237; W6 19727. Collected 08/1996 in Mongolia. Latitude 49° 13' 37" N. Longitude 94° 55' 52" E. Elevation 1878 m. 7 km southeast of Tsetserleg. 2% to 3% slope. On a very rocky, stony exposed hillside site with southwest aspect. Soil is gravelly. DOMINANT VEG: *Festuca lenensis*, *Stipa capillata*, *Agropyron cristatum*, *Poa attenuata*, *Heteropappus hispidus*, *Artemisia commutata* ECOLOGICAL ZONE: Steppe.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619542. *Agrostis gigantea* Roth

Wild. X97-088; W6 20258. Collected 08/1997 in Xinjiang, China. Latitude 43° 2' 30" N. Longitude 80° 58' 58" E. Elevation 1560 m. 20 km west of Zhaosu County, Xinjiang. Ungrazed meadow, will be cut for hay. Silt loam soil, low area surrounded by hills that would catch snow and spring runoff. No slope.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619543. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-985; W6 20934. Collected in Washington, United States. Latitude 47° 29' N. Longitude 119° 31' W. 8 miles north of Highway 28 and Highway 17 junction (opposite Lenore Lake) in Grant County.

PI 619544. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-992; W6 20941. Collected in Washington, United States. Latitude 46° 44' N. Longitude 118° 16' W. 2 miles east of town of Washtucna on Highway 26 in Adams County.

PI 619545. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-995; W6 20944. Collected in Washington, United States. Latitude 46° 32' N. Longitude 117° 50' W. 0.5 m west of town of Dodge on Highway 12 in Garfield County.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619546. *Koeleria macrantha* (Ledeb.) Schult.

Wild. 96N-333; W6 19808. Collected 09/1996 in Mongolia. Latitude 49° 27' 28" N. Longitude 90° 6' 5" E. Elevation 2248 m. Bayan-Olgii Aimag, 23 km west from Achit Nuur and 20 km southwest of Nogoonuur Steep rocky canyon with the road in the bottom. 15% to 20% east slope. Sides of the canyon are very steep more than 50% and very rocky. Soils are gravel overlying a light tan soil. DOMINANT VEG: *Poa altaica*, *Koeleria gracilis*, *Agropyron cristatum*, *Artemisia pectinata* ECOLOGICAL ZONE: Mountain steppe.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619547. *Agropyron cristatum* (L.) Gaertn.

Wild. X97-076; W6 20249. Collected 08/1997 in Xinjiang, China. Latitude 43° 2' 15" N. Longitude 81° 26' 12" E. Elevation 1380 m. 5 km

east of Akedala Farm, 40 km east of Zhaosu County, Xinjiang. Dry meadow lightly grazed. Very dry, clay soil. Slope is 1% with southwest aspect.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619548. *Leymus cinereus* (Scribn. & Merr.) A. Love
Wild. T-1000; W6 20949. Collected in Washington, United States. Latitude 46° 5' N. Longitude 120° 33' W. 27 miles southwest of town of Toppenish on Highway 97 in Yakima County.

PI 619549. *Leymus cinereus* (Scribn. & Merr.) A. Love
Wild. T-996; W6 20945. Collected in Washington, United States. Latitude 46° 31' N. Longitude 118° W. 1 miles west of junction of Highway 12 and Highway 261 on Highway 261 in Columbia County.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619550. *Phleum pratense* L.
Cultivated. X97-048; W6 20232. Collected 08/1997 in Xinjiang, China. Latitude 43° 6' 33" N. Longitude 80° 52' 1" E. Elevation 1950 m. 12 km north of Farm No. 77, 38 km west of Zhaosu County, Xinjiang. Seeded hay field, established in 1989. Silt loam soil. Silt loam soil with a sandy ridge. Slope is 2% with south aspect.

PI 619551. *Agrostis gigantea* Roth
Wild. X97-005; W6 20210. Collected 08/1997 in Xinjiang, China. Latitude 43° 54' 1" N. Longitude 80° 58' 27" E. Elevation 540 m. 10 km west of No. 68 Farm, 30 km southwest of Yili City, Xinjiang. Alluvial flood plain, sand and coarse stone with no slope. Near bank of Yili River.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619552. *Elymus multisetus* (J. G. Sm.) Burt Davy
Wild. T-1207; W6 20971. Collected in Idaho, United States. Latitude 43° 19' N. Longitude 115° 26' W. Highway 20 at Anderson Reservoir turnoff in Elmore County.

PI 619553. *Elymus elymoides* (Raf.) Swezey **subsp. *elymoides***
Wild. T-1171; W6 20986. Collected in Idaho, United States. Latitude 42° 58' N. Longitude 114° 18' W. 7 miles northeast of Shoshone on Highway 93 in Lincoln County.

The following were donated by Welsh Plant Breeding Station, Genetic Resources Unit, Aberystwyth, Wales, United Kingdom. Received 09/03/1991.

PI 619554. *Lolium perenne* L.

Wild. ABY-BA 10189.81; W6 9366. Collected in Wales, United Kingdom. Latitude 52° 1' N. Longitude 4° 44' W. Eglwysrwrw.

The following were donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619555. *Elymus elymoides* (Raf.) Swezey subsp. *elymoides*

Wild. 9005549; Acc:1127; W6 20983. Collected in Montana, United States. Latitude 44° 59' N. Longitude 108° 40' W. Elevation 1368 m. 5 miles south of Warren in Carbon County. T9S R25E Section 35. Received as: *Elymus elymoides* var. *hystrix*.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619556. *Agropyron cristatum* (L.) Gaertn.

Wild. 96N-335; W6 19810. Collected 09/1996 in Mongolia. Latitude 49° 27' 28" N. Longitude 90° 6' 5" E. Elevation 2248 m. Bayan-Olgii Aimag, 23 km west from Achit Nuur and 20 km southwest of Nogoonnuur. Steep rocky canyon with the road in the bottom. 15% to 20% east slope. Sides of the canyon are very steep more than 50% and very rocky. Soils are gravel overlying a light tan soil. DOMINANT VEG: *Poa altaica*, *Koeleria gracilis*, *Agropyron cristatum*, *Artemisia pectinata* ECOLOGICAL ZONE: Mountain steppe.

The following were collected by Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 619557. *Phleum phleoides* (L.) H. Karst.

Wild. VIR D141; W6 17786. Collected 08/31/1995 in Russian Federation. Latitude 43° 55' 1" N. Longitude 40° 15' 39" E. Elevation 2000 m. pH 3.9-4.0. Population distribution patchy, abundance occasional. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A.

Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619558. *Agrostis gigantea* Roth

Wild. X97-014; W6 20212. Collected 08/1997 in Xinjiang, China. Latitude 43° 37' 7" N. Longitude 81° 49' 50" E. Elevation 720 m. 5 km east of Yemadu Bridge, Xinjiang. Hillside going down into a drainage area and near edge of drainage area. Sandy loam soil. Slope is 30% going down into drainage area.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619559. *Agropyron cristatum* (L.) Gaertn.

Wild. 96N-233; W6 19724. Collected 08/1996 in Mongolia. Latitude 48° 56' 2" N. Longitude 95° 33' 18" E. Elevation 1694 m. Wide valley floor that has a uniform southwest slope of less than 1%. Soils are sandy, gravelly. Changing from forest steppe to dry steppe. DOMINANT VEG: *Cleistogenes squarrosa*, *Stipa capillata*, *Artemisia adamsii*, *Agropyron cristatum*, *Caragana stenophylla*, *Potentilla acaulis*
ECOLOGICAL ZONE: Steppe.

PI 619560. *Poa attenuata* Trin.

Wild. 96N-342; W6 19817. Collected 09/1996 in Mongolia. Latitude 48° 50' 52" N. Longitude 89° 20' 48" E. Elevation 2648 m. Bayan-Olgii Aimag, 33 km northwest of Buyant and 23 km southwest of Uujin hillside about 1 km below summit. 5% to 15% southwest slope. Collection site is and open draw. Rocky/gravelly soils with several major rock outcrops on the edge of the collection area. DOMINANT VEG: *Artemisia frigida*, *Festuca lenensis*, *Poa attenuata*, *Potentilla multifida*, *Artemisia dracanulis*. ECOLOGICAL ZONE: Mountain steppe.

The following were donated by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619561. *Elymus elymoides* (Raf.) Swezey *subsp. elymoides*

Wild. 9019218; Acc:1128; W6 20984. Collected in Wyoming, United States. Latitude 42° 50' N. Longitude 110° 25' W. Elevation 2432 m. 25 miles northwest of Big Piney. T33N R114W Section 25. Received as: *Elymus elymoides* var. *hystrix*.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619562. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-989; W6 20938. Collected in Washington, United States. Latitude 47° 32' N. Longitude 118° 47' W. Highway 21 at mile marker 48 in Lincoln County.

The following were collected by T.A. Campbell, USDA-ARS, Germplasm Quality and Enhancement Lab, Building 001, Room 339, Beltsville, Maryland 20705, United States; John D. Berdahl, USDA-ARS, Northern Great Plains Research Lab., P.O. Box 459, Mandan, North Dakota 58554, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Larry K. Holzworth, USDA-NRCS State Office, Federal Bldg., Room 443, 10 E. Babcock, Bozeman, Montana 59715-4704, United States. Received 12/1997.

PI 619563. *Poa pratensis* subsp. *angustifolia* (L.) Dumort.

Wild. X97-058; W6 20239. Collected 08/1997 in Xinjiang, China. Latitude 43° 1' 26" N. Longitude 80° 56' 27" E. Elevation 1590 m. 1 km north of Farm No. 77, 38 km west of Zhaosu County, Xinjiang. In Populus tree rows (10-12 m tall) along main road going through Farm No. 77. Disturbed silt loam/clay loam soil with some stones; irrigated. No slope.

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619564. *Elymus multisetus* (J. G. Sm.) Burt Davy

Wild. T-1210; W6 20973. Collected in Idaho, United States. Latitude 43° 21' 30" N. Longitude 115° 49' 30" W. Junction of Ditto Creek Road and Foothill Road in Elmore County.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 619565. *Psathyrostachys juncea* (Fisch.) Nevski

Wild. 96N-238; W6 19728. Collected 08/1996 in Mongolia. Latitude 49° 13' 37" N. Longitude 94° 55' 52" E. Elevation 1878 m. 7 km southeast of Tsetserleg. 2% to 3% slope. On a very rocky, stony exposed hillside site with southwest aspect. Soil is gravelly. DOMINANT VEG: *Festuca lenensis*, *Stipa capillata*, *Agropyron cristatum*, *Poa attenuata*, *Heteropappus hispidus*, *Artemisia commutata* ECOLOGICAL ZONE: Steppe.

PI 619566. *Leymus chinensis* (Trin.) Tzvelev

Wild. 96S-25; W6 19570. Collected 08/1996 in Mongolia. Latitude 44° 48' 47" N. Longitude 97° 20' 58" E. Elevation 1320 m. Gobi-Altai Aimag, Zakhuin Gobi about 100 km from farm experimental area near the headquarters of the Gobi A Ecological Reserve Area. 5% south slope. Small oasis. Soils are sandy, coarse, gravelly alluvial soils. Surface armor of rocks and gravel on the desert surrounding the oasis while wet soils appear to be mostly coarse sandy soil high in salts. DOMINANT VEG: Wet areas: dominated by *Phragmites communis*; desert areas dominated by shrubs including *Tamarix* and *Reaumuria*. Associated vegetation includes *Haloxylon*, *Achnatherum splendens*.

The following were collected by Walter Graves, University of California Cooperative Ext. Service (retired), 7665 Volclay Drive, San Diego, California 92119-1219, United States; Alexander Afonin, Vavilov Institute of Plant Industry, 42 Bolshaya Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation; Melvin Rumbaugh, R.R. 3, Box 125, Humboldt, Nebraska 68376, United States; Nicolay Portinier, Kamorov Institute of Botany, St. Petersburg, Leningrad, Russian Federation; Jay Hart, 20 Bush Lane, Ithaca, New York 14850, United States; Nicolay Khitrov, Dokvchaev Soil Institute, Pygevsky, per., 7., Moscow, Moscow 109017, Russian Federation. Received 01/1996.

PI 619567. *Phleum alpinum* L.

Wild. 0014; VIR 179; US 14; W6 17823. Collected 08/31/1995 in Russian Federation. Latitude 44° 3' 30" N. Longitude 40° 1' 14" E. Elevation 1800 m. Thirty two kilometers southwest of Dakhovskaya in the vicinity of Maykop. Previously logged/cleared, now grazed. Slope 6-10%, aspect S. Light open. Soil loam to clay, limestone derived, pH 4.4-4.7. Moist to seasonally dry, upper-mid slope. Vegetation closed, evergreen broad-leafed herb vegetation. Surrounding vegetation evergreen open forest with closed lower layers. Dominant tree species Birch, *Betula* sp., *Pinus* sp., *Acer* sp., *Fagus* sp. Dominant shrub species *Juniperus* sp. Dominant herb/grass species *Achemilla* sp., *Plantago* sp., *Festuca* v., *D. escampsia* c., *Phleum* a. Population distribution patchy, abundance frequent. Growth habit erect. Extensive regional climate data available in spreadsheet format or image maps in raster format suitable for GIS analysis. Contact Dr. Stephanie L. Greene (sgreene@ars-grin.gov).

The following were collected by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 09/1998.

PI 619568. *Leymus cinereus* (Scribn. & Merr.) A. Love

Wild. T-1002; W6 20951. Collected in Washington, United States. Latitude 46° 3' N. Longitude 118° 36' W. West edge of Lowden on Highway 12 in Walla Walla County.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619569. *Elymus nutans* Griseb.

Wild. H8945; W6 22117. Collected 1989 in Sichuan, China. Elevation 4110 m. Dege co., 28 km from Manigange to Dege, Que-er-shan mtn.

PI 619570. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. H8917; W6 22109. Collected 1989 in Sichuan, China. Elevation 3500 m. Qian Ling co., Zeduo mtn. to Qianling.

The following were collected by R. von Bothmer. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619571. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev
Wild. H7320; W6 22070. Collected 08/21/1986 in Sichuan, China. Elevation
2480 m. Nanping co, in Da Lun, 90 km NW Nanping, edge of field.

The following were collected by Bo Lu, Shandong Provincial Department of
Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS,
Utah State University, Forage & Range Research Laboratory, Logan, Utah
84322-6300, United States. Received 11/20/1999.

PI 619572. *Elymus dahuricus* subsp. *excelsus* (Turcz. ex Griseb.) Tzvelev
Wild. H8937; W6 22116. Collected 1989 in Sichuan, China. Latitude
31° 10' N. Longitude 100° 53' E. Elevation 3520 m. Lu Huo co.,
33 km from Lu Huo to Ganzi co.

PI 619573. *Elymus strictus* (Keng) A. Love
Wild. H8936; W6 22115. Collected 1989 in Sichuan, China. Latitude
31° 10' N. Longitude 100° 53' E. Elevation 3520 m. Lu Huo co.,
33 km from Lu Huo to Ganzi co.

The following were collected by Bjoern Salomon, Swedish University of
Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp,
Malmöhus S-23053, Sweden; C. Baden. Donated by Kevin B. Jensen, USDA, ARS,
Utah State University, Forage & Range Research Laboratory, Logan, Utah
84322-6300, United States. Received 11/20/1999.

PI 619574. *Elymus nutans* Griseb.
Wild. H7818; W6 22080. Collected 09/07/1987 in Xinjiang, China. Latitude
36° 31' 12" N. Longitude 76° 59' 24" E. Elevation 3800 m. E
slopes of Karakorum, 4 km W Mazar, S facing ravine. Ploidy: 6x.

The following were collected by C. Baden. Donated by Kevin B. Jensen, USDA,
ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah
84322-6300, United States. Received 11/20/1999.

PI 619575. *Elymus nutans* Griseb.
Wild. H8747; W6 22104. Collected 08/23/1989 in Xinjiang, China. Latitude
47° 53' N. Longitude 86° 12' E. Elevation 1200 m. Habahe co,
just outside Teleki village, along river.

The following were collected by Bjoern Salomon, Swedish University of
Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp,
Malmöhus S-23053, Sweden; C. Baden. Donated by Kevin B. Jensen, USDA, ARS,
Utah State University, Forage & Range Research Laboratory, Logan, Utah
84322-6300, United States. Received 11/20/1999.

PI 619576. *Elymus nutans* Griseb.
Wild. H7846; W6 22081. Collected 09/08/1987 in Xinjiang, China. Latitude
37° 5' N. Longitude 76° 55' E. Elevation 2150 m. Lower E slopes
of Karakorum, Buzar, N Akmeqit, along a stream. Lat/lon accurate to
Akmeqit. Ploidy: 6x.

The following were collected by N. Jacobsen. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619577. *Elymus sibiricus* L.

Wild. H9262; W6 22135. Collected 09/12/1990 in Xinjiang, China. Latitude 43° 4' 12" N. Longitude 87° 35' 24" E. ca 80 km S Urumqi, Lan Tai Zei, mountain slope by stream, pasture.

The following were collected by Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden; C. Baden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619578. *Elymus nutans* Griseb.

Wild. H7811; W6 22079. Collected 09/06/1987 in Xinjiang, China. Latitude 36° 50' 24" N. Longitude 76° 57' 36" E. Elevation 2800 m. E slopes of Karakorum, Kudi, between Akmeqit & Mazar, among trees. Ploidy: 6x.

The following were collected by C. Baden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619579. *Elymus sibiricus* L.

Wild. H8800; W6 22106. Collected 08/31/1989 in Xinjiang, China. Latitude 43° 48' N. Longitude 87° 35' E. Elevation 1850 m. Urumqi co, lower slopes Nan Shan, N part Tian Shan, SW Urumqi, gras.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China; Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619580. *Elymus praeruptus* Tzvelev

Wild. H10285; W6 22146. Collected 09/07/1991 in Russian Federation. Latitude 39° 33' N. Longitude 68° 33' E. Elevation 3400 m. Turkestan mtns., M 34, Sachristan pass. Ploidy: 4x.

PI 619581. *Thinopyrum intermedium* (Host) Barkworth & D. R. Dewey

Wild. H10247; W6 22145. Collected 09/02/1991 in Russian Federation. Gissar mtns., SW of Iskander-kul, Mura Valley.

PI 619582. *Elymus dahuricus* Turcz. ex Griseb.

Wild. H10237; W6 22143. Collected 09/01/1991 in Russian Federation. Elevation 2400 m. Gissar mtns., Iskander-kul, SW side of the lake.

PI 619583. *Elymus sibiricus* L.

Wild. H10238; W6 22144. Collected 09/01/1991 in Russian Federation. Elevation 2400 m. Gissar mtns., Iskander-kul, SW side of the lake. Ploidy: 4x.

PI 619584. *Elymus dahuricus* Turcz. ex Griseb.

Wild. H10226; W6 22142. Collected 08/30/1991 in Russian Federation. Latitude 39° 1' 1" N. Longitude 58° 52' E. Elevation 2150 m. Gissar mtns., Jagnob river, 2 km E of Anzob village.

The following were collected by R. von Bothmer. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619585. *Elymus dahuricus* Turcz. ex Griseb. *subsp. dahuricus*

Wild. H7066; W6 22068. Collected 08/02/1986 in Qinghai, China. Latitude 36° 10' N. Longitude 98° 16' E. Elevation 2700 m. Dulan co, Nomhon farm. Ploidy: 6x.

PI 619586. *Elymus nutans* Griseb.

Wild. H7053; W6 22067. Collected 08/02/1986 in Qinghai, China. Latitude 35° 49' N. Longitude 97° 37' E. Elevation 2950 m. Dulan co, 75 km SW Dulan, water canals.

PI 619587. *Elymus atratus* (Nevski) Hand.-Mazz.

Wild. H7045; W6 22066. Collected 08/01/1986 in Qinghai, China. Latitude 36° 44' N. Longitude 99° 46' E. Elevation 3250 m. Gonghe co, 1 km W Dashuiqiao bridge at Heimahe, dry riverbed. Ploidy: 6x.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619588. *Elymus dahuricus subsp. excelsus* (Turcz. ex Griseb.) Tzvelev

Wild. H8972; W6 22120. Collected 1989 in Xizang, China. Elevation 3600 m. Jiangda co., 81 km from Dege to Jiangda, Ailalashan mtn.

The following were collected by R. von Bothmer; Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmohus S-23053, Sweden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619589. *Elymus nutans* Griseb.

Wild. H8155; W6 22091. Collected 09/10/1988 in Xizang, China. Latitude 29° 16' N. Longitude 91° 46' E. Elevation 3800 m. 34 km SE Nedong, Chulewa, km stone 159.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619590. *Elymus nutans* Griseb.

Wild. H9005; W6 22125. Collected 1989 in Xizang, China. Elevation 3740 m. Changdu co., Taniantawong shan mtn.

The following were collected by R. von Bothmer; Bjoern Salomon, Swedish University of Agricultural Sciences, Department of Crop Science, P.O. Box 44, Alnarp, Malmö S-23053, Sweden. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619591. *Elymus dahuricus* Turcz. ex Griseb.

Wild. H8217; W6 22094. Collected 09/11/1988 in Xizang, China. Latitude 29° 39' N. Longitude 91° 6' E. Elevation 3600 m. Lhasa, below the Potala temple.

The following were collected by Bo Lu, Shandong Provincial Department of Agriculture, Jinan, Shandong, China. Donated by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States. Received 11/20/1999.

PI 619592. *Elymus nutans* Griseb.

Wild. H8979; W6 22122. Collected 1989 in Xizang, China. Elevation 4200 m. Changdu co., near Touba, Kaqilashan mtn.

The following were developed by Syngenta Seeds, Inc., United States. Received 10/05/2001.

PI 619593 PVPO. *Citrullus lanatus* (Thunb.) Matsum. & Nakai

Cultivar. "90-4194". PVP 200100260.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 10/05/2001.

PI 619594 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH5DR". PVP 200100261.

PI 619595 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH6JM". PVP 200100262.

PI 619596 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH76B". PVP 200100263.

PI 619597 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH48F". PVP 200100264.

The following were developed by Seed Research of Oregon, Inc., Corvallis, Oregon, United States. Received 10/05/2001.

PI 619598 PVPO. *Festuca arundinacea* Schreb.

Cultivar. "SR 8600". PVP 200100265.

The following were developed by Frederick B. Ledebauer, United States. Received 10/05/2001.

PI 619599 PVPO. *Poa pratensis* L.
Cultivar. "BLUE KNIGHT". PVP 200100267.

The following were developed by The J.C. Robinson Seed Company, Waterloo, Nebraska, United States. Received 10/05/2001.

PI 619600 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "CI9805". PVP 200100269.

PI 619601 PVPO. *Zea mays* L. subsp. *mays*
Cultivar. "W60028". PVP 200100270.

The following were developed by Ted P. Wallace, Mississippi State University, Mississippi Agric. & Forestry Exp. Stn., P.O. Box 9555, Mississippi State, Mississippi 39762, United States; Mississippi Agr. Exp. Sta., Delta Branch Exp. Sta., Stoneville, Mississippi, United States; B.W. White, Mississippi State University, Mississippi Agric. & Forestry Exp. Sta. Variety Evaluations, P.O. Box 9811, Mississippi State, Mississippi 39762, United States; J.E. Hollowell, Pioneer Hi-Bred International, Inc., Crop Genetics Research & Development, West Memphis, Arkansas 72303, United States. Received 10/05/2001.

PI 619602. *Gossypium hirsutum* L.
Cultivar. Pureline. "MISCOT 8839". PVP 200100271; CV-122. Pedigree - DES 119/Deltapine Acala 90. Early maturing, smooth leaf cultivar with high yield potential and excellent fiber properties adapted to the midsouth and southeastern regions. Open boll, picker-type cultivar. Glanded and possesses normal shaped leaves and bracts with sparse trichomes on the bottom leaf surface. Most leaf hairs present occur on mid-veins. Combines excellent yield with a highly desirable fiber length (UHM) and micronaire value.

The following were developed by Nunza B.V.. Received 10/05/2001.

PI 619603. *Lactuca sativa* L.
Cultivar. "COMINA". PVP 200100272.

PI 619604 PVPO. *Lactuca sativa* L.
Cultivar. "GREEN SUN". PVP 200100273.

PI 619605 PVPO. *Lactuca sativa* L.
Cultivar. "CALIENTE". PVP 200100274.

The following were developed by Syngenta Seeds, Inc., United States. Received 10/05/2001.

PI 619606 PVPO. *Gossypium hirsutum* L.
Cultivar. "N2108ss". PVP 200100275.

PI 619607 PVPO. *Gossypium hirsutum* L.
Cultivar. "N2387". PVP 200100276.

The following were developed by Advanta USA, Inc., United States. Received 10/05/2001.

PI 619608 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "HANNA". PVP 200100277. Pedigree - N93-2424/AC Domain. Hard red spring wheat.

The following were developed by Monsanto Company, 800 North Lindbergh Blvd., St. Louis, Missouri 63167, United States. Received 10/05/2001.

PI 619609 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "KNUDSON". PVP 200100278. Pedigree - Karl/Krona//N90-0669(Bergen/Hamer sib). Hard red spring wheat.

The following were developed by Western Plant Breeders, Inc., Phoenix, Arizona, United States. Received 10/05/2001.

PI 619610 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "CDC FALCON". PVP 200100279. Pedigree - Norstar*2/Vona//Abilene.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 10/05/2001.

PI 619611 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "25R78". PVP 200100280. Pedigree - Stella/2555 sib//3*2555/2510 sib/3/2571.

PI 619612 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "25R42". PVP 200100281. Pedigree - Sumai/WEF076B1//WEG0065/Siouxland/Auburn//2555 sib/3/2552.

PI 619613 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "25R23". PVP 200100282. Pedigree - Mexico 5/IN4946A4//MoW7718/3/Pio. line W558/GA80/MoW7358//S76//IN4946A4/MoW7470//Pio. line W521/3/2548/4/2510.

The following were developed by West-Gro Farms, Inc., United States. Received 10/05/2001.

PI 619614 PVPO. *Allium cepa* L.

Cultivar. "MAJIC EARLY YELLOW GRANO PRR". PVP 200100283.

The following were developed by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Xingliang Zhou, North Carolina State University, Dept. of Crop Science, Box 7629, Raleigh, North Carolina 27695-7629, United States; X. Cui, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; M.R. Villagarcia, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; A.S. Niewoehner,

North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; M.O. Fountain, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States. Donated by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States. Received 10/05/2001.

PI 619615. *Glycine max* (L.) Merr.

Cultivar. Pureline. "N6201"; NTCPR92-40. PVP 200100284; CV-446. Pedigree - Nakasennari x Young. Young was a widely grown variety in the southeastern U.S. in the 1980's. Nakasennari (PI 507079) is a Japanese variety. Released 05/17/2000. Potential use in the Japanese soyfoods export market. Large-seeded maturity group VI adapted to the South Atlantic Coast and Southeastern U.S. Approx. 3 days later in maturity than Brim and is adapted to similar latitudes (approx. 31 deg to 37 deg.). In ten North Carolina environments, produced 7% lower yield than Brim in wide (95 cm) row spacings when grown under full season conditions. In these same environments, the 100-seed weight averaged 23.1 g which was larger than Brim (14.0 g). In the 1995 USDA Coop. Uniform Soybean Yield Tests, the average seed protein and oil concentrations on a zero percent moisture basis were 423 and 207 g kg⁻¹ (429 and 202 g kg⁻¹ for Brim). Moderate lodging resistant and exhibits an average lodging score of 2.3, compared with Brim's score of 2.0 (a score of 1 indicates no lodging while 5 indicates a prostrate plant). Plant height averages 17 cm shorter than Young. Very resistant to pod dehiscence after maturation. Seed yellow and clear hila, purple flowers, gray pubescence, and determinate growth habit. Resistant to frog eye leaf spot (*Cercospora sojina*), bacterial pustule (*Xanthomonas campestris*) and most strains of soybean mosaic virus, but susceptible to root knot (*Meloidogyne*) species of nematode. In some environments, seed will exhibit a light to dark brown mottling which can be detrimental to acceptance in the soyfoods market. The basis for this mottling is unknown at this time. The lower yield potential, compared to commodity-type varieties, limits its use to niche markets.

The following were developed by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Joe W. Burton, USDA-ARS, Plant Science Research Building, 3127 Ligon Street, Raleigh, North Carolina 27607, United States; Xingliang Zhou, North Carolina State University, Dept. of Crop Science, Box 7629, Raleigh, North Carolina 27695-7629, United States; X. Cui, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; M.R. Villagarcia, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; A.S. Niewoehner, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; M.O. Fountain, North Carolina State University, Dept. of Crop Science, Raleigh, North Carolina 27695-7631, United States; J.F. Wilder, North Carolina Soybean Producers Assoc., Raleigh, North Carolina 27609, United States. Donated by Tommy E. Carter, USDA-ARS, Soybean and Nitrogen Fixation Research, 3127 Ligon Street, Raleigh, North Carolina 27607, United States. Received 10/05/2001.

PI 619616. *Glycine max* (L.) Merr.

Cultivar. Pureline. "N7101"; NTCPR92-100. PVP 200100285; CV-447. Pedigree - Vance x Jizuka (PI 561386). Released 05/17/2000. Potential use in the Japanese soyfoods export market. Small-seeded maturity group

VII adapted to the South Atlantic Coast and Southeastern U.S. Similar to Cook and adapted to similar latitudes (approx. 31 deg. to 37 deg.). Produces 17% lower average yields compared to Cook when grown in wide (95 cm) row spacings under full-season conditions in nine different North Carolina environments. 100-seed weight averages 7.3 g, which is smaller than Cook (16.7 g) or Pearl (8.7 g). In regional USDA Coop. Uniform Soybean Yield Trials, the average seed protein and oil concentrations on a zero percent moisture basis were 471 and 178 g kg⁻¹ (428 and 201 g kg⁻¹ for Haskell). Plant height averages 7 cm shorter than Haskell. Lodging susceptible in North Carolina, exhibiting an average lodging score of 3.9 compared with Cook's average score of 3.2 over two locations (a score of 1 indicates no lodging while 5 indicates a prostrate plant). Moderately resistant to pod dehiscence after maturation, but can exhibit more than 20% pod dehiscence if harvest is delayed extensively. Seed yellow with shiny luster and clear hila, purple flowers, gray pubescence, determinate growth habit, and narrow leaves. Resistant to soybean mosaic virus, frog eye leaf spot (*Cercospora sojina*) and bacterial pustule (*Xanthomonas campestris*) but susceptible to root knot (*Meloidogyne*) species of nematode. Small seed size and lower yield potential compared to commodity-type varieties, limits its use to niche markets.

PI 619617. *Glycine max* (L.) Merr.

Cultivar. Pureline. "N7102"; NTCPR92-115. PVP 200100286; CV-448. Pedigree - Vance x Jizuka (PI 561386). Released 05/17/2000. Potential use in the Japanese soyfoods export market. Small-seeded maturity group VII adapted to the South Atlantic Coast and Southeastern U.S. Matures approx. 2 days earlier than Cook and is adapted to similar latitudes (approx. 31 deg. to 37 deg.). Produces 18% lower average yield compared to Cook when grown in wide (95 cm) row spacing under full-season conditions in nine different North Carolina environments. 100-seed weight averages 7.5 g which was smaller than Cook (16.7 g) or Pearl (8.7 g). In the regional USDA Coop. Uniform Soybean Yield Trials, the average seed protein and oil concentrations on a zero percent moisture basis were 474 and 181 g kg⁻¹ (428 and 201 g kg⁻¹ for Haskell). Plant height averages 20 cm shorter than Haskell. In North Carolina, lodging susceptible, exhibiting an average lodging score of 3.7 compared with Cook's average score of 3.1 over two locations (a score of 1 indicates no lodging while 5 indicates a prostrate plant). Resistant to pod dehiscence after maturation, even when harvest is delayed extensively. Seed yellow with shiny luster and clear hila, purple flowers, gray pubescence, determinate growth habit, and narrow leaves. Resistant to soybean mosaic virus, frog eye leaf spot (*Cercospora sojina*), and bacterial pustule (*Xanthomonas campestris*) but susceptible to root knot (*Meloidogyne*) species of nematode. Small seed size and lower yield potential compared to commodity-type varieties, limits use to niche markets.

The following were developed by Robert K. Bacon, University of Arkansas, Dept. of Crop, Soil, and Env. Science, 115 Plant Science Bldg., Fayetteville, Arkansas 72701, United States; John T. Kelly, University of Arkansas, Department of Crop, Soil & Environmental Sciences, 115 Plant Science, Fayetteville, Arkansas 72701, United States; C.E. Parsons, University of Arkansas, Dept. of Crop, Soil and Environmental Sciences, Lonoke, Arkansas

72086, United States. Donated by Robert K. Bacon, University of Arkansas, Dept. of Crop, Soil, and Env. Science, 115 Plant Science Bldg., Fayetteville, Arkansas 72701, United States. Received 09/19/2001.

PI 619618. Brassica napus L.

Breeding. AR91017; ARC91017-44E-5. GP-8. Pedigree - CXW03/Falcon. Winter canola (erucic<1%) with low glucosinolate content. Performs well in Arkansas and is broadly-adapted to the mid-south and mid-west regions. Blackleg resistance and high oil content.

The following were developed by Monsanto Company, 800 North Lindbergh Blvd., St. Louis, Missouri 63167, United States. Received 10/09/2001.

PI 619619 PVPO. Solanum tuberosum L.

Cultivar. "NL30-RBK". PVP 9800103.

The following were developed by Cygnet Potato Breeders, Inc., United States. Received 10/09/2001.

PI 619620 PVPO. Solanum tuberosum L.

Cultivar. "SAXON". PVP 9800225.

The following were developed by NORIKA Nordring-Kartoffelzucht-und, Vermehrungs-GmbH Grob Lusewitz, Germany. Received 10/09/2001.

PI 619621 PVPO. Solanum tuberosum L.

Cultivar. "MOLLI". PVP 9900119.

The following were developed by John Mara, Irish Potato Breeders Limited, 11 James's Terrace, Malahide, Dublin, Ireland. Received 10/09/2001.

PI 619622 PVPO. Solanum tuberosum L.

Cultivar. "CRISPIN". PVP 9900121.

PI 619623 PVPO. Solanum tuberosum L.

Cultivar. "AVALANCHE". PVP 9900123.

The following were developed by Richard Percy, USDA, ARS, Maricopa Agricultural Research Ctr., 37860 W. Smith-Enke Rd., Maricopa, Arizona 85239, United States. Received 09/24/2001.

PI 619624. Gossypium barbadense L.

Breeding. 93252; American Pima. GP-734. Pedigree - P62/Giza 70 (89591-9-2-1)//8006/P73 (8807-25-9-3). Extra-long staple American Pima line possessing superior fiber length and strength and has agronomically acceptable yield potential, maturity interval, and plant height. Adapted to the American Southwest and exhibits good levels of heat tolerance. Fiber averages 38.4 cN in strength (as measured on a stelometer) and 38.1 mm in length. Fiber length uniformity is 45.7% and micronaire is 4.25. In tests run across locations, the lint yield (1297 kg ha⁻¹) and plant height (1.26 m) did not differ significantly from the commercial cv. Pima S-7.

PI 619625. *Gossypium barbadense* L.

Breeding. 93260; American Pima. GP-735. Pedigree - P62/S.I. St. Vincent (89590-7-8-4)//P62/Giza 70 (89591-34-3-2). Extra-long staple American Pima line possessing superior fiber length and strength and has agronomically acceptable yield potential, maturity interval, and plant height. Adapted to American Southwest and exhibits good levels of heat tolerance, Fiber averages 35.0 cN in strength (as measured on a stelometer) and 38.3 mm in length. Fiber length uniformity is 42.8% and micronaire is 3.67. In tests run across locations, the lint yield was 81% that of the commercial cv. Pima S-7 (1289 kg ha⁻¹). Plant height (1.29 m) was equivalent to Pima S-7.

PI 619626. *Gossypium barbadense* L.

Breeding. 94217; American Pima. GP-736. Pedigree - P62/S.I. St. Vincent (89590-7-8-7)//P73 (8810-51-4-1). Extra-long staple American Pima line possessing superior fiber length and strength and has agronomically acceptable yield potential, maturity interval, and plant height. Adapted to American Southwest and exhibits good levels of heat tolerance. Fiber averages 34.9 cN in strength (as measured on a stelometer) and 38.3 mm in length. Fiber length uniformity is 45.6% and micronaire is 4.04. In tests run across locations, the lint yield (1292 kg ha⁻¹) and plant height (1.33 m) did not differ significantly from the commercial cv. Pima S-7.

PI 619627. *Gossypium barbadense* L.

Breeding. 94218; American Pima. GP-737. Pedigree - P75/88-314 (8915-13-7)//P72/P73 (8810-51-4-1). Extra-long staple American Pima line possessing superior fiber length and strength and has agronomically acceptable yield potential, maturity interval, and plant height. Adapted to the American Southwest and exhibits good levels of heat tolerance. Fiber averages 34.0 cN in strength (as measured on a stelometer) and 38.3 mm in length. Fiber length uniformity is 43.7% and micronaire is 3.99. In tests run across locations, the lint yield (1370 kg ha⁻¹) and plant height (1.30 m) did not differ significantly from the commercial cv. Pima S-7.

PI 619628. *Gossypium barbadense* L.

Breeding. 94220; American Pima. GP-738. Pedigree - P62/S.I. St. Vincent (89590-7-12-2)//P72/P73 (8810-51-4-1). Extra-long staple American Pima line possessing superior fiber length and strength and has agronomically acceptable yield potential, maturity interval, and plant height. Adapted to American Southwest and exhibits good levels of heat tolerance. Fiber averages 34.6 cN in strength (as measured on a stelometer) and 37.8 mm in length. Fiber length uniformity is 45.6% and micronaire is 3.78. In tests run across locations, the lint yield (1215 kg ha⁻¹) and plant height (1.34 m) did not differ significantly from the commercial cv. Pima S-7.

The following were developed by Thomas A. Jones, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; N. Jerry Chatterton, USDA-ARS, Forage & Range Research, Utah State University, Logan, Utah 84322-6300, United States; D.C. Nielson, USDA, ARS, Forage and Range Research, Utah State University, Logan, Utah 84322-6300, United States; A.J. Palazzo, U.S. Army Cold Regions Res. and Engineering Lab., 72 Lyme Road, Hanover, New Hampshire 03755-1290, United

States; Steve Larson, USDA, ARS, FRRL, Utah State University, Forage and Range Research Laboratory, Logan, Utah 84322-6300, United States; Stanford Young, Utah State University, Utah Crop Improvement Assoc., 4855 Old Main Hill, Logan, Utah 84322-4855, United States. Received 09/24/2001.

PI 619629. *Pseudoroegneria spicata* (Pursh) A. Love

Breeding. P-7. GP-7. Pedigree - T-17 (4x) WA; K-36 WA; DS 134 WA; T-9 ID; K-26 ID; K-68 WA; Goldar WA; Whitmar WA; T-7 ID; DS 120 WA; P-3 OR; T-22 OR; K-67 WA; T-655 UT; P-5 unknown origin; T-578 WA; K-48 WA; T-15 WA; PI 236670 BC; K-44 WA; K-43 WA; B101 MT; KJ-10 UT; T-36 NV; T-420 OR. Intended to provide genetic diversity within a single germplasm for semi-arid to mesic sites where bluebunch wheatgrass was an original component of the vegetation. Its broad genetic base was generated by open-pollinating 25 native-site populations from Washington, Oregon, Nevada, Utah, Idaho, Montana, and British Columbia. Twenty-four of the constituent populations are diploid ($2n=14$) and one is tetraploid ($2n=28$). Two of the populations are the cvs. Whitmar and Goldar. Breeder seed was bulked across the 25 populations in proportion to their seed yield. Therefore, some populations are better represented genetically than others. AFLP molecular markers have received significantly more genetic diversity within P-7 relative to Whitmar and Goldar.

The following were developed by C.M. Owsley, USDA, NRCS, Americus Plant Materials Center, Route 6, Box 417, Americus, Georgia 31709, United States; Jorge A. Mosjidis, Auburn University, Department of Agronomy & Soils, 202 Funchess Hall, Auburn, Alabama 36849-5412, United States; M.S. Kirkland, USDA, NRCS, Plant Materials Center, Americus, Georgia 31709, United States; K.M. Rogers, USDA, NRCS, Plant Materials Center, Auburn, Alabama, United States. Received 10/10/2001.

PI 619630. *Vicia villosa* Roth

Cultivar. "AU Merit". CV-9. Pedigree - Selection from PI 206493. Flowers earlier than common hairy fetch. Flowers (50% flowering between April 3rd and 10th, average of 3 locations, and 2 years), in the first half of April. Seeds have mostly a dull seed coat but about 5% have a shiny coat. Seedlings have more commonly reddish epicotyls but about 4% are green.

The following were developed by Glenn W. Burton, USDA, ARS, Forage & Turf Research, Georgia Coastal Plain Experiment Station, Tifton, Georgia 31793, United States; Kenneth H. Quesenberry, University of Florida, Department of Agronomy, Forage Breeding and Genetics, Gainesville, Florida 32611-0500, United States; Ann R. Blount, University of Florida, North Florida Research, & Education Center, Marianna, Florida 32446-7906, United States; Camilo Quarin, Universidad Nacional del Nordeste, Facultad de Ciencias Agrarias, Sargento Cabral 2131 C.C. 209, Corrientes, Argentina; E.J. Martinez, Universidad Nacional del Nordeste, Facultad de Ciencias Agrarias, c.c. 308, Argentina; M.H. Urbani, Universidad Nacional del Nordeste, Facultad de Ciencias agrarias, c.c. 308, Argentina; C.M. Hack, Universidad Nacional del Nordeste, Facultad de Ciencias Agrarias, c.c. 308, Argentina. Received 10/17/2001.

PI 619631. *Paspalum notatum* Flugge

Breeding. Q4188. GP-1. Pedigree - Q3664/Q3853. A sexual, tetraploid bahiagrass that has short, stout, ascending rhizomes, an erect growth

habit, red-purple basal leaf sheaths, purple anthers and purple stigmas. The line is maintained as a clone by rhizome propagation.

PI 619632. *Paspalum notatum* Flugge

Breeding. Q4205. GP-2. Pedigree - Selected, selfed progeny of Q3664 which originated from a cross between a sexual tetraploid plant (PF2) and a bahiagrass strain (WSB). A sexual tetraploid bahiagrass that has short rhizomes, an upright growth habit, red-purple leaf sheaths, white stigmas and is 100% sexual. The line is maintained as a clone by rhizome propagation.

The following were developed by Eduardo Espitia, INIFAP, CIFAP, Experimental Valle De Mexico, Apartado Postal No. 10, KM 38.5 CARR. Mex-VER/VIA Texcoco, Chapingo, Federal District, Mexico; Eduardo Villasenor, INIFAP, CIFAP, Experimental Valle De Mexico, Apartado Postal No. 10, KM 38.5 CARR. Mex-VER/VIA Texcoco, Chapingo, Federal District, Mexico; J. Huerta-Espino, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; E. Solis-Moya, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; A. Maria-Ramirez, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; D. Aguirre-Montoya, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; R.J. Pena-Bautista, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico. Received 09/25/2001.

PI 619633. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "NAHUATL F2000". CV-960. Pedigree - E7408/Pamir//Hork/PF73226/3/Ures T81/4/Opata M85/5/Opata M85/Bobwhite. Released 2000. Hard white spring variety with average plant height of 83 cm with 107 days to maturity. Kernels hard, midlong with a 1000 kernel weight of 36 g, test weight of 75 kg hL-1 and protein content of 135 g kg-1. Alveograph W value was 528 x10-4 J, Alveograph P/L 0.78, Mixograph mixing time 3.3 min. and Loaf volume 893 cm-3. Resistnace to leaf rust (*Puccinia triticina*) is based on Lr16, 34, and resistance to stripe rust (*P. striiformis*) is based on Yr18 plus at least three slow rusting genes.

The following were developed by Eduardo Espitia, INIFAP, CIFAP, Experimental Valle De Mexico, Apartado Postal No. 10, KM 38.5 CARR. Mex-VER/VIA Texcoco, Chapingo, Federal District, Mexico; H.E. Villasenor, CIRCE-INIFAP, Valle de Mexico Experimental Station, Apartado Postal #10, Chapingo, Federal District 56230, Mexico; J. Huerta-Espino, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; A. Maria-Ramirez, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; D. Aguirre-Montoya, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; R.J. Pena-Bautista, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; L. Alcalá-Osorio, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico. Received 09/25/2001.

PI 619634. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "TLAXCALA F2000". CV-961. Pedigree - Zacatecas VT74/Romoga F96. Released 2000. High yielding hard red spring variety

with average plant height of 83 cm with 110 days to maturity. Kernels hard, midlong with a 1000 kernel weight of 38g, test weight of 79 kg hL-1, and protein content of 125 g kg-1. Alveograph W value was 508 x10-4 J, Alveograph P/L 1.0, Mixograph mixing time 3.6 min. and Loaf volume 820 cm-3. Resistance to leaf rust (*Puccinia triticina*) is based on Lr34 and at least two slow rusting genes with additive effects and resistance to stripe rust (*P. striiformis*) is based on Yr18 plus two or three slow rusting genes.

The following were developed by Eduardo Espitia, INIFAP, CIFAP, Experimental Valle De Mexico, Apartado Postal No. 10, KM 38.5 CARR. Mex-VER/VIA Texcoco, Chapingo, Federal District, Mexico; H.E. Villasenor, CIRCE-INIFAP, Valle de Mexico Experimental Station, Apartado Postal #10, Chapingo, Federal District 56230, Mexico; J. Huerta-Espino, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; E. Solis-Moya, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; D. Aguirre-Montoya, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; R.J. Pena-Bautista, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; R. Gonzalez-Iniguez, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico; L. Osorio-Alcala, CIRCE-INIFAP, 'Valle de Mexico' Experimental Station, National Wheat Breeding Program, Chapingo, Mexico. Received 09/25/2001.

PI 619635. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "JUCHI F2000". CV-962. Pedigree - Kite/Bobwhite//Romoga F96. Released 2000. High yielding hard red spring variety with very good end-use quality. Average plant height of 85 cm with 113 days to maturity. Kernels hard, midlong with a 1000 kernel weight of 35 gt, test weight of 79 kg hL-1 and protein content of 127 g kg-1. Alveograph W value was 432 x10-4 J, Alveograph P/L 0.61, Mixograph mixing time 3.3 min. and Loaf volume 904 cm-3. Resistance to leaf rust (*Puccinia triticina*) is based on Lr1, 13, 17, 34 and at least two slow rusting genes with additive effects and resistance to stripe rust (*P. striiformis*) is based on Yr18 plus two or three slow rusting genes.

The following were developed by Texas Agricultural Experiment Station, Texas, United States. Received 10/22/2001.

PI 619636 PVPO. *Solanum tuberosum* L.

Cultivar. "Russet Norkotah 278". PVP 9900139.

PI 619637 PVPO. *Solanum tuberosum* L.

Cultivar. "Russet Norkotah 223". PVP 9900140.

The following were donated by N Kameswara Rao, ICRISAT, Genetic Resources and Enhancement Program, Patancheru, Andhra Pradesh 502 324, India. Received 10/03/2001.

PI 619638. *Sorghum bicolor* (L.) Moench subsp. *bicolor*

Landrace. IS 29634; Xiao hong gualiang. Collected in China.

The following were collected by V. Ramanatha Rao, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Resources Division, Patancheru, Andhra Pradesh, India; F.F. Mwenda, Tanzania. Donated by N Kameswara Rao, ICRISAT, Genetic Resources and Enhancement Program, Patancheru, Andhra Pradesh 502 324, India. Received 10/03/2001.

- PI 619639. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. RM 57; IS 29659. Collected 05/03/1985 in Tanzania.
- PI 619640. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. RM 62; IS 29660. Collected 05/03/1985 in Tanzania.
- PI 619641. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. RM 64; IS 29661. Collected 05/03/1985 in Tanzania.
- PI 619642. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. RM 69; IS 29662. Collected 05/04/1985 in Tanzania.
- PI 619643. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. RM 76; IS 29663. Collected 05/05/1985 in Tanzania.

The following were donated by N Kameswara Rao, ICRISAT, Genetic Resources and Enhancement Program, Patancheru, Andhra Pradesh 502 324, India. Received 10/03/2001.

- PI 619644. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30330; Da shan dong. Collected in China.
- PI 619645. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30337; Xiao Niu Xin. Collected in China.
- PI 619646. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30354; Er guan dong. Collected in China.
- PI 619647. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30365; Ba ye qi. Collected in China.
- PI 619648. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30371; Da huang gaoliang. Collected in China.
- PI 619649. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30374; Da hei mao. Collected in China.
- PI 619650. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30390; Guang dong gaoliang. Collected in China.
- PI 619651. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30392; Niu wei ba ruan gaoliang. Collected in China.
- PI 619652. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30408; Xiao gaoliang. Collected in China.
- PI 619653. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30413; Jin guang gaoliang. Collected in China.

- PI 619654. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30415; Duan san chi. Collected in China.
- PI 619655. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30417; Tie sha mao. Collected in China.
- PI 619656. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30421; Gaoliang. Collected in China.
- PI 619657. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30426; Hong ke jiao. Collected in China.
- PI 619658. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30435; Guan dong hong. Collected in China.
- PI 619659. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30438; Hong ke gaoliang. Collected in China.
- PI 619660. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30445; Jin sui gaoliang. Collected in China.
- PI 619661. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30464; Jiao zi. Collected in China.
- PI 619662. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30470; K 38. Collected in Russian Federation.
- PI 619663. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30471; K 163 B. Collected in Russian Federation.
- PI 619664. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30472; K 258 B. Collected in Russian Federation.
- PI 619665. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30473; K 301. Collected in Russian Federation.
- PI 619666. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30474; K 395. Collected in Russian Federation.
- PI 619667. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30475; K 669. Collected in Russian Federation.
- PI 619668. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30476; K 1353. Collected in Russian Federation.
- PI 619669. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30477; K 1595. Collected in Russian Federation.
- PI 619670. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30478; K 1670. Collected in Russian Federation.
- PI 619671. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30479; K 1682. Collected in Russian Federation.
- PI 619672. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30480; K 1720/II. Collected in Russian Federation.

- PI 619673. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30481; K 1879. Collected in Russian Federation.
- PI 619674. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30482; K 2028/I. Collected in Russian Federation.
- PI 619675. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30483; K 2131. Collected in Russian Federation.
- PI 619676. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30484; K 2515. Collected in Russian Federation.
- PI 619677. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30485; K 3405. Collected in Russian Federation.
- PI 619678. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30486; K 3609. Collected in Russian Federation.
- PI 619679. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30487; K 5392. Collected in Russian Federation.
- PI 619680. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30890; Abir; US 1. Collected in Soroti, Uganda.
- PI 619681. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30891; Ilodir; US 2. Collected in Soroti, Uganda.
- PI 619682. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30892; Ilodir; US 3. Collected in Soroti, Uganda.
- PI 619683. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30893; Ecopiara; US 4. Collected in Soroti, Uganda.
- PI 619684. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30895; Terema; US 6. Collected in Soroti, Uganda.
- PI 619685. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30897; Emonwai; US 8. Collected in Soroti, Uganda.
- PI 619686. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30899; Eluratoro; US 10. Collected in Uganda.
- PI 619687. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30901; Eiris; US 12. Collected in Uganda.
- PI 619688. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30902; US 13. Collected in Uganda.
- PI 619689. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30903; US 16. Collected in Uganda.
- PI 619690. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30904; Eidima; US 17. Collected in Uganda.
- PI 619691. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30905; Asio; US 19. Collected in Uganda.

- PI 619692. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30906; Elemureng; US 20. Collected in Uganda.
- PI 619693. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30907; Elemureng; US 21. Collected in Uganda.
- PI 619694. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30909; Edgdg; US 23. Collected in Soroti, Uganda.
- PI 619695. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30910; US 24. Collected in Soroti, Uganda.
- PI 619696. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30911; US 26. Collected in Soroti, Uganda.
- PI 619697. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30912; US 27. Collected in Soroti, Uganda.
- PI 619698. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30914; US 30. Collected in Soroti, Uganda.
- PI 619699. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30916; Anyangoit; US 33. Collected in Soroti, Uganda.
- PI 619700. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30917; Emvmwai; US 34. Collected in Soroti, Uganda.
- PI 619701. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30918; US 37. Collected in Uganda.
- PI 619702. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Wild. IS 30919; US 38. Collected in Uganda.
- PI 619703. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30920; Anyakoka; US 39. Collected in Uganda.
- PI 619704. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30921; US 41. Collected in Uganda.
- PI 619705. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30922; US 42. Collected in Uganda.
- PI 619706. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30924; Ekama; US 44. Collected in Uganda.
- PI 619707. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30925; Ourien; US 45. Collected in Uganda.
- PI 619708. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30926; Eegdg; US 46. Collected in Uganda.
- PI 619709. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30927; Mutema; US 47. Collected in Uganda.
- PI 619710. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30928; Enyang; US 48. Collected in Uganda.

- PI 619711. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30929; Kasunta; US 49. Collected in Uganda.
- PI 619712. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30930; US 50. Collected in Uganda.
- PI 619713. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30931; US 51. Collected in Uganda.
- PI 619714. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30932; Edgdg; US 52. Collected in Uganda.
- PI 619715. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30933; Edgdg; US 53. Collected in Uganda.
- PI 619716. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30934; US 54. Collected in Uganda.
- PI 619717. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30935; Edgdg-dokola; US 56. Collected in Uganda.
- PI 619718. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30936; Elugu; US 57. Collected in Uganda.
- PI 619719. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30937; US 59. Collected in Uganda.
- PI 619720. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30938; US 60. Collected in Uganda.
- PI 619721. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30939; US 62. Collected in Uganda.
- PI 619722. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30940; US 62. Collected in Uganda.
- PI 619723. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30941; Amira; US 63. Collected in Uganda.
- PI 619724. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30942; Belatar; US 64. Collected in Uganda.
- PI 619725. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30943; Orygmatera; US 65. Collected in Uganda.
- PI 619726. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30944; Avera; US 66. Collected in Uganda.
- PI 619727. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30945; Avera; US 67. Collected in Uganda.
- PI 619728. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30946; Avera; US 68. Collected in Uganda.
- PI 619729. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30947; Avera; US 69. Collected in Uganda.

- PI 619730. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30948; Nyang Bel; US 70. Collected in Uganda.
- PI 619731. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30949; Nyang Bel; US 72. Collected in Uganda.
- PI 619732. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30950; Nyang Bel; US 73. Collected in Uganda.
- PI 619733. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30951; US 74. Collected in Uganda.
- PI 619734. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30953; US 76. Collected in Uganda.
- PI 619735. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30954; US 77. Collected in Uganda.
- PI 619736. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30956; Awiera; US 80. Collected in Uganda.
- PI 619737. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30957; Nyang-Awila; US 81. Collected in Uganda.
- PI 619738. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30959; Awera-Yakyak; US 83. Collected in Uganda.
- PI 619739. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30960; Nile-alengo; US 84. Collected in Uganda.
- PI 619740. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30962; Awiagot; US 86. Collected in Uganda.
- PI 619741. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30963; Awera-adyeda; US 87. Collected in Uganda.
- PI 619742. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30964; Awera-teeboke; US 88. Collected in Uganda.
- PI 619743. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30967; Awera-atar; US 91. Collected in Uganda.
- PI 619744. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30968; Eluku; US 92. Collected in Uganda.
- PI 619745. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30970; Serena; US 94. Collected in Uganda.
- PI 619746. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30971; Abir; US 95. Collected in Uganda.
- PI 619747. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30972; Abir; US 96. Collected in Uganda.
- PI 619748. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30974; Awera-bar; US 98. Collected in Uganda.

- PI 619749. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30976; Abir-omoro; US 100. Collected in Uganda.
- PI 619750. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30977; Ayibgwok; US 101. Collected in Uganda.
- PI 619751. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30978; Abir-atar; US 102. Collected in Uganda.
- PI 619752. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30980; Awera-omoro; US 104. Collected in Uganda.
- PI 619753. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30981; Awera-omoro; US 105. Collected in Uganda.
- PI 619754. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30984; Abako; US 108. Collected in Uganda.
- PI 619755. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30985; Abako; US 109. Collected in Uganda.
- PI 619756. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30986; Abako; US 110. Collected in Uganda.
- PI 619757. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30987; Iluku-bata; US 111. Collected in Uganda.
- PI 619758. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30989; Angara-ngetta; US 113. Collected in Uganda.
- PI 619759. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30990; Abiri; US 114. Collected in Uganda.
- PI 619760. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30991; Awgra-apala; US 115. Collected in Uganda.
- PI 619761. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30993; Olarkwon; US 117. Collected in Uganda.
- PI 619762. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30994; Olarkwonny; US 118. Collected in Uganda.
- PI 619763. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30995; Abir-odokomit; US 119. Collected in Uganda.
- PI 619764. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30996; Ogaya; US 120. Collected in Uganda.
- PI 619765. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30997; US 121. Collected in Uganda.
- PI 619766. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30998; Serena-opielo; US 123. Collected in Uganda.
- PI 619767. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31000; Abir-palwo; US 126. Collected in Uganda.

- PI 619768. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31001; Lawera; US 127. Collected in Uganda.
- PI 619769. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31002; Lawera; US 128. Collected in Uganda.
- PI 619770. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31003; Abir-patongo; US 129. Collected in Uganda.
- PI 619771. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31004; Abir-patongo; US 129. Collected in Uganda.
- PI 619772. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31008; Lawera-adilang; US 133. Collected in Uganda.
- PI 619773. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31010; US 135. Collected in Uganda.
- PI 619774. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31011; Tyang-kwa; US 136. Collected in Uganda.
- PI 619775. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31012; Lawera; US 137. Collected in Uganda.
- PI 619776. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31013; Kabir; US 139. Collected in Uganda.
- PI 619777. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31014; Kabir; US 140. Collected in Uganda.
- PI 619778. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31015; Gaya; US 141. Collected in Uganda.
- PI 619779. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31016; Tyang; US 142. Collected in Uganda.
- PI 619780. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31017; Lawera-ayumani; US 143. Collected in Uganda.
- PI 619781. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31018; Lawera; US 144. Collected in Uganda.
- PI 619782. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31019; Tyang-kitgum; US 145. Collected in Uganda.
- PI 619783. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31020; Tyang-kitgum; US 146. Collected in Uganda.
- PI 619784. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31021; Tyang-pachwa-kabete; US 147. Collected in Uganda.
- PI 619785. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31022; Gaya; US 148. Collected in Uganda.
- PI 619786. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31023; Lachua; US 149. Collected in Uganda.

- PI 619787. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31024; Lawera-yak-yak; US 150. Collected in Uganda.
- PI 619788. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31025; Lawera-akelle; US 151. Collected in Uganda.
- PI 619789. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31026; Omera; US 152. Collected in Uganda.
- PI 619790. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31027; Aleda; US 153. Collected in Uganda.
- PI 619791. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31029; Lodoke; US 155. Collected in Uganda.
- PI 619792. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31031; Kawera; US 157. Collected in Uganda.
- PI 619793. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31032; Tyang-labongo; US 158. Collected in Uganda.
- PI 619794. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31034; Geyalango; US 161. Collected in Uganda.
- PI 619795. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31035; Tyang-labongo; US 162. Collected in Uganda.
- PI 619796. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31036; Tyang-labongo; US 163. Collected in Uganda.
- PI 619797. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31037; Tyang-labongo; US 164. Collected in Uganda.
- PI 619798. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31038; Tyang-labongo; US 165. Collected in Uganda.
- PI 619799. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31039; Lawer-otal; US 166. Collected in Uganda.
- PI 619800. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31040; Tyang-oryane; US 167. Collected in Uganda.
- PI 619801. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31041; Tyang-omiya; US 168. Collected in Uganda.
- PI 619802. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31042; Tyang-omiya; US 170. Collected in Uganda.
- PI 619803. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31043; Goda; US 171. Collected in Uganda.
- PI 619804. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31044; Kabir-namokora; US 172. Collected in Uganda.
- PI 619805. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31045; Kabir-namokora; US 173. Collected in Uganda.

- PI 619806. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31046; Abwor; US 174. Collected in Uganda.
- PI 619807. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31047; US 175. Collected in Uganda.
- PI 619808. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31049; Latere gilwit; US 179. Collected in Uganda.
- PI 619809. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31050; Lociri; US 180. Collected in Uganda.
- PI 619810. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31051; Kabir-pajimu; US 181. Collected in Uganda.
- PI 619811. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31052; Gaya; US 183. Collected in Uganda.
- PI 619812. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31053; Kabir-pajimu; US 184. Collected in Uganda.
- PI 619813. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31054; US 185. Collected in Uganda.
- PI 619814. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31055; Lawera-palabek; US 188. Collected in Uganda.
- PI 619815. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31056; Lociri; US 189. Collected in Uganda.
- PI 619816. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31057; US 190. Collected in Uganda.
- PI 619817. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31058; Kabir-gulu; US 191. Collected in Uganda.
- PI 619818. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31060; Lacer; US 194. Collected in Uganda.
- PI 619819. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31061; Lacer; US 194. Collected in Uganda.
- PI 619820. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31064; Kabir-omotu; US 197. Collected in Uganda.
- PI 619821. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31065; Kabir-omotu; US 198. Collected in Uganda.
- PI 619822. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31066; Kabir-omotu; US 199. Collected in Uganda.
- PI 619823. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31067; Kabir-pacho; US 200. Collected in Uganda.
- PI 619824. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31068; Gaya; US 201. Collected in Uganda.

- PI 619825. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31069; Gaya-gulu; US 202. Collected in Uganda.
- PI 619826. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31070; Gaya-pachore; US 204. Collected in Uganda.
- PI 619827. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31071; Lawera-pachore; US 205. Collected in Uganda.
- PI 619828. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31072; Gome; US 206. Collected in Uganda.
- PI 619829. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31073; US 207. Collected in Uganda.
- PI 619830. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31074; US 208. Collected in Uganda.
- PI 619831. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31075; Nyang-molo; US 209. Collected in Uganda.
- PI 619832. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31076; US 210. Collected in Uganda.
- PI 619833. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31077; Lawera-bobi; US 211. Collected in Uganda.
- PI 619834. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31078; Lacene; US 213. Collected in Uganda.
- PI 619835. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31079; Lawera; US 214. Collected in Uganda.
- PI 619836. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31080; Lawuluba; US 216. Collected in Uganda.
- PI 619837. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31082; Kabir-olwiyo; US 218. Collected in Uganda.
- PI 619838. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31083; US 220. Collected in Uganda.
- PI 619839. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31084; Yele-yele; US 223. Collected in Uganda.
- PI 619840. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31085; Gaya-akaba; US 224. Collected in Uganda.
- PI 619841. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31086; Yibjobi; US 226. Collected in Uganda.
- PI 619842. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31087; Yibjobi; US 227. Collected in Uganda.
- PI 619843. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31088; Katikira; US 228. Collected in Uganda.

- PI 619844. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31089; Awulumaba; US 229. Collected in Uganda.
- PI 619845. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31090; Aruutu; US 230. Collected in Uganda.
- PI 619846. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31091; Nyacobo; US 231. Collected in Uganda.
- PI 619847. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31094; Gaya-pawong; US 234. Collected in Uganda.
- PI 619848. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31095; Yele-yele; US 235. Collected in Uganda.
- PI 619849. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31096; Yele-yele; US 236. Collected in Uganda.
- PI 619850. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31097; US 237. Collected in Uganda.
- PI 619851. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31102; US 242. Collected in Uganda.
- PI 619852. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31103; US 243. Collected in Uganda.
- PI 619853. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31105; Awure; US 246. Collected in Uganda.
- PI 619854. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31111; Ndumu-kabir type; US 253. Collected in Uganda.
- PI 619855. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31112; Ejiki; US 254. Collected in Uganda.
- PI 619856. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31114; Akidini; US 256. Collected in Uganda.
- PI 619857. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31117; US 259. Collected in Uganda.
- PI 619858. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31120; Akidini-lugbara; US 262. Collected in Uganda.
- PI 619859. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31121; Akindi; US 263. Collected in Uganda.
- PI 619860. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31123; US 264. Collected in Uganda.
- PI 619861. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31124; Ejiki; US 265. Collected in Uganda.
- PI 619862. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31125; Derebe; US 266. Collected in Uganda.

- PI 619863. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31126; US 269. Collected in Uganda.
- PI 619864. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31129; US 273. Collected in Uganda.
- PI 619865. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31131; Trutrua; US 275. Collected in Uganda.
- PI 619866. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31132; US 276. Collected in Uganda.
- PI 619867. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31133; US 277. Collected in Uganda.
- PI 619868. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31134; US 278. Collected in Uganda.
- PI 619869. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31136; Atindia; US 280. Collected in Uganda.
- PI 619870. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31138; Charaga; US 282. Collected in Uganda.
- PI 619871. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31141; Godo; US 285. Collected in Uganda.
- PI 619872. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31142; Godo; US 286. Collected in Uganda.
- PI 619873. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31144; Godo; US 288. Collected in Uganda.
- PI 619874. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31145; Godo; US 289. Collected in Uganda.
- PI 619875. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31146; Godo; US 290. Collected in Uganda.
- PI 619876. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31147; Godo; US 291. Collected in Uganda.
- PI 619877. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31148; Godo; US 292. Collected in Uganda.
- PI 619878. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31149; Godo; US 293. Collected in Uganda.
- PI 619879. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31150; US 294. Collected in Uganda.
- PI 619880. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31152; US 296. Collected in Uganda.
- PI 619881. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31153; US 296. Collected in Uganda.

- PI 619882. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31154; Lawnluba; US 298. Collected in Uganda.
- PI 619883. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31155; Geya; US 299. Collected in Uganda.
- PI 619884. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31156; Obeja; US 300. Collected in Uganda.
- PI 619885. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31157; US 301. Collected in Uganda.
- PI 619886. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31158; US 302. Collected in Uganda.
- PI 619887. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31159; Kabir-gweng-abara; US 303. Collected in Uganda.
- PI 619888. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31160; Kabir-gweng-abara; US 304. Collected in Uganda.
- PI 619889. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31161; Elugu; US 305. Collected in Uganda.
- PI 619890. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31165; US 310. Collected in Uganda.
- PI 619891. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31167; Chuata; US 312. Collected in Uganda.
- PI 619892. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31169; Tomu; US 314. Collected in Uganda.
- PI 619893. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31170; Imomwa; US 315. Collected in Uganda.
- PI 619894. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31171; Serena; US 316. Collected in Uganda.
- PI 619895. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31172; Okwaras; US 317. Collected in Uganda.
- PI 619896. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31174; US 319. Collected in Uganda.
- PI 619897. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31175; US 320. Collected in Uganda.
- PI 619898. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31176; US 321. Collected in Uganda.
- PI 619899. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31178; US 323. Collected in Uganda.
- PI 619900. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31179; US 324. Collected in Uganda.

- PI 619901. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31180; US 325. Collected in Uganda.
- PI 619902. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31181; US 326. Collected in Uganda.
- PI 619903. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31182; US 327. Collected in Uganda.
- PI 619904. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31184; US 329. Collected in Uganda.
- PI 619905. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31189; Holish; US 334. Collected in Uganda.
- PI 619906. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31190; Holish; US 335. Collected in Uganda.
- PI 619907. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31193; US 338. Collected in Uganda.
- PI 619908. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31194; US 339. Collected in Uganda.
- PI 619909. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31195; US 340. Collected in Uganda.
- PI 619910. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31196; Bel matari; US 341. Collected in Uganda.
- PI 619911. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31197; Bel mobokere; US 342. Collected in Uganda.
- PI 619912. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31198; Airo; US 343. Collected in Uganda.
- PI 619913. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31200; Bel matari; US 345. Collected in Uganda.
- PI 619914. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31201; Omubere; US 346. Collected in Uganda.
- PI 619915. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31202; Omubere; US 347. Collected in Uganda.
- PI 619916. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31205; Omubere; US 350. Collected in Uganda.
- PI 619917. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31208; Nakasabi; US 353. Collected in Uganda.
- PI 619918. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31209; Kasunta; US 354. Collected in Uganda.
- PI 619919. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31211; US 356. Collected in Uganda.

- PI 619920. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31212; US 357. Collected in Uganda.
- PI 619921. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Wild. IS 31213; US 358. Collected in Uganda.
- PI 619922. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31214; Emakasuta; US 359. Collected in Uganda.
- PI 619923. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31215; Ekomo; US 360. Collected in Uganda.
- PI 619924. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31216; Mutamatama; US 361. Collected in Uganda.
- PI 619925. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31217; Mutamatama; US 362. Collected in Uganda.
- PI 619926. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31218; Mutamatama; US 363. Collected in Uganda.
- PI 619927. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31219; Muwamba; US 364. Collected in Uganda.
- PI 619928. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31220; US 365. Collected in Uganda.
- PI 619929. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31222; US 367. Collected in Uganda.
- PI 619930. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31223; US 368. Collected in Uganda.
- PI 619931. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31224; Namata; US 369. Collected in Uganda.
- PI 619932. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Wild. IS 31225; US 370. Collected in Uganda.
- PI 619933. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31226; US 371. Collected in Uganda.
- PI 619934. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31227; Mafumo; US 372. Collected in Uganda.
- PI 619935. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31228; US 373. Collected in Uganda.
- PI 619936. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31229; Bel; US 374. Collected in Uganda.
- PI 619937. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31230; Bel; US 375. Collected in Uganda.
- PI 619938. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31231; US 376. Collected in Soroti, Uganda.

- PI 619939. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31232; US 377. Collected in Soroti, Uganda.
- PI 619940. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31233; US 378. Collected in Soroti, Uganda.
- PI 619941. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31234; US 379. Collected in Uganda.
- PI 619942. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31235; US 380. Collected in Uganda.
- PI 619943. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31236; Elodir; US 381. Collected in Uganda.
- PI 619944. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31237; Elodir; US 382. Collected in Uganda.
- PI 619945. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31238; Elodir; US 383. Collected in Uganda.
- PI 619946. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31239; US 384. Collected in Uganda.
- PI 619947. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31240; US 385. Collected in Uganda.
- PI 619948. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31241; US 386. Collected in Uganda.
- PI 619949. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31242; US 387. Collected in Uganda.
- PI 619950. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31243; US 388. Collected in Uganda.
- PI 619951. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31245; US 390. Collected in Uganda.
- PI 619952. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31246; Serena; US 391. Collected in Uganda.
- PI 619953. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31247; Enyang; US 392. Collected in Uganda.
- PI 619954. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31248; Enyang; US 393. Collected in Uganda.
- PI 619955. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31249; US 394. Collected in Uganda.
- PI 619956. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31250; US 395. Collected in Uganda.
- PI 619957. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31251; US 396. Collected in Uganda.

- PI 619958. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31252; US 397. Collected in Uganda.
- PI 619959. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31253; US 398. Collected in Uganda.
- PI 619960. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31254; US 399. Collected in Uganda.
- PI 619961. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31255; Erepit; US 400. Collected in Uganda.
- PI 619962. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31257; US 402. Collected in Uganda.
- PI 619963. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31258; US 403. Collected in Uganda.
- PI 619964. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31259; US 404. Collected in Uganda.
- PI 619965. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31260; US 405. Collected in Uganda.
- PI 619966. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31261; US 406. Collected in Uganda.
- PI 619967. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31263; Kakodo; US 408. Collected in Uganda.
- PI 619968. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31264; US 409. Collected in Uganda.
- PI 619969. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31266; Kabete; US 411. Collected in Uganda.
- PI 619970. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31267; US 412. Collected in Uganda.
- PI 619971. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31268; Kashaya 1; US 413. Collected in Uganda.
- PI 619972. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31269; US 414. Collected in Uganda.
- PI 619973. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31270; Kata-mbindo; US 415. Collected in Uganda.
- PI 619974. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31271; Kata-mbindo rwamukondo; US 416. Collected in
Uganda.
- PI 619975. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31272; Rwamu Kondo rwamukondo; US 417. Collected in
Uganda.

- PI 619976. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31273; Kata-mbindo nyakaembunk; US 418. Collected in
Uganda.
- PI 619977. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31274; Kanyiyerere; US 419. Collected in Uganda.
- PI 619978. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31275; US 420. Collected in Uganda.
- PI 619979. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31276; Kabusiba; US 421. Collected in Uganda.
- PI 619980. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31277; Kabusiba; US 422. Collected in Uganda.
- PI 619981. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31278; US 423. Collected in Uganda.
- PI 619982. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31279; US 425. Collected in Uganda.
- PI 619983. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31280; US 426. Collected in Uganda.
- PI 619984. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31281; Kata-mbindo rubaure; US 427. Collected in Uganda.
- PI 619985. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31282; Kanyankole; US 428. Collected in Uganda.
- PI 619986. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31283; US 431. Collected in Uganda.
- PI 619987. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31284; US 434. Collected in Uganda.
- PI 619988. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31285; US 436. Collected in Uganda.
- PI 619989. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31286; US 437. Collected in Uganda.
- PI 619990. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31287; US 438. Collected in Uganda.
- PI 619991. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31288; US 439. Collected in Uganda.
- PI 619992. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31289; Amasaka; US 440. Collected in Uganda.
- PI 619993. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31290; US 441. Collected in Uganda.
- PI 619994. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31291; US 442. Collected in Uganda.

- PI 619995. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31292; Enjuna; US 443. Collected in Uganda.
- PI 619996. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31293; US 444. Collected in Uganda.
- PI 619997. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31294; US 445. Collected in Uganda.
- PI 619998. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31296; Nyakakiga; US 447. Collected in Uganda.
- PI 619999. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31297; Rutare 1; US 448. Collected in Uganda.
- PI 620000. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31298; Rutare 2; US 449. Collected in Uganda.
- PI 620001. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31299; Ntuku; US 450. Collected in Uganda.
- PI 620002. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31300; Mabare; US 452. Collected in Uganda.
- PI 620003. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31301; Mabare; US 453. Collected in Uganda.
- PI 620004. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31302; Kanyijengere 1; US 454. Collected in Uganda.
- PI 620005. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31303; Rukondo; US 455. Collected in Uganda.
- PI 620006. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31304; Kanyijengere 2; US 456. Collected in Uganda.
- PI 620007. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31305; US 457. Collected in Uganda.
- PI 620008. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31306; US 458. Collected in Uganda.
- PI 620009. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31308; US 460. Collected in Uganda.
- PI 620010. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31309; US 461. Collected in Uganda.
- PI 620011. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31312; US 464. Collected in Uganda.
- PI 620012. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31313; Rukondogoza; US 465. Collected in Uganda.
- PI 620013. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31314; Kankwerere; US 466. Collected in Uganda.

- PI 620014. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31315; US 467. Collected in Uganda.
- PI 620015. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31316; Nchinga 1; US 468. Collected in Rukungiri, Uganda.
- PI 620016. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31317; Nchinga 2; US 469. Collected in Rukungiri, Uganda.
- PI 620017. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31318; Kankwerere; US 470. Collected in Rukungiri, Uganda.
- PI 620018. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31320; Rutare; US 472. Collected in Rukungiri, Uganda.
- PI 620019. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31321; Kankwerere; US 473. Collected in Rukungiri, Uganda.
- PI 620020. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31323; US 476. Collected in Rukungiri, Uganda.
- PI 620021. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31324; Rukondo; US 477. Collected in Uganda.
- PI 620022. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31326; Kankwerere-bugangari 2; US 479. Collected in Uganda.
- PI 620023. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31327; Kankwerere-bugangari 3; US 480. Collected in Uganda.
- PI 620024. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31328; US 481. Collected in Uganda.
- PI 620025. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31330; Kabuninye nyenka; US 483. Collected in Uganda.
- PI 620026. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31331; US 484. Collected in Uganda.
- PI 620027. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Wild. IS 31332; US 485. Collected in Uganda.
- PI 620028. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31333; Kabusiba II; US 486. Collected in Uganda.
- PI 620029. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31334; Kabusiba III; US 487. Collected in Uganda.
- PI 620030. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31335; Masaku I; US 488. Collected in Uganda.
- PI 620031. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31337; Nyakagusa; US 490. Collected in Rukungiri, Uganda.

- PI 620032. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31338; Kabuyanda; US 491. Collected in Rukungiri, Uganda.
- PI 620033. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31339; Kabuyanda; US 492. Collected in Rukungiri, Uganda.
- PI 620034. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31340; Kalanjamwere; US 494. Collected in Rukungiri,
Uganda.
- PI 620035. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31341; Ntalushaka; US 495. Collected in Rukungiri, Uganda.
- PI 620036. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31342; US 496. Collected in Rukungiri, Uganda.
- PI 620037. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31343; Kajanjamwire; US 497. Collected in Rukungiri,
Uganda.
- PI 620038. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31346; Nyakagusha; US 500. Collected in Uganda.
- PI 620039. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31348; Kajanjamwire; US 502. Collected in Uganda.
- PI 620040. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31349; Kaababuro; US 503. Collected in Uganda.
- PI 620041. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31350; Kajamja; US 504. Collected in Uganda.
- PI 620042. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31351; Buro; US 505. Collected in Uganda.
- PI 620043. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31352; Kaaburo; US 506. Collected in Uganda.
- PI 620044. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31353; Kaaburo; US 507. Collected in Uganda.
- PI 620045. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31354; Ekigusnagusha; US 508. Collected in Uganda.
- PI 620046. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31355; Kaamate; US 509. Collected in Uganda.
- PI 620047. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31356; Ruhogo; US 510. Collected in Uganda.
- PI 620048. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31357; Kaburo-kichwamba; US 511. Collected in Uganda.
- PI 620049. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31358; Ruhogo; US 512. Collected in Uganda.

- PI 620050. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31360; US 514. Collected in Uganda.
- PI 620051. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31361; Ruhogokulya; US 515. Collected in Uganda.
- PI 620052. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31362; US 516. Collected in Uganda.
- PI 620053. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31363; US 517. Collected in Uganda.
- PI 620054. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31366; US 520. Collected in Uganda.
- PI 620055. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31367; US 522. Collected in Uganda.
- PI 620056. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31368; Kaburo; US 523. Collected in Uganda.
- PI 620057. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31369; Nkundankole I; US 524. Collected in Uganda.
- PI 620058. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31370; Nkundankole II; US 525. Collected in Uganda.
- PI 620059. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31371; Nkundankole III; US 526. Collected in Uganda.
- PI 620060. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31372; Kajanja; US 528. Collected in Uganda.
- PI 620061. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31373; Kajanja kangyenyi I; US 529. Collected in Uganda.
- PI 620062 QUAR. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31374; Kaburo kangyenyi I; US 530. Collected in Uganda.
- PI 620063 QUAR. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31375; Ogwenkiga; US 531. Collected in Uganda.
- PI 620064. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31376; Ogwenkiga; US 532. Collected in Uganda.
- PI 620065. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31377; Katambin I; US 533. Collected in Uganda.
- PI 620066. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31378; Katambindo II; US 534. Collected in Uganda.
- PI 620067. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31379; Kajanja-masekuka; US 535. Collected in Uganda.
- PI 620068. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31380; Kajanja-fabwohe; US 536. Collected in Uganda.

- PI 620069. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31381; Katambindo-kabwohe; US 537. Collected in Uganda.
- PI 620070. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31382; US 538. Collected in Uganda.
- PI 620071. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31383; Gusagusa; US 539. Collected in Uganda.
- PI 620072. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31384; US 540. Collected in Uganda.
- PI 620073. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31385; US 541. Collected in Uganda.
- PI 620074. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31386; US 542. Collected in Uganda.
- PI 620075. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31387; US 543. Collected in Uganda.
- PI 620076. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31388; US 544. Collected in Uganda.
- PI 620077. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31389; US 545. Collected in Uganda.
- PI 620078. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31390; US 546. Collected in Uganda.
- PI 620079. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31391; US 547. Collected in Uganda.
- PI 620080. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31392; Kanyamunyu; US 548. Collected in Uganda.
- PI 620081. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31393; US 549. Collected in Uganda.
- PI 620082. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31395; US 551. Collected in Uganda.
- PI 620083. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31396; US 552. Collected in Uganda.
- PI 620084. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31397; Yenoera; US 553. Collected in Uganda.
- PI 620085. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31398; Kanyimwerere; US 554. Collected in Uganda.
- PI 620086. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31399; US 555. Collected in Uganda.
- PI 620087. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31400; US 556. Collected in Uganda.

- PI 620088. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31401; US 557. Collected in Uganda.
- PI 620089. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31402; Kabano; US 558. Collected in Uganda.
- PI 620090. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Wild. IS 31403; US 559. Collected in Uganda.
- PI 620091. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31404; Kajanja-gali; US 560. Collected in Uganda.
- PI 620092. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31405; US 561. Collected in Uganda.
- PI 620093. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31406; US 562. Collected in Uganda.
- PI 620094. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31407; US 563. Collected in Uganda.
- PI 620095. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31408; US 564. Collected in Uganda.
- PI 620096. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31409; Kabir; US 565. Collected in Uganda.
- PI 620097. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31410; US 566. Collected in Uganda.
- PI 620098. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31411; Kabir; US 567. Collected in Uganda.
- PI 620099. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31412; US 568. Collected in Uganda.
- PI 620100. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31415; US 571. Collected in Uganda.
- PI 620101. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31416; US 572. Collected in Uganda.
- PI 620102. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31417; US 573. Collected in Uganda.
- PI 620103. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31418; US 574. Collected in Uganda.
- PI 620104. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31419; Kamyeirere; US 575. Collected in Uganda.
- PI 620105. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31420; US 576. Collected in Uganda.
- PI 620106. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31421; US 577. Collected in Uganda.

- PI 620107. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31422; US 578. Collected in Uganda.
- PI 620108. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31423; Enkumba; US 579. Collected in Uganda.
- PI 620109. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31424; Enowera; US 580. Collected in Uganda.
- PI 620110. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31425; US 581. Collected in Uganda.
- PI 620111. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31426; US 582. Collected in Uganda.
- PI 620112. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31427; US 583. Collected in Uganda.
- PI 620113. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31428; Ekinyabulo; US 584. Collected in Uganda.
- PI 620114. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31429; US 585. Collected in Uganda.
- PI 620115. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31430; US 586. Collected in Uganda.
- PI 620116. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31431; Nkumba; US 587. Collected in Uganda.
- PI 620117. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31432; Enowera; US 588. Collected in Uganda.
- PI 620118. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31433; US 589. Collected in Uganda.
- PI 620119. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31434; US 590. Collected in Uganda.
- PI 620120. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31435; US 591. Collected in Uganda.
- PI 620121. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31436; US 592. Collected in Uganda.
- PI 620122. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31437; US 593. Collected in Uganda.
- PI 620123. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31438; Ebinyamugusa; US 594. Collected in Uganda.
- PI 620124. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31439; Obunyabudo; US 595. Collected in Uganda.
- PI 620125. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31440; US 596. Collected in Uganda.

- PI 620126. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31441; US 597. Collected in Uganda.
- PI 620127. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31442; Kanyeirere; US 598. Collected in Uganda.
- PI 620128. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31443; Kigufu; US 599. Collected in Uganda.
- PI 620129. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31444; US 600. Collected in Uganda.
- PI 620130. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31445; US 601. Collected in Uganda.
- PI 620131. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31446; US 603. Collected in Uganda.
- PI 620132. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31447; US 604. Collected in Uganda.
- PI 620133. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31448; US 605. Collected in Uganda.
- PI 620134. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31449; Katambiodo; US 606. Collected in Uganda.
- PI 620135. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31450; Kabusimu; US 607. Collected in Uganda.
- PI 620136. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31451; Kabusiba I; US 608. Collected in Uganda.
- PI 620137. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31452; Majoro; US 609. Collected in Uganda.
- PI 620138. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31453; Kabusiba II; US 610. Collected in Uganda.
- PI 620139. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31454; Majoro II; US 611. Collected in Uganda.
- PI 620140. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31456; US 613. Collected in Uganda.
- PI 620141. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31457; US 614. Collected in Uganda.
- PI 620142. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31458; US 615. Collected in Uganda.
- PI 620143. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31459; US 616. Collected in Uganda.
- PI 620144. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31460; Kabwaga; US 617. Collected in Uganda.

- PI 620145. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31461; Mpwera; US 618. Collected in Uganda.
- PI 620146. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31463; Nyaburo; US 620. Collected in Uganda.
- PI 620147. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31464; Mpwera II; US 621. Collected in Uganda.
- PI 620148. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31466; Kabwaga; US 623. Collected in Uganda.
- PI 620149. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31467; Nkumba; US 624. Collected in Uganda.
- PI 620150. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31468; US 625. Collected in Uganda.
- PI 620151. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31469; US 626. Collected in Uganda.
- PI 620152. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31470; US 627. Collected in Uganda.
- PI 620153. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31471; US 628. Collected in Uganda.
- PI 620154. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31472; Nkumba; US 629. Collected in Uganda.
- PI 620155. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31473; Emperwa; US 630. Collected in Uganda.
- PI 620156. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31474; US 631. Collected in Uganda.
- PI 620157. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31475; US 632. Collected in Uganda.
- PI 620158. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31476; US 633. Collected in Uganda.
- PI 620159. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31477; Kanyeyerere; US 634. Collected in Uganda.
- PI 620160. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31478; Rwakatima; US 635. Collected in Uganda.
- PI 620161. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31480; Rutanga; US 637. Collected in Uganda.
- PI 620162. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31481; US 638. Collected in Uganda.
- PI 620163. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31482; Ompwera; US 639. Collected in Uganda.

- PI 620164. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31483; Rwemeraea; US 640. Collected in Uganda.
- PI 620165. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31485; Magune; US 642. Collected in Uganda.
- PI 620166. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31487; Mayondo; US 644. Collected in Uganda.
- PI 620167. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31488; Rukondo; US 645. Collected in Uganda.
- PI 620168. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31489; Kankondo; US 646. Collected in Uganda.
- PI 620169. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31490; Kazanza; US 647. Collected in Uganda.
- PI 620170. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31491; Namatera; US 648. Collected in Uganda.
- PI 620171. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31493; Namatera; US 650. Collected in Uganda.
- PI 620172. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31494; Kayini; US 651. Collected in Uganda.
- PI 620173. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31495; US 652. Collected in Uganda.
- PI 620174. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31499; Namatera-kaeini; US 656. Collected in Uganda.
- PI 620175. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31502; Namatera 1; US 659. Collected in Uganda.
- PI 620176. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31503; Namatera 2; US 660. Collected in Uganda.
- PI 620177. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31504; Katome; US 661. Collected in Uganda.
- PI 620178. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31505; Namatera; US 662. Collected in Uganda.
- PI 620179. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31506; Katomi; US 663. Collected in Uganda.
- PI 620180. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31507; US 664. Collected in Uganda.
- PI 620181. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31508; US 665. Collected in Uganda.
- PI 620182. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31509; US 666. Collected in Uganda.

- PI 620183. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31510; Lubere; US 667. Collected in Uganda.
- PI 620184. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31513; Masansabali II; US 670. Collected in Uganda.
- PI 620185. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31514; Namatera-kukondo; US 671. Collected in Uganda.
- PI 620186. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31516; US 673. Collected in Uganda.
- PI 620187. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31517; Namatera-kabale; US 675. Collected in Uganda.
- PI 620188. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31519; Magu No. 1; US 677. Collected in Uganda.
- PI 620189. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31520; Magu No. 2; US 678. Collected in Uganda.
- PI 620190. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31523; US 817. Collected in Uganda.
- PI 620191. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31524; US 1022. Collected in Uganda.
- PI 620192. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31525; US 5271. Collected in Uganda.
- PI 620193. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32264; PC 1. Collected in India.
- PI 620194. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32265; PC 6. Collected in India.
- PI 620195. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32266; PC 9. Collected in India.
- PI 620196. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32267; PC 11. Collected in India.
- PI 620197. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32268; PC 16. Collected in India.
- PI 620198. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32269; PC 18. Collected in India.
- PI 620199. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32270; PC 19. Collected in India.
- PI 620200. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32271; PC 21. Collected in India.
- PI 620201. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32272; PC 23. Collected in India.

- PI 620202. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32273; PC 28. Collected in India.
- PI 620203. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32274; PC 29. Collected in India.
- PI 620204. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32276; PC 53. Collected in India.
- PI 620205. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32277; PC 54. Collected in India.
- PI 620206. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32278; PC 56. Collected in India.
- PI 620207. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32279; PC 57. Collected in India.
- PI 620208. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32280; PC 62. Collected in India.
- PI 620209. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32281; PC 63. Collected in India.
- PI 620210. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32282; PC 65. Collected in India.
- PI 620211. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32283; PC 66. Collected in India.
- PI 620212. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32284; PC 67. Collected in India.
- PI 620213. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32286; PC 70. Collected in India.
- PI 620214. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32287; PC 72. Collected in India.
- PI 620215. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32288; PC 74. Collected in India.
- PI 620216. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32289; PC 75. Collected in India.
- PI 620217. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32290; PC 76. Collected in India.
- PI 620218. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32291; PC 77. Collected in India.
- PI 620219. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32292; PC 78. Collected in India.
- PI 620220. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32293; PC 79. Collected in India.

- PI 620221. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32294; PC 80. Collected in India.
- PI 620222. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32295; PC 81. Collected in India.
- PI 620223. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32296; PC 82. Collected in India.
- PI 620224. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32297; SAR 1. Collected in India.
- PI 620225. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32298; SAR 2. Collected in India.
- PI 620226. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32299; SAR 3. Collected in India.
- PI 620227. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32300; SAR 4. Collected in India.
- PI 620228. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32301; SAR 5. Collected in India.
- PI 620229. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32303; SAR 9. Collected in India.
- PI 620230. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32305; SAR 11. Collected in India.
- PI 620231. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32306; SAR 12. Collected in India.
- PI 620232. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32308; SAR 14. Collected in India.
- PI 620233. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32309; SAR 15. Collected in India.
- PI 620234. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32310; SAR 16. Collected in India.
- PI 620235. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32311; SAR 19. Collected in India.
- PI 620236. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32312; SAR 20. Collected in India.
- PI 620237. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32313; SAR 21. Collected in India.
- PI 620238. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32314; SAR 22. Collected in India.
- PI 620239. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32315; SAR 23. Collected in India.

- PI 620240. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32316; SAR 24. Collected in India.
- PI 620241. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32317; SAR 25. Collected in India.
- PI 620242. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32318; SAR 26. Collected in India.
- PI 620243. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32319; SAR 27. Collected in India.
- PI 620244. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32320; SAR 28. Collected in India.
- PI 620245. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32321; SAR 29. Collected in India.
- PI 620246. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32322; SAR 30. Collected in India.
- PI 620247. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32323; SAR 31. Collected in India.
- PI 620248. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32324; SAR 32. Collected in India.
- PI 620249. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32325; SAR 33. Collected in India.
- PI 620250. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32326; SAR 34. Collected in India.
- PI 620251. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 32327; SAR 35. Collected in India.

The following were collected by M.N. Koppar, Nat. Bureau of Plant Genetic Resources, Germplasm Exploration Div., Indian Council of Ag. Res., New Delhi, Delhi 110 012, India; S. Appa Rao, Int. Crops Res. Inst. for the Semi-Arid Tropics, Germplasm Resources Unit, Patancheru, Andhra Pradesh 502 324, India; V. Gopal Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Resources Division, Patancheru, Andhra Pradesh 502324, India. Donated by N Kameswara Rao, ICRISAT, Genetic Resources and Enhancement Program, Patancheru, Andhra Pradesh 502 324, India. Received 10/03/2001.

- PI 620252. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 7; IS 32329. Collected 11/14/1986 in Orissa, India.
- PI 620253. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 11; IS 32333; Sattara jonnalu. Collected 11/14/1986 in Orissa, India.
- PI 620254. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 12; IS 32334; Sattara jonnalu. Collected 11/14/1986 in Orissa, India.

- PI 620255. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 39; IS 32339. Collected 11/14/1986 in Orissa, India.
- PI 620256. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 44; IS 32341. Collected 11/14/1986 in Orissa, India.
- PI 620257. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 51; IS 32343; Sattara jonnalalu. Collected 11/14/1986 in Orissa, India.
- PI 620258. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 54; IS 32344. Collected 11/14/1986 in Orissa, India.
- PI 620259. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 63; IS 32345. Collected 11/14/1986 in Orissa, India.
- PI 620260. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 64; IS 32346. Collected 11/14/1986 in Orissa, India.
- PI 620261. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 69; IS 32348. Collected 11/14/1986 in Orissa, India.
- PI 620262. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 70; IS 32349. Collected 11/14/1986 in Orissa, India.
- PI 620263. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 72; IS 32350. Collected 11/14/1986 in Orissa, India.
- PI 620264. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 74; IS 32352. Collected 11/14/1986 in Orissa, India.
- PI 620265. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 78; IS 32355; Khedi jonna. Collected 11/15/1986 in Orissa, India.
- PI 620266. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 87; IS 32358. Collected 11/15/1986 in Orissa, India.
- PI 620267. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 88; IS 32359. Collected 11/15/1986 in Orissa, India.
- PI 620268. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 90; IS 32360. Collected 11/15/1986 in Orissa, India.
- PI 620269. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 91; IS 32361. Collected 11/15/1986 in Orissa, India.
- PI 620270. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 94; IS 32365. Collected 11/15/1986 in Orissa, India.
- PI 620271. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 95; IS 32366. Collected 11/15/1986 in Orissa, India.
- PI 620272. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 96; IS 32367. Collected 11/15/1986 in Orissa, India.

- PI 620273. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 97; IS 32368; Raksee. Collected 11/15/1986 in Orissa,
India.
- PI 620274. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 101; IS 32370; Raksee. Collected 11/15/1986 in Orissa,
India.
- PI 620275. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 102; IS 32371. Collected 11/15/1986 in Orissa, India.
- PI 620276. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 105; IS 32375. Collected 11/16/1986 in Orissa, India.
- PI 620277. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 109; IS 32376. Collected 11/16/1986 in Orissa, India.
- PI 620278. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 113; IS 32379. Collected 11/16/1986 in Orissa, India.
- PI 620279. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 114; IS 32380. Collected 11/16/1986 in Orissa, India.
- PI 620280. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 116; IS 32381. Collected 11/16/1986 in Orissa, India.
- PI 620281. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 117; IS 32382. Collected 11/16/1986 in Orissa, India.
- PI 620282. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 118; IS 32383. Collected 11/16/1986 in Orissa, India.
- PI 620283. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 123; IS 32385; Gangai. Collected 11/16/1986 in Orissa,
India.
- PI 620284. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 126; IS 32387; Gangai. Collected 11/16/1986 in Bihar,
India.
- PI 620285. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 127; IS 32388; Gangai. Collected 11/16/1986 in Bihar,
India.
- PI 620286. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 128; IS 32389. Collected 11/16/1986 in Bihar, India.
- PI 620287. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 129; IS 32390. Collected 11/16/1986 in Bihar, India.
- PI 620288. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 130; IS 32391; Gangai. Collected 11/16/1986 in Bihar,
India.
- PI 620289. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 132; IS 32393; Gangai. Collected 11/16/1986 in Bihar,
India.

- PI 620290. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 134; IS 32395. Collected 11/16/1986 in Bihar, India.
- PI 620291. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 135; IS 32396; Gangai. Collected 11/17/1986 in Bihar,
India.
- PI 620292. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 137; IS 32397; Gangai. Collected 11/17/1986 in Bihar,
India.
- PI 620293. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 138; IS 32398. Collected 11/17/1986 in Bihar, India.
- PI 620294. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 139; IS 32399. Collected 11/17/1986 in Bihar, India.
- PI 620295. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 141; IS 32400. Collected 11/17/1986 in Bihar, India.
- PI 620296. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 156; IS 32401. Collected 11/18/1986 in Bihar, India.
- PI 620297. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 157; IS 32402; Bajra. Collected 11/18/1986 in Bihar,
India.
- PI 620298. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 163; IS 32405. Collected 11/19/1986 in Bihar, India.
- PI 620299. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 166; IS 32406; Bajra. Collected 11/19/1986 in Bihar,
India.
- PI 620300. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 167; IS 32407. Collected 11/19/1986 in Bihar, India.
- PI 620301. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 172; IS 32410. Collected 11/19/1986 in Bihar, India.
- PI 620302. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 181; IS 32414. Collected 11/19/1986 in Bihar, India.
- PI 620303. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 184; IS 32415. Collected 11/19/1986 in Bihar, India.
- PI 620304. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 186; IS 32416; Bajra. Collected 11/19/1986 in Bihar,
India.
- PI 620305. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 188; IS 32417; Bajra. Collected 11/19/1986 in Bihar,
India.
- PI 620306. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 191; IS 32419. Collected 11/19/1986 in Bihar, India.

- PI 620307. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 194; IS 32420; Bajra. Collected 11/19/1986 in Bihar,
India.
- PI 620308. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 195; IS 32421; Bajra. Collected 11/19/1986 in Bihar,
India.
- PI 620309. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 201; IS 32422. Collected 11/19/1986 in Bihar, India.
- PI 620310. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 202; IS 32423; Bajra. Collected 11/19/1986 in Bihar,
India.
- PI 620311. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 203; IS 32425; Bajra. Collected 11/19/1986 in Bihar,
India.
- PI 620312. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 207; IS 32426; Bajra. Collected 11/20/1986 in Bihar,
India.
- PI 620313. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 214; IS 32427. Collected 11/20/1986 in Bihar, India.
- PI 620314. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 216; IS 32429; Sisua. Collected 11/20/1986 in Bihar,
India.
- PI 620315. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 217; IS 32430. Collected 11/20/1986 in Bihar, India.
- PI 620316. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 220; IS 32432; Kassava. Collected 11/21/1986 in Bihar,
India.
- PI 620317. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 222; IS 32434; Kassava. Collected 11/21/1986 in Bihar,
India.
- PI 620318. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 225; IS 32436; Kassava. Collected 11/21/1986 in Bihar,
India.
- PI 620319. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 228; IS 32439; Kassava. Collected 11/21/1986 in Bihar,
India.
- PI 620320. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 229; IS 32440; Kassava. Collected 11/21/1986 in Bihar,
India.
- PI 620321. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 231; IS 32441. Collected 11/21/1986 in Bihar, India.

- PI 620322. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 232; IS 32442. Collected 11/21/1986 in Bihar, India.
- PI 620323. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 233; IS 32443. Collected 11/21/1986 in Bihar, India.
- PI 620324. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 234; IS 32444. Collected 11/21/1986 in Bihar, India.
- PI 620325. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 237; IS 32446. Collected 11/21/1986 in Bihar, India.
- PI 620326. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 239; IS 32449; Nambia. Collected 11/21/1986 in Bihar,
India.
- PI 620327. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 240; IS 32450. Collected 11/21/1986 in Bihar, India.
- PI 620328. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 241; IS 32451. Collected 11/21/1986 in Bihar, India.
- PI 620329. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 243; IS 32452; Ouldubia. Collected 11/21/1986 in Bihar,
India.
- PI 620330. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 247; IS 32453. Collected 11/21/1986 in Bihar, India.
- PI 620331. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 249; IS 32454; Binora. Collected 11/21/1986 in Bihar,
India.
- PI 620332. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 252; IS 32456. Collected 11/22/1986 in Bihar, India.
- PI 620333. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 253; IS 32457. Collected 11/22/1986 in Bihar, India.
- PI 620334. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 254; IS 32458. Collected 11/22/1986 in Bihar, India.
- PI 620335. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 262; IS 32462. Collected 11/23/1986 in Madhya Pradesh,
India.
- PI 620336. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 266; IS 32465; Bajra. Collected 11/23/1986 in Madhya
Pradesh, India.
- PI 620337. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 268; IS 32468; Bajra. Collected 11/23/1986 in Madhya
Pradesh, India.
- PI 620338. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 284; IS 32473. Collected 11/23/1986 in Madhya Pradesh,
India.

- PI 620339. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 292; IS 32474. Collected 11/23/1986 in Madhya Pradesh,
India.
- PI 620340. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 294; IS 32475; Bajra. Collected 11/23/1986 in Madhya
Pradesh, India.
- PI 620341. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 295; IS 32476. Collected 11/23/1986 in Madhya Pradesh,
India.
- PI 620342. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 296; IS 32477. Collected 11/23/1986 in Madhya Pradesh,
India.
- PI 620343. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 302; IS 32478; Jowar. Collected 11/24/1986 in Madhya
Pradesh, India.
- PI 620344. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 303; IS 32479; Jowar. Collected 11/24/1986 in Madhya
Pradesh, India.
- PI 620345. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 307; IS 32480; Jowar. Collected 11/24/1986 in Madhya
Pradesh, India.
- PI 620346. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 309; IS 32481; Jowar. Collected 11/24/1986 in Madhya
Pradesh, India.
- PI 620347. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 313; IS 32482. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620348. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 319; IS 32486. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620349. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 320; IS 32487. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620350. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 324; IS 32489. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620351. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 325; IS 32490. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620352. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 327; IS 32491. Collected 11/24/1986 in Madhya Pradesh,
India.

- PI 620353. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 328; IS 32492. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620354. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 329; IS 32493. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620355. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 331; IS 32494. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620356. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 332; IS 32495. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620357. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 335; IS 32497. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620358. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 336; IS 32499. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620359. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 337; IS 32500. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620360. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 338; IS 32501. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620361. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 341; IS 32503. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620362. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 342; IS 32504. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620363. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 349; IS 32506. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620364. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 351; IS 32507. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620365. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 353; IS 32509. Collected 11/24/1986 in Madhya Pradesh,
India.
- PI 620366. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 355; IS 32510. Collected 11/24/1986 in Andhra Pradesh,
India.

The following were collected by S. Appa Rao, Int. Crops Res. Inst. for the Semi-Arid Tropics, Germplasm Resources Unit, Patancheru, Andhra Pradesh 502 324, India. Donated by N Kameswara Rao, ICRISAT, Genetic Resources and Enhancement Program, Patancheru, Andhra Pradesh 502 324, India. Received 10/03/2001.

- PI 620367. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 9; IS 32820. Collected 05/27/1987 in Morogoro, Tanzania.
- PI 620368. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 10 S; IS 32821. Collected 05/27/1987 in Morogoro, Tanzania.
- PI 620369. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 20; IS 32823. Collected 05/29/1987 in Morogoro, Tanzania.
- PI 620370. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 22; IS 32824. Collected 05/29/1987 in Morogoro, Tanzania.
- PI 620371. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 23; IS 32825. Collected 05/29/1987 in Morogoro, Tanzania.
- PI 620372. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 25; IS 32826. Collected 05/29/1987 in Morogoro, Tanzania.
- PI 620373. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 28; IS 32829. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620374. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 30; IS 32830. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620375. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 33; IS 32831. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620376. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 36; IS 32832. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620377. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 38; IS 32833. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620378. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 39; IS 32834. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620379. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 41; IS 32835. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620380. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 42; IS 32836. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620381. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 45; IS 32837. Collected 05/29/1987 in Dodoma, Tanzania.
- PI 620382. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 51; IS 32838. Collected 05/30/1987 in Dodoma, Tanzania.
- PI 620383. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 53; IS 32839. Collected 05/30/1987 in Dodoma, Tanzania.

- PI 620384. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 59; IS 32841. Collected 05/30/1987 in Dodoma, Tanzania.
- PI 620385. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 67; IS 32842. Collected 05/30/1987 in Dodoma, Tanzania.
- PI 620386. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 70; IS 32843. Collected 05/30/1987 in Dodoma, Tanzania.
- PI 620387. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 72; IS 32844. Collected 05/30/1987 in Dodoma, Tanzania.
- PI 620388. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 73; IS 32845. Collected 05/30/1987 in Dodoma, Tanzania.
- PI 620389. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 75; IS 32846. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620390. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 78; IS 32847. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620391. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 79; IS 32848. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620392. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 80; IS 32849. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620393. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 81; IS 32850. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620394. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 84; IS 32851. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620395. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 85; IS 32852. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620396. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 94; IS 32853. Collected 05/31/1987 in Dodoma, Tanzania.
- PI 620397. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 97; IS 32854. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620398. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 99; IS 32855. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620399. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 100; IS 32856. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620400. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 105; IS 32857. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620401. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 106; IS 32858. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620402. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 109; IS 32859. Collected 06/01/1987 in Dodoma, Tanzania.

- PI 620403. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 111; IS 32860. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620404. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 113; IS 32861. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620405. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 117; IS 32862. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620406. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 118; IS 32864. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620407. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 119; IS 32865. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620408. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 120; IS 32866. Collected 06/01/1987 in Dodoma, Tanzania.
- PI 620409. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 125; IS 32868. Collected 06/02/1987 in Dodoma, Tanzania.
- PI 620410. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 127; IS 32869. Collected 06/02/1987 in Dodoma, Tanzania.
- PI 620411. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 131; IS 32870. Collected 06/02/1987 in Dodoma, Tanzania.
- PI 620412. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 134; IS 32871. Collected 06/02/1987 in Dodoma, Tanzania.
- PI 620413. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 135; IS 32872. Collected 06/02/1987 in Dodoma, Tanzania.
- PI 620414. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 136; IS 32873. Collected 06/02/1987 in Arusha, Tanzania.
- PI 620415. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 137; IS 32874. Collected 06/02/1987 in Arusha, Tanzania.
- PI 620416. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 138; IS 32875. Collected 06/02/1987 in Arusha, Tanzania.
- PI 620417. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 139; IS 32876. Collected 06/02/1987 in Arusha, Tanzania.
- PI 620418. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 140; IS 32877. Collected 06/02/1987 in Arusha, Tanzania.
- PI 620419. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 141; IS 32878. Collected 06/02/1987 in Singida, Tanzania.
- PI 620420. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 144; IS 32879. Collected 06/03/1987 in Singida, Tanzania.
- PI 620421. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 145; IS 32880. Collected 06/03/1987 in Singida, Tanzania.

- PI 620422. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 146; IS 32881. Collected 06/03/1987 in Singida, Tanzania.
- PI 620423. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 149; IS 32882. Collected 06/03/1987 in Singida, Tanzania.
- PI 620424. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 150; IS 32883. Collected 06/03/1987 in Singida, Tanzania.
- PI 620425. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 151; IS 32884. Collected 06/03/1987 in Singida, Tanzania.
- PI 620426. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 152; IS 32885. Collected 06/03/1987 in Singida, Tanzania.
- PI 620427. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 153; IS 32886. Collected 06/03/1987 in Singida, Tanzania.
- PI 620428. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 155; IS 32888. Collected 06/03/1987 in Singida, Tanzania.
- PI 620429. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 156; IS 32889. Collected 06/03/1987 in Singida, Tanzania.
- PI 620430. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 161; IS 32892. Collected 06/03/1987 in Singida, Tanzania.
- PI 620431. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 162; IS 32893. Collected 06/03/1987 in Singida, Tanzania.
- PI 620432. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 164; IS 32894. Collected 06/03/1987 in Singida, Tanzania.
- PI 620433. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 165; IS 32895. Collected 06/03/1987 in Singida, Tanzania.
- PI 620434. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 166; IS 32896. Collected 06/03/1987 in Singida, Tanzania.
- PI 620435. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 167; IS 32897. Collected 06/03/1987 in Singida, Tanzania.
- PI 620436. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 169; IS 32899. Collected 06/03/1987 in Singida, Tanzania.
- PI 620437. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 170; IS 32900. Collected 06/03/1987 in Singida, Tanzania.
- PI 620438. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 172; IS 32901. Collected 06/03/1987 in Singida, Tanzania.
- PI 620439. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 173; IS 32902. Collected 06/03/1987 in Singida, Tanzania.
- PI 620440. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 174; IS 32903. Collected 06/03/1987 in Singida, Tanzania.

- PI 620441. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 177; IS 32906. Collected 06/03/1987 in Singida, Tanzania.
- PI 620442. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 178; IS 32907. Collected 06/03/1987 in Singida, Tanzania.
- PI 620443. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 179; IS 32908. Collected 06/03/1987 in Singida, Tanzania.
- PI 620444. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 180; IS 32909. Collected 06/03/1987 in Singida, Tanzania.
- PI 620445. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 183; IS 32910. Collected 06/03/1987 in Singida, Tanzania.
- PI 620446. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 184; IS 32911. Collected 06/03/1987 in Singida, Tanzania.
- PI 620447. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 186; IS 32913. Collected 06/03/1987 in Singida, Tanzania.
- PI 620448. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 187; IS 32914. Collected 06/04/1987 in Singida, Tanzania.
- PI 620449. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 193; IS 32915. Collected 06/04/1987 in Singida, Tanzania.
- PI 620450. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 195; IS 32916. Collected 06/04/1987 in Singida, Tanzania.
- PI 620451. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 196; IS 32917. Collected 06/04/1987 in Singida, Tanzania.
- PI 620452. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 197; IS 32918. Collected 06/04/1987 in Singida, Tanzania.
- PI 620453. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 211; IS 32919. Collected 06/04/1987 in Singida, Tanzania.
- PI 620454. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 214; IS 32920. Collected 06/04/1987 in Singida, Tanzania.
- PI 620455. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 215; IS 32922. Collected 06/04/1987 in Singida, Tanzania.
- PI 620456. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 216; IS 32923. Collected 06/04/1987 in Singida, Tanzania.
- PI 620457. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 217; IS 32924. Collected 06/04/1987 in Singida, Tanzania.
- PI 620458. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 218; IS 32926. Collected 06/04/1987 in Singida, Tanzania.
- PI 620459. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 220; IS 32927. Collected 06/04/1987 in Singida, Tanzania.

- PI 620460. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 221; IS 32928. Collected 06/04/1987 in Singida, Tanzania.
- PI 620461. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 225; IS 32929. Collected 06/04/1987 in Singida, Tanzania.
- PI 620462. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 227; IS 32931. Collected 06/04/1987 in Singida, Tanzania.
- PI 620463. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 232; IS 32932. Collected 06/04/1987 in Singida, Tanzania.
- PI 620464. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 241; IS 32933. Collected 06/04/1987 in Singida, Tanzania.
- PI 620465. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 245; IS 32934. Collected 06/04/1987 in Singida, Tanzania.
- PI 620466. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 253; IS 32936. Collected 06/04/1987 in Singida, Tanzania.
- PI 620467. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 255; IS 32937. Collected 06/04/1987 in Singida, Tanzania.
- PI 620468. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 256; IS 32938. Collected 06/04/1987 in Singida, Tanzania.
- PI 620469. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 258; IS 32939. Collected 06/04/1987 in Singida, Tanzania.
- PI 620470. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 259; IS 32940. Collected 06/05/1987 in Singida, Tanzania.
- PI 620471. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 262; IS 32941. Collected 06/05/1987 in Singida, Tanzania.
- PI 620472. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 270; IS 32942. Collected 06/05/1987 in Singida, Tanzania.
- PI 620473. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 271; IS 32943. Collected 06/05/1987 in Singida, Tanzania.
- PI 620474. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 274; IS 32944. Collected 06/05/1987 in Singida, Tanzania.

- PI 620475. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 277; IS 32945. Collected 06/05/1987 in Singida, Tanzania.
- PI 620476. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 280; IS 32949. Collected 06/05/1987 in Singida, Tanzania.
- PI 620477. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 282; IS 32950. Collected 06/05/1987 in Singida, Tanzania.
- PI 620478. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 283; IS 32951. Collected 06/05/1987 in Singida, Tanzania.
- PI 620479. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 286; IS 32953. Collected 06/05/1987 in Singida, Tanzania.
- PI 620480. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 289; IS 32955. Collected 06/05/1987 in Dodoma, Tanzania.
- PI 620481. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 291; IS 32956. Collected 06/05/1987 in Dodoma, Tanzania.
- PI 620482. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 294; IS 32957. Collected 06/05/1987 in Dodoma, Tanzania.
- PI 620483. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 303; IS 32958. Collected 06/05/1987 in Dodoma, Tanzania.
- PI 620484. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 304; IS 32959. Collected 06/05/1987 in Dodoma, Tanzania.
- PI 620485. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 305; IS 32960. Collected 06/05/1987 in Dodoma, Tanzania.
- PI 620486. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 312; IS 32961. Collected 06/06/1987 in Dodoma, Tanzania.
- PI 620487. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 318; IS 32962. Collected 06/06/1987 in Dodoma, Tanzania.
- PI 620488. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 319; IS 32964. Collected 06/06/1987 in Dodoma, Tanzania.
- PI 620489. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 321; IS 32965. Collected 06/06/1987 in Dodoma, Tanzania.
- PI 620490. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 322; IS 32966. Collected 06/06/1987 in Dodoma, Tanzania.
- PI 620491. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 326; IS 32968. Collected 06/06/1987 in Dodoma, Tanzania.

- PI 620492. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 329; IS 32969. Collected 06/06/1987 in Dodoma, Tanzania.
- PI 620493. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 330; IS 32970. Collected 06/06/1987 in Singida, Tanzania.
- PI 620494. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 331; IS 32971. Collected 06/06/1987 in Singida, Tanzania.
- PI 620495. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 333; IS 32972. Collected 06/06/1987 in Singida, Tanzania.
- PI 620496. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 334; IS 32973. Collected 06/06/1987 in Singida, Tanzania.
- PI 620497. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 336; IS 32974. Collected 06/06/1987 in Singida, Tanzania.
- PI 620498. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 337; IS 32975. Collected 06/06/1987 in Singida, Tanzania.
- PI 620499. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 338; IS 32976. Collected 06/06/1987 in Singida, Tanzania.
- PI 620500. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 341; IS 32977. Collected 06/06/1987 in Singida, Tanzania.
- PI 620501. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 343; IS 32978. Collected 06/06/1987 in Singida, Tanzania.
- PI 620502. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 344; IS 32979. Collected 06/06/1987 in Singida, Tanzania.
- PI 620503. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 346; IS 32980. Collected 06/06/1987 in Singida, Tanzania.
- PI 620504. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 347; IS 32981. Collected 06/06/1987 in Singida, Tanzania.
- PI 620505. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 348; IS 32982. Collected 06/06/1987 in Singida, Tanzania.
- PI 620506. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 349; IS 32983. Collected 06/08/1987 in Singida, Tanzania.
- PI 620507. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 350; IS 32984. Collected 06/08/1987 in Singida, Tanzania.
- PI 620508. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 351; IS 32985. Collected 06/08/1987 in Singida, Tanzania.
- PI 620509. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 353; IS 32986. Collected 06/08/1987 in Singida, Tanzania.
- PI 620510. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 355; IS 32987. Collected 06/08/1987 in Singida, Tanzania.

- PI 620511. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 357; IS 32988. Collected 06/08/1987 in Singida, Tanzania.
- PI 620512. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 358; IS 32989. Collected 06/08/1987 in Singida, Tanzania.
- PI 620513. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 360; IS 32990. Collected 06/08/1987 in Singida, Tanzania.
- PI 620514. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 361; IS 32991. Collected 06/08/1987 in Singida, Tanzania.
- PI 620515. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 366; IS 32992. Collected 06/08/1987 in Singida, Tanzania.
- PI 620516. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 375; IS 32993. Collected 06/09/1987 in Tabora, Tanzania.
- PI 620517. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 376; IS 32994. Collected 06/09/1987 in Tabora, Tanzania.
- PI 620518. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 377; IS 32995. Collected 06/09/1987 in Tabora, Tanzania.
- PI 620519. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 382; IS 32996. Collected 06/09/1987 in Tabora, Tanzania.
- PI 620520. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 383; IS 32997. Collected 06/09/1987 in Tabora, Tanzania.
- PI 620521. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 385; IS 32998. Collected 06/12/1987 in Tanzania.
- PI 620522. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 390; IS 32999. Collected 06/12/1987 in Shinyanga,
Tanzania.
- PI 620523. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 397; IS 33000. Collected 06/12/1987 in Shinyanga,
Tanzania.
- PI 620524. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 408; IS 33001. Collected 06/12/1987 in Shinyanga,
Tanzania.
- PI 620525. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 411; IS 33002. Collected 06/12/1987 in Shinyanga,
Tanzania.
- PI 620526. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 412; IS 33003. Collected 06/12/1987 in Shinyanga,
Tanzania.

- PI 620527. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 420; IS 33004. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620528. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 422; IS 33005. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620529. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 428; IS 33006. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620530. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 429; IS 33007. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620531. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 430; IS 33008. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620532. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 431; IS 33009. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620533. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 432; IS 33010. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620534. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 433; IS 33011. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620535. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 435; IS 33012. Collected 06/14/1987 in Mwanza, Tanzania.
- PI 620536. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 454; IS 33016. Collected 06/14/1987 in Mwanza, Tanzania.
- PI 620537. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 457; IS 33017. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620538. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 458; IS 33018. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620539. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 459; IS 33019. Collected 06/14/1987 in Shinyanga,
Tanzania.
- PI 620540. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 460; IS 33020. Collected 06/15/1987 in Shinyanga,
Tanzania.
- PI 620541. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 464; IS 33021. Collected 06/15/1987 in Shinyanga,
Tanzania.

- PI 620542. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 468; IS 33022. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620543. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 469; IS 33023. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620544. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 471; IS 33024. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620545. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 472; IS 33025. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620546. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 474; IS 33026. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620547. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 475; IS 33027. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620548. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 476; IS 33028. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620549. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 477; IS 33029. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620550. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 478; IS 33030. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620551. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 479; IS 33031. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620552. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 480; IS 33032. Collected 06/15/1987 in Tabora, Tanzania.
- PI 620553. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 481; IS 33033. Collected 06/18/1987 in Tabora, Tanzania.
- PI 620554. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 482; IS 33034. Collected 06/18/1987 in Tabora, Tanzania.
- PI 620555. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 483; IS 33035. Collected 06/18/1987 in Tabora, Tanzania.
- PI 620556 **QUAR.** *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 485; IS 33036. Collected 06/18/1987 in Tabora, Tanzania.
- PI 620557. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 490; IS 33039. Collected 06/18/1987 in Singida, Tanzania.
- PI 620558. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 491; IS 33040. Collected 06/18/1987 in Singida, Tanzania.
- PI 620559. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 493; IS 33041. Collected 06/18/1987 in Singida, Tanzania.
- PI 620560. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 500; IS 33043. Collected 06/18/1987 in Singida, Tanzania.

- PI 620561. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 501; IS 33044. Collected 06/18/1987 in Singida, Tanzania.
- PI 620562. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 503; IS 33045. Collected 06/18/1987 in Singida, Tanzania.
- PI 620563. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 506; IS 33046. Collected 06/18/1987 in Singida, Tanzania.
- PI 620564. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 509; IS 33047. Collected 06/19/1987 in Singida, Tanzania.
- PI 620565. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 510; IS 33048. Collected 06/19/1987 in Singida, Tanzania.
- PI 620566. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 511; IS 33049. Collected 06/19/1987 in Singida, Tanzania.
- PI 620567. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 516; IS 33050. Collected 06/19/1987 in Dodoma, Tanzania.
- PI 620568. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 517; IS 33051. Collected 06/19/1987 in Dodoma, Tanzania.
- PI 620569. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 518; IS 33052. Collected 06/19/1987 in Dodoma, Tanzania.
- PI 620570. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 525; IS 33053. Collected 06/19/1987 in Iringa, Tanzania.
- PI 620571. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 526; IS 33054. Collected 06/19/1987 in Iringa, Tanzania.
- PI 620572. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AMF 532; IS 33055. Collected 06/19/1987 in Morogoro,
Tanzania.
- PI 620573. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 397; IS 33056. Collected 06/20/1987 in Shinyanga, Tanzania.
- PI 620574. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 409; IS 33058. Collected 06/20/1987 in Shinyanga, Tanzania.
- PI 620575. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 411; IS 33059. Collected 06/20/1987 in Shinyanga, Tanzania.
- PI 620576. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 412; IS 33060. Collected 06/20/1987 in Shinyanga, Tanzania.
- PI 620577. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 432; IS 33061. Collected 06/20/1987 in Shinyanga, Tanzania.
- PI 620578. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 440; IS 33062. Collected 06/20/1987 in Mwanza, Tanzania.

- PI 620579. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 442; IS 33063. Collected 06/20/1987 in Mwanza, Tanzania.
- PI 620580. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 474; IS 33064. Collected 06/20/1987 in Tabora, Tanzania.
- PI 620581. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 476; IS 33065. Collected 06/20/1987 in Tabora, Tanzania.
- PI 620582. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 478; IS 33066. Collected 06/20/1987 in Tabora, Tanzania.
- PI 620583. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 481; IS 33068. Collected 06/20/1987 in Tabora, Tanzania.
- PI 620584. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 483; IS 33070. Collected 06/20/1987 in Tabora, Tanzania.
- PI 620585. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 490; IS 33073. Collected 06/20/1987 in Singida, Tanzania.
- PI 620586. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 491; IS 33074. Collected 06/20/1987 in Singida, Tanzania.
- PI 620587. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 493; IS 33075. Collected 06/20/1987 in Singida, Tanzania.
- PI 620588. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 494; IS 33076. Collected 06/20/1987 in Singida, Tanzania.
- PI 620589. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 499; IS 33077. Collected 06/20/1987 in Singida, Tanzania.
- PI 620590. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 500; IS 33079. Collected 06/20/1987 in Singida, Tanzania.
- PI 620591. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. S 501; IS 33080. Collected 06/20/1987 in Singida, Tanzania.

The following were donated by N Kameswara Rao, ICRISAT, Genetic Resources and Enhancement Program, Patancheru, Andhra Pradesh 502 324, India. Received 10/03/2001.

- PI 620592. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Breeding. IS 33095; SPV 475. Collected in India.
- PI 620593. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33345; ADS 13. Collected in Kenya.
- PI 620594. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33346; ADS 14. Collected in Kenya.
- PI 620595. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33347; ADS 15. Collected in Kenya.

- PI 620596. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33349; ADS 17. Collected in Kenya.
- PI 620597. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33350; ADS 18. Collected in Kenya.
- PI 620598. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33352; ADS 21. Collected in Kenya.
- PI 620599. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33353; ADS 22. Collected in Kenya.
- PI 620600. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33354; ADS 23. Collected in Kenya.
- PI 620601. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33355; ADS 24. Collected in Kenya.
- PI 620602. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33356; ADS 25. Collected in Kenya.
- PI 620603. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33358; ADS 27. Collected in Kenya.
- PI 620604. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33359; ADS 28. Collected in Kenya.
- PI 620605. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33360; ADS 29. Collected in Kenya.
- PI 620606. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33361; ADS 30. Collected in Kenya.
- PI 620607. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 33363; ADS 32. Collected in Kenya.
- PI 620608. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30965; Olukumony; US 89. Collected in Uganda.
- PI 620609. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30973; Nyang-bar; US 97. Collected in Uganda.
- PI 620610. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30982; US 106. Collected in Uganda.
- PI 620611. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30992; US 116. Collected in Uganda.
- PI 620612. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 30999; Tyang; US 124. Collected in Uganda.
- PI 620613. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31005; Lawera-adilang; US 130. Collected in Uganda.
- PI 620614. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31164; Oryamatera; US 309. Collected in Uganda.

- PI 620615. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31173; US 318. Collected in Uganda.
- PI 620616. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31177; US 322. Collected in Uganda.
- PI 620617. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31183; US 328. Collected in Uganda.
- PI 620618. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31322; Kabusiba; US 474. Collected in Rukungiri, Uganda.
- PI 620619. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31329; Kankwerere-bwambara; US 482. Collected in Uganda.
- PI 620620. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31336; Kankwerere mashafu II; US 489. Collected in Uganda.
- PI 620621. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31344; US 498. Collected in Rukungiri, Uganda.
- PI 620622. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31479; Rutanga; US 636. Collected in Uganda.
- PI 620623. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31486; Kimika; US 643. Collected in Uganda.
- PI 620624. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. IS 31492; US 649. Collected in Uganda.

The following were collected by M.N. Koppar, Nat. Bureau of Plant Genetic Resources, Germplasm Exploration Div., Indian Council of Ag. Res., New Delhi, Delhi 110 012, India; S. Appa Rao, Int. Crops Res. Inst. for the Semi-Arid Tropics, Germplasm Resources Unit, Patancheru, Andhra Pradesh 502 324, India; V. Gopal Reddy, Int. Crops Res. Inst. for the Semi-Arid Tropics, Genetic Resources Division, Patancheru, Andhra Pradesh 502324, India. Donated by N Kameswara Rao, ICRISAT, Genetic Resources and Enhancement Program, Patancheru, Andhra Pradesh 502 324, India. Received 10/03/2001.

- PI 620625. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 104; IS 32374. Collected 11/16/1986 in Orissa, India.
- PI 620626. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 131; IS 32392; Gangai. Collected 11/16/1986 in Bihar, India.
- PI 620627. *Sorghum bicolor* (L.) Moench **subsp. bicolor**
Landrace. AKG 173; IS 32411. Collected 11/19/1986 in Bihar, India.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Blair J. Goates, USDA-ARS, National Small Grains Germplasm Res. Facility, 1691 S. 2700 W., Aberdeen, Idaho 83210, United States; G. Fuentes-Davila, International Maize & Wheat Improvement Center, Apdo. Postal

6-641, Mexico City, Federal District 06600, Mexico; Josh Udall, Iowa State University, Botany Dept., Bessey Hall, Ames, Iowa 50011, United States. Received 10/29/2001.

PI 620628. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. A93324S-76kbr; ID0602. GP-776. Pedigree - Borlaug M95*2/Westbred 926. Released 2003. Semi-dwarf spring wheat adapted to irrigated production systems of the western U.S. Hard red spring type with good bread quality and grain yields similar to standard cvs. White chaffed awned heads and resistant to stripe rust (*Puccinia striiformis*). High levels of resistance to the pathogen *Neovosa indica*, the casual organism for Karnal bunt. Resistance likely derived from cv. Weaver.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Katherine O'Brien, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States. Received 10/29/2001.

PI 620629. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "DW"; ID0513; A8616W-IS. PVP 200200151; CV-948. Pedigree - Waid/2*Borah//Neeley/3/Blizzard. Released 2001. Hard red winter wheat adapted to rainfed production systems of the Pacific Northwestern U.S. Semi-dwarf genotype, with bronze chaff and awned heads. Resistant to stripe rust (*Puccinia striiformis*), dwarf bunt (*Tilletia controversa*), and snow mold (*Typhula* spp.) Excellent bread quality but relatively low grain protein content.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States; R. McLean, Pendleton Flour Mills, 463 W. Hwy 26, Blackfoot, Idaho 83221, United States. Received 10/29/2001.

PI 620630. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "MORELAND"; ID0517; A86327W-3-2-2. PVP 200200266; CV-949. Pedigree - Sonora 65/II-60-155//Heglar/3/Warrior//Kiowa/PI 178383/6/Frococor//Frontana/Yaqui/3/Wanser/4/McCall/5/Heglar/7/A81665W-45. Released 2002. Hard red winter wheat adapted to irrigated production regions of the Pacific Northwest of the U.S. Semi-dwarf plant type with bronze chaff and awned heads. Moderately resistant to stripe rust (*Puccinia striiformis*). Exceptionally strong gluten and relatively high grain protein content in irrigated production systems.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Katherine O'Brien, University of Idaho, Aberdeen Research & Extension Center, P.O. Box AA, Aberdeen, Idaho 83210, United States; Bradford D. Brown, University of Idaho, Parma Research & Extension Center, 29603 U of I Lane, Parma, Idaho 83660, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States. Received 10/29/2001.

PI 620631. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "ALTURAS"; IDO526; A89078S-10. PVP 200200265; CV-950 Pedigree - Whitebird/Centennial. Released 2002. Soft white spring wheat adapted to the Pacific Northwest of the U.S. Semi-dwarf plant type and is awned and white chaffed. Resistant to the organisms that cause stripe rust and leaf rust. Carries a single mutation to the GBSS loci and the 5+10 allele at the Glu1D locus.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States; R. McLean, Pendleton Flour Mills, 463 W. Hwy 26, Blackfoot, Idaho 83221, United States. Received 10/29/2001.

PI 620632. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "GARY"; IDO550; A879W-5. PVP 200200152; CV-951. Pedigree - Manning*2/Survivor. Released 2001. Hard white winter wheat adapted to the rainfed production systems of the Pacific Northwest. Tall semi-dwarf wheat that is awned with white chaff at maturity. Resistant to the causal organisms of stripe rust, dwarf bunt, and snow mold. Low grain polyphenol oxidase activity.

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States. Received 10/29/2001.

PI 620633. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. IDO556; A91329S-22. Pedigree - Centennial/Tincurrin. Spring club wheat with soft white seed. Semi-dwarf with awns, white chaff, and a very compact head type. Resistant to stripe rust (*Puccinia graminis*). Adapted to both irrigated and rainfed production systems of the Pacific Northwestern U.S. End-use quality typical of a United States club wheat.

PI 620634. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. IDO563; A95631S-Js-4-2. Pedigree - Kanto 79/2*IDO488. Soft white spring wheat with early maturity and semi-dwarf stature. White chaffed awned heads at maturity. Resistant to stripe rust (*Puccinia striiformis*). Grain with low polyphenol oxidase activity and elevated percentages of amylopectin in the starch. Has null GBSS alleles at the A and B genome loci for that enzyme.

PI 620635. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. IDO569. Pedigree - Alpowa/Pomerelle. Soft white spring wheat adapted to the Pacific Northwest of the U.S. Semi-dwarf wheat with white chaff and awned heads. Resistant to stripe rust (*Puccinia striiformis*). Superior soft wheat quality with very low flour water absorbance due to pentosans.

PI 620636. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. IDO571; A781011W-1-4. Pedigree - A7257W-71-2-1/A77695W. Hard red winter wheat adapted to the Pacific Northwest of the U.S. Semi-dwarf plant, awned, bronze, chaffed, and winter hardy. Excellent milling and baking quality. Resistant to dwarf smut (*Tilletia controversa*) and stripe rust (*Puccinia striiformis*).

PI 620637. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. IDO576; A9495W-G-1. Pedigree - Sprague*2/IDO444. IDO444 is PI 578278. Soft white winter wheat adapted to the Pacific Northwest of the U.S. Semi-dwarf plant stature, is awned and white chaffed. Moderate resistance to stripe rust (*Puccinia striiformis*). Highly resistant to snow molds (*Typhula* species). Also resistant to dwarf bunt (*Tilletia controversa*).

The following were developed by Edward J. Souza, University of Idaho, Aberdeen Research & Extension Center, P.O. Box 870, Aberdeen, Idaho 83210, United States; Mary Guttieri, University of Idaho, PO Box 870, 1693 S 2700 W, Aberdeen, Idaho 83210-0530, United States; Josh Udall, Iowa State University, Botany Dept., Bessey Hall, Ames, Iowa 50011, United States. Received 10/29/2001.

PI 620638. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. IDO580; A96203S-D-11. GP-777. Pedigree - Cadoux//Maya 74/M2. Released 2003. Hard white spring wheat with semi-dwarf stature, awned heads, and white chaff. Resistance to stripe rust (*Puccinia striiformis*). Unique for having very low levels of seed polyphenol oxidase activity at maturity. This trait derived from the synthetic hexaploid 'M2' which was developed at CIMMYT. Levels of polyphenol oxidase are similar to most durum cultivars.

The following were developed by Milton E. McDaniel, Texas A&M University, Dept. of Soil & Crops Sciences, College Station, Texas 77843, United States; Mark D. Lazar, Texas A&M University, Research & Extension Center, 6500 Amarillo Blvd. West, Amarillo, Texas 79106, United States; Brett F. Carver, Oklahoma State University, Dept. of Plant & Soil Sciences, 368 Agriculture Hall North, Stillwater, Oklahoma 74078, United States; David S. Marshall, Texas A&M University, Research & Extension Center, 17360 Coit Road, Dallas, Texas 75252-6599, United States; Lloyd R. Nelson, Texas A&M University, Agricultural Research & Extension Center, P.O. Box 200, Overton, Texas 75684, United States; Russell L. Sutton, Texas A&M University, Texas A&M University Res. & Ext. Center, 17360 Coit Road, Dallas, Texas 75252, United States. Received 10/26/2001.

PI 620639. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "TAMBAR 501"; TX94D632. PVP 200200033; CV-303. Pedigree - Developed from a composite cross population (CC11). The maternal parent in CC11 was Post (CI15695) and the pollen parent consisted of an equal mixture (by seed weight) of Hitchcock (PI 485594), Kanby (PI 539139), Milton (CI 15732), Paoli (CI 15235), Schuyler (CI 11887), Tamar 401 (CI 13778), and Tambar 402 (PI 468115). Released 2001. Winter feed-type barley that has a combination of high grain yield, early maturity, good winter hardiness, and good disease resistance. Has expressed good tolerance to barley yellow dwarf virus (BYDV) as measured in the field using a 0-to-9 scale (where 0=no symptoms and 9=plant death from BYDV). The rating averages 2.2. The field reaction to leaf rust (*Puccinia hordei*) has been resistant when tested in the southern Great Plains. Moderately resistant to net blotch (*Pyrenophora teres*), spot blotch (*Drechslera teres*), and scald (*Rhynchosporium secalis*). Susceptible to powdery mildew (*Blumeria graminis*).

The following were developed by Mario C. Therrien, Agriculture and Agri-Food Canada, Brandon Research Centre, Box 1000A, Brandon, Manitoba R7A 5Z7, Canada. Received 10/26/2001.

PI 620640. *Hordeum vulgare* L. subsp. *vulgare*

Cultivar. Pureline. "AC RANGER"; EX467-5. CV-295. Pedigree - AC Rosser /PC 11 - PC 11 selection from CIMMYT. Released 2001. Six-rowed spring forage barley suitable for forage production in the Northern Great Plains. Forage yield exceeds the Canadian forage check cvs. Virden by 4.4% across the Canadian Prairies. Forage quality is superior to all other barley varieties tested in the Western Canadian Forage Barley Test, with Total Digestible Nutrients (TDN) of 67% vs. 63% for Duke, 62% for Lacombe, and 54% for Virden. Lodging resistance and general field disease resistance rated good.

The following were developed by Warren E. Kronstad, Oregon State University, Dept. of Crop and Soil Science, Corvallis, Oregon 97331, United States. Received 12/15/1998.

PI 620641. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 3870118; NSGC 8071. Pedigree - Hyslop/?R37/GHL1/3.

PI 620642. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 3900394; NSGC 8072. Pedigree - NRPB81-455/Merkur.

PI 620643. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 3930396; NSGC 8073. Pedigree - M632/11988.

PI 620644. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 3930153; 308 O 2-231; NSGC 8074.

PI 620645. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 900327; NSGC 8075. Pedigree - F12.71/Cocoraque 75//Carsten/Gigant.

PI 620646. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 889294; NSGC 8076. Pedigree - Neuzucht/Bezostaja 1//Alondra/4/Nadadores 63//Triumph/CI12406/3/Emu.

PI 620647. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 3930324; NSGC 8077. Pedigree - 3024.01/Rendezvous.

PI 620648. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 899210; NSGC 8078. Pedigree - Iona/Rendezvous.

PI 620649. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 3880045; NSGC 8079. Pedigree - VPM 1/MOS951//CI13438, 8815.

PI 620650. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 910102; NSGC 8080. Pedigree - Rendezvous/4/Siete Cerros/Ciano//Calidad/3/Yamhill.

PI 620651. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 880494; NSGC 8081. Pedigree - OR7946/Hill//Hill.

- PI 620652. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3900438; NSGC 8082. Pedigree - TCK82799/WAR//Burt/PI178383/3/Hill.
- PI 620653. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3880039; NSGC 8083. Pedigree - Stephens*2/Thule III.
- PI 620654. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3890191; NSGC 8084. Pedigree - Stephens/Hohenheimer, BT5.
- PI 620655. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3890209; SMUT1571-40; NSGC 8085.
- PI 620656. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3890210; SMUT1590-165; NSGC 8086.
- PI 620657. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3930052; 456 S 1-12; NSGC 8087.
- PI 620658. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3930053; 650 R 1-21; NSGC 8088.
- PI 620659. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3930252; NSGC 8089. Pedigree - Kolenten/PME/317C/Ciano 67//Calidad/4/Cleopatra 74.
- PI 620660. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3930264; NSGC 8090. Pedigree - KS73H530/Veery 'S'.
- PI 620661. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 910147; NSGC 8091. Pedigree - TJB841/1543//WA5987/4/Davis 6301/HN7//Era/3/Buckbuck.
- PI 620662. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 908294; NSGC 8092. Pedigree - Fief/Pernel.
- PI 620663. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 900438; NSGC 8093. Pedigree - Stephens/4/Davis 6301/HN7//Era/3/Buckbuck/5/Malcolm.
- PI 620664. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 861555; NSGC 8094. Pedigree - VS74-709/Buckbuck.
- PI 620665. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 890074; NSGC 8095. Pedigree - Aurora/Minn/Heines Kolben/38 M.A./Yamhill/Era/Collafen/Bezostaja/SU/CI13645/NAI/Emu.
- PI 620666. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3950719; NSGC 8096. Pedigree - P648.05/Brandish.
- PI 620667. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3950803; NSGC 8097.
- PI 620668. *Triticum aestivum* L. **subsp. aestivum**
Breeding. Pureline. 3950804; NSGC 8098.

- PI 620669. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3930267; NSGC 8099. Pedigree - BUL1687-1/Lovrin 38//BUL305-44.
- PI 620670. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3920022; NSGC 8100.
- PI 620671. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3870552; NSGC 8101. Pedigree - TJB406.892/Moncho 'S'.
- PI 620672. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3930326; NSGC 8102. Pedigree - Batten/C6891.
- PI 620673. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3930330; NSGC 8103. Pedigree - C7205/3024.01.
- PI 620674. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 908237; NSGC 8104. Pedigree - CARGL62//TJB368-251/Buckbuck.
- PI 620675. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 899407; NSGC 8105. Pedigree - Moulin//TJB368-251/Buckbuck.
- PI 620676. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 908134; NSGC 8106. Pedigree - Carsten/Gigant/5/Aurora/3/Minn//Heines Kolben/38 M.A./4/Yamhill/Era.
- PI 620677. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 910379; NSGC 8107. Pedigree - CL/833//CL/3/Top/Fundus/4/Cama/Pavone.
- PI 620678. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 2626; NSGC 8108. Pedigree - Hyslop//R37/GHL1.
- PI 620679. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3870115; NSGC 8109. Pedigree - Hyslop//R37/GHL1.
- PI 620680. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3870634; NSGC 8110. Pedigree - Hyslop//R37/GHL1.
- PI 620681. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3930387; NSGC 8111. Pedigree - Roussalka/VA103, FW83102 B7046/VA103/SWM783787, FW83126 B7016.
- PI 620682. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3930257; NSGC 8112. Pedigree - Amigo/ROA.
- PI 620683. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950865; NSGC 8113. Pedigree - PBI1267.175.1/P748/02.
- PI 620684. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 899302; NSGC 8114. Pedigree - Davis 6301/HN7//Era/3/Buckbuck 'S'/4/Parula 'S'/Veery 6.

- PI 620685. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 1922; NSGC 8115. Pedigree - Carsten/Gigant.
- PI 620686. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3870538; NSGC 8116. Pedigree - Nord Desprez/Pullman
Sel 101//Azteca 67.
- PI 620687. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3930055; 309 O 3-111; NSGC 8117.
- PI 620688. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 920548; NSGC 8118. Pedigree - 8655/Timson/3/Carsten
V/Gigant//Adams.
- PI 620689. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3920068; NSGC 8119. Pedigree - 14IBWSN19/3417.04.
- PI 620690. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 900327; NSGC 8120. Pedigree - F12.71/Cocoraque
75//Carsten/Gigant.
- PI 620691. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 900192; NSGC 8121. Pedigree - Aurora/3/Minn/Heines
Kolben/38 M.A./4/Yamhill/Era/5/85CB077.
- PI 620692. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 900381; NSGC 8122. Pedigree - 85CB077/3/Nord
Desprez/Pullman Sel 101//Bluebird/Gallo.
- PI 620693. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 908289; NSGC 8123. Pedigree -
B8021/Ambassador//Cargidoc.
- PI 620694. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 908164; NSGC 8124. Pedigree - Topo 'S'/Narino
59*2//Budifen/3/Bobwhite 'S'/4/Pumafen//Ciano 'S'/Gallo.
- PI 620695. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 889303; NSGC 8125. Pedigree - Nainari
60/HN7//Buckbuck/5/F59-71//Bluebird/Kalyansona//Alondra/3/Yaqui 50
Enano/3*Kalyansona//Emu.
- PI 620696. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 899511; NSGC 8126. Pedigree -
Master/3/Hyslop/Cerco//Yamhill/Hyslop.
- PI 620697. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 908127; NSGC 8127. Pedigree -
Rendezvous/3/Probstdorfer Extrem/Tobari 66.
- PI 620698. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 910231; NSGC 8128. Pedigree -
Collafen/Bezostaja//Suweon 92/CI13645/3/Nainari
60/4/Emu/5/TJB788-1089/Alondra.

- PI 620699. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 900031; NSGC 8129. Pedigree - Aurora/3/Minn/Heines
Kolben/38 M.A./4/Yamhill/era/5/Buck Pangare/Baart/6/Huquin/Alondra.
- PI 620700. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 908110; NSGC 8130. Pedigree -
Rendezvous/3/Carsten/Gigant.
- PI 620701. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 910262; NSGC 8131. Pedigree -
GRTPL85504//M1223-3D-1D (MI76-77-S29)/Alondra.
- PI 620702. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3940160; NSGC 8132. Pedigree -
Kalyansona/Odзи/3/Triumph//Davis 6301/NAI//4/Titmouse 'S'.
- PI 620703. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3940263; NSGC 8133. Pedigree - Neelkant
'S'/TEMU49-82.
- PI 620704. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950710; NSGC 8134.
- PI 620705. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950712; NSGC 8135.
- PI 620706. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950727; NSGC 8136. Pedigree - P748.02/C7205.
- PI 620707. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950728; NSGC 8137. Pedigree - P748.02/C7205.
- PI 620708. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950730; NSGC 8138. Pedigree -
PBI1267.175.1/3024.01.2.
- PI 620709. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950733; NSGC 8139. Pedigree -
CWW4643.28/3042.01.3//3024/01.2.
- PI 620710. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 3950750; NSGC 8140.
- PI 620711. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. OR9630057; NSGC 8141. Pedigree - TJB801,
1332/Chilero.
- PI 620712. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. OR9630058; NSGC 8142. Pedigree -
TJB916.46/CB306//2*Maris Hobbit/3/Buckbuck.
- PI 620713. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. OR9630062; NSGC 8143. Pedigree - Pitic
62/Funo*2//Valdivia/3/CO723595.

- PI 620714. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. OR9630064; NSGC 8144. Pedigree - Pitic
62/Funo*2//Valdivia/3/CO723595.
- PI 620715. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG951041; NSGC 8145. Pedigree -
4thIWWSN60Turkey//TX71A1039-VI*3/Amigo/3/NRPB88-3141.
- PI 620716. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 928132; NSGC 8146. Pedigree - Rendezvous/6/Nainari
60/HN7//Buckbuck/5/F59-71/Bluebird/Kalyansona//Alondra/3/Yaqui.
- PI 620717. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940005; NSGC 8147. Pedigree - Budifen/Pavon
'S'//KS5210/3/VPM 1/MOS83-11-4-8//Pewee.
- PI 620718. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940043; NSGC 8148. Pedigree - Budifen/Pavon
'S'//KS5210/3/VPM 1/MOS83-11-4-8//Pewee.
- PI 620719. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940214; NSGC 8149. Pedigree -
Rendezvous/ID#2619//ID#855301.
- PI 620720. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940228; NSGC 8150. Pedigree - ID#3701/3/VPM
1/MOS83-11-4-8//Pewee/4/Budifen/Pavon 'S'.
- PI 620721. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940078; NSGC 8151. Pedigree - ID#3870279/5/VPM
1/MOS83-11-4-8//Pewee/6/Pumafen//Ciano 'S'/Gallo.
- PI 620722. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940079; NSGC 8152. Pedigree - ID#3870279/5/VPM
1/MOS83-11-4-8//Pewee/6/Pumafen//Ciano 'S'/Gallo.
- PI 620723. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940447; NSGC 8153. Pedigree - Rendezvous/3/VPM
1/MOS83-11-4-8//Pewee.
- PI 620724. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940099; NSGC 8154. Pedigree -
GRTPL6121//TJB788-1089/Aldan/5/ID#3870279.
- PI 620725. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940105; NSGC 8155. Pedigree -
GRTPL6121//TJB788-1089/Aldan/5/ID#3870279.
- PI 620726. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940205; NSGC 8156. Pedigree -
Rendezvous/5/ID#2619/6/ID#855301.
- PI 620727. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940719; NSGC 8157. Pedigree -
Cerco//Yamhill/Hyslop/3/Pumafen//Ciano 'S'/Gallo.

- PI 620728. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 942732; NSGC 8158. Pedigree - 1D13.1/Metaltail 'S'//Fasan.
- PI 620729. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 942742; NSGC 8159. Pedigree - 1D13.1/Metaltail 'S'//Fasan.
- PI 620730. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 942969; NSGC 8160. Pedigree - F12.71/Cocaraque 75//Bagula 'S'.
- PI 620731. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 943065; NSGC 8161. Pedigree - GP3357/Tui 'S'.
- PI 620732. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 943075; NSGC 8162. Pedigree - GP3357/Tui 'S'.
- PI 620733. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 943302; NSGC 8163. Pedigree - TAM200/Trapp#1 'S'.
- PI 620734. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-739; NSGC 8164. Pedigree - 4thIWWSN57Turkey/3/VPM 1/MOS83-11-4-8//Pewee.
- PI 620735. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-740; NSGC 8165. Pedigree - 4thIWWSN57Turkey/3/VPM 1/MOS83-11-4-8//Pewee.
- PI 620736. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-740; NSGC 8166. Pedigree - 4thIWWSN57Turkey/3/VPM 1/MOS83-11-4-8//Pewee.
- PI 620737. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-761; NSGC 8167. Pedigree - Mironovska 10//RMN F12-71/Jupateco 73 'S'.
- PI 620738. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-761; NSGC 8168. Pedigree - Mironovska 10//RMN F12-71/Jupateco 73 'S'.
- PI 620739. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-761; NSGC 8169. Pedigree - Mironovska 10//RMN F12-71/Jupateco 73 'S'.
- PI 620740. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-767; NSGC 8170. Pedigree - Carsten/Gigant//Zelengora.
- PI 620741. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-939; NSGC 8171. Pedigree - KS831374-141B/DYBR83-058/6/ID#889313/7/RMN F12-71/Jupateco 73.
- PI 620742. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG95-997; NSGC 8172. Pedigree - WIY910588/3/VPM 1/MOS83-11-4-8//Pewee.

- PI 620743. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG951007; NSGC 8173. Pedigree - CARGL62/3/Carsten V/Gigant//Adams/4/NRPB88-3141.
- PI 620744. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG951032; NSGC 8174. Pedigree - TAM200/Opata//.
- PI 620745. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG951036; NSGC 8175. Pedigree - Shaanmai 897/3/Joss Cambier/Emu//Dove/4/F1271/BZ.
- PI 620746. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG951047; NSGC 8176. Pedigree - F12.71/Cocoraque 75//Saulesku#14/3/AFG2/Buckbuck//Kavkaz.
- PI 620747. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG951104; NSGC 8177. Pedigree - 61.01/BN3447//Weaver.
- PI 620748. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. SEG951128; NSGC 8178. Pedigree - PNR2548/Ning 8675.
- PI 620749. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 908127; NSGC 8179. Pedigree - Rendezvous/3/Probstorfer Extrem/Tobari 66.
- PI 620750. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 910227; NSGC 8180. Pedigree - RMN F12-71/Jupateco 73 'S'//BPR689-71/Tanori 71.
- PI 620751. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 910231; NSGC 8181. Pedigree - Collafen/Bezostaja//Suweon 92/CI13645/3/Nainari 60/4/Emu/5/TJB788-1089/Alondra.
- PI 620752. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 910263; NSGC 8182. Pedigree - GRTPL85504//M1223-3D-1D (MI76-77-S29)/Alondra.
- PI 620753. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 920070; NSGC 8183. Pedigree - TEMU39.76/Chat 'S'//Cucurpe 86/3/M1223-3D-1D (MI76-77-S29).
- PI 620754. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 920450; NSGC 8184. Pedigree - Pumafen//Ciano 'S'/Gallo/3/Rendezvous.
- PI 620755. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 941102; NSGC 8185. Pedigree - unknown 89SXWF1//VPM 1/MOS83-11-4-8//Pewee.
- PI 620756. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 943202; NSGC 8186. Pedigree - ID800994-W/Kauz 'S'.
- PI 620757. *Triticum aestivum* L. subsp. *aestivum***
Breeding. Pureline. 940205; NSGC 8187. Pedigree - Rendezvous/5/ID#2619/6/ID#855301.

PI 620758. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. 941379; NSGC 8188. Pedigree - Rendezvous/3/VPM
1/MOS951//CI13438, 8815.

PI 620759. *Triticum aestivum* L. subsp. *aestivum*

Breeding. Pureline. OR9800949; NSGC 8189. Pedigree -
KS82W422/SWM754308//KS831182/KS821422/3/Stephens/Blue.

The following were collected by Joseph Postman, USDA, ARS, National Germplasm Repository, 33447 Peoria Road, Corvallis, Oregon 97333-2521, United States. Received 11/02/2001.

PI 620760. *Cucurbita palmata* S. Watson

Uncertain. Collected 10/17/2001 in California, United States. Latitude 35° 40' 12" N. Longitude 118° 15' W. Elevation 914 m. Southern end of Sierra Nevada mountains east of Lake Isabella, just past Onyx, California on Hwy. 178, northeast of Bakersfield. Arid environment. Drought tolerant.

The following were developed by Steven J. Knapp, Oregon State University, Department of Crop & Soil Science, Crop Science Building, 451C, Corvallis, Oregon 97331-3002, United States; Jimmie M. Crane, Oregon State University, Dept. of Crop and Soil Science, Crop Science Bldg, Rm. 107, Corvallis, Oregon 97331-3002, United States. Received 11/06/2001.

PI 620761. *Limnanthes alba* Hartw. ex Benth. subsp. *alba*

Cultivar. "Wheeler"; OSU_EXP_OMF86. CV-11; PVP 200200077. Pedigree - Developed through 2 cycles of recurrent half-sib family selection for increased seed yield, seed oil concentration, and lodging resistance in the OMF58 C2 population. When grown with two check cultivars, Knowles and Floral, in replicated yield trials at Corvallis between 1998 and 2001, Wheeler produced significantly more seed per hectare, seed oil, and oil per hectare. Mean seed yield of 1,749 kg/ha compared to 1,603 kg/ha for Knowles and 1,461 kg/ha for Floral (LSD0.05=70 kg/ha). Seed oil concentration of 295 g/kg was 11 g/kg greater than Knowles and Floral (both 284 g/kg)(LSD0.05=10g/kg). Mean oil yield 514 kg/ha compared to 454 kg/ha for Knowles and 414 kg/ha for Floral (LSD0.05=29 kg/ha). There were no significant differences in days to flowering, days to physiological maturity, or growth habit among Wheeler, Knowles, and Floral. Has strong upright growth characteristics required for mechanical harvest by direct combining or swathing and adapted for production as a winter annual in the mild maritime climates of the western U.S. especially the Willamette Valley of Oregon. 1000-seed weight 8.4 g compared to 8.4 g for Knowles and 8.1 for Floral.

The following were developed by W.H. Pfeiffer, International Maize & Wheat Improvement Centre, Lisboa 27, Apartado Postal 6-641, Mexico City, Federal District 06600, Mexico; A. Hede, International Maize and Wheat Improvement Center, CIMMYT Int., Lisboa 27, Mexico, Mexico 06600, Mexico; Mohamed Mergoum, International Maize and Wheat Improvement Center, CIMMYT Int., Lisboa 27, Apdo., Mexico City, Federal District 06600, Mexico; Javier Lozano-del Rio, Universidad Autonoma Agraria Antonio Narro, Buenavista, Saltillo, Coahuila C.P. 25315, Mexico; M. Colin Rico, Universidad Autonoma

Agraria Antonio Narro, Departamento de Fitomejoramiento, Buenavista, Saltillo, Coahuila 25315, Mexico; M.H. Reyes-Valdes, Universidad Autonoma Agraria Antonio Narro, Departamento de Fitomejoramiento, Buenavista, Saltillo, Coahuila 25315, Mexico. Received 10/31/2001.

PI 620762. X Triticosecale sp.

Cultivar. Pureline. "TCLF-AN-31"; Reg. No. TCL-07-080592; X-9M-0Y-1Y-2BV-1BV-1BV-0Y-ONV-ONV. CV-25. Pedigree - URSS #3310 Population. Released 1992. Winter triticale developed by CIMMYT, Mexico, reselected and released as a forage cv. in Mexico by the Universidad Autonoma Agraria "Antonio Narro" in 1992 (Reg. No. TCL-07-080592). Complete hexaploid winter triticale genotype. Tall (165-180 cm), late maturity (155-180 d). Long, fully awned, white, dense and medium upright spikes. Kernels medium dark in color with good animal feeding quality. Evaluated in advanced forage yield trials under 15 environments of northern Mexico from 1987 to 1991. On average, yielded 8590 kg ha⁻¹ (37 and 60% more dry forage than Eronga 83 spring triticale and Cuauhtemoc oat, respectively). Average crude protein content 26.2, 24.7, and 16.7% at the first, second and third cut, respectively. In vitro dry matter digestibility 75, 71, and 67% at first, second and third cut, respectively. At present, used in northern States of Mexico mainly for grazing of fattening yearling steers and heifers.

PI 620763. X Triticosecale sp.

Cultivar. Pureline. "TCLF-AN-34"; Reg. No. TCL-06-080592; X-21748-0Y-1BV-2BV-1BV-0Y-ONV-ONV. CV-26. Pedigree - 274 / 320 // 244.KISS. Released 1992. Intermediate triticale developed by CIMMYT, Mexico, reselected and released as a forage cv. in Mexico by the Universidad Autonoma Agraria "Antonio Narro" in 1992 (Reg. No.1 TCL-06-080592). Complete hexaploid intermediate triticale genotype. Tall (160-170 cm), late maturity (140-165 d). Long, fully awned, lightly colored, dense and medium lax spikes. Kernels medium dark in color with good animal feeding quality. Evaluated in advanced forage yield trials under 15 environments of northern Mexico from 1987 to 1991. In average, yielded 7770 kg ha⁻¹ (24 and 45% more dry forage than Eronga 83 spring triticale and Cuauhtemoc oat, respectively). Average crude protein content 25.4, 24.3 and 20.0% at the first, second and third cut, respectively. In vitro dry matter digestibility 73, 69 and 70% at first, second and third cut, respectively. At present, used in northern States of Mexico mainly for green forage, haying and grazing.

The following were donated by Francisco Vilaro, INIA - Programa Horticultura, Est. Exptal Las Brujas, Rincon del Colorado, Canelones, Uruguay. Received 02/16/2000.

PI 620764. Ipomoea batatas (L.) Lam. var. batatas

Cultivar. "Belastiqui"; Q 42562.

The following were developed by Texas Agricultural Experiment Station, Texas, United States. Received 11/26/2001.

PI 620765 PVPO. Solanum tuberosum L.

Cultivar. "Russet Norkotah 112". PVP 9900141.

The following were developed by James S. Quick, Colorado State University, Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; T.J. Martin, Kansas State University, Agric. Research Center-Hays, 1232 240th Avenue, Hays, Kansas 67601, United States; Frank Peairs, Colorado State University, Dept. of Bioagricultural Sciences & Pest Management, Fort Collins, Colorado 80523-1177, United States; J.B. Rudolph, Colorado State University, Dept. of Entomology, Fort Collins, Colorado 80523, United States; John Stromberger, Colorado State University, Dept. of Soil and Crop Sciences, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; Scott D. Haley, Colorado State University, Soil and Crop Sciences Department, 1170 Campus Delivery, Fort Collins, Colorado 80523, United States; J.J. Johnson, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States; Sally Clayshulte, Colorado State University, Dept. of Soil and Crop Sciences, Plant Science Building W18, Fort Collins, Colorado 80523, United States; B. Clifford, Colorado State University, Dept. of Soil and Crop Sciences, Fort Collins, Colorado 80523, United States. Received 11/19/2001.

PI 620766. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "AVALANCHE"; CO940611. PVP 200200205; CV-921. Pedigree - KS87H325/Rio Blanco ; KS87H325 = RL6005/RL6008//Larned/3/Cheney/Larned/4/Bennett sib/5/TAM107. Released 2001. Awne, white-glumed, medium maturity, semidwarf hard white winter wheat. Good straw strength and good winterhardiness, and sprouting tolerance equal to the Rio Blanco parent. Resistant to stem rust (*Puccinia graminis*), moderately susceptible to leaf rust (*Puccinia triticina*) and moderately susceptible to both wheat streak mosaic virus and barley yellow dwarf virus. Susceptible to the Great Plains biotype of Hessian fly (*Mayetiola destructor*), greenbug (*Schizaphis graminum*), and Russian wheat aphid (*Diuraphis noxia*). Very good test weight and milling and bread baking quality characteristics.

The following were donated by INIFAP, CIFAP, Experimental Valle De Mexico, Apartado Postal No. 10, KM 38.5 CARR. Mex-VER/VIA Texcoco, Chapingo, Mexico, Mexico. Received 03/18/1988.

PI 620767. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 16; MEX 16 (INIFAP ACC NO); NRC 1187; Blanco; CH-86 5#; Ames 8163. Collected 01/01/1944 in Aguascalientes, Mexico. Latitude 22° 14' N. Longitude 102° 20' W. Elevation 2164 m. Campo Experimental Pabellon, Rincon de Ramos.

PI 620768. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 20; NRC 1191; MEX 20 (INIFAP ACC NO); CH-86 6#; Ames 8164. Collected 01/31/1952 in Aguascalientes, Mexico. Latitude 21° 48' N. Longitude 102° 12' W. Elevation 2100 m. El Retono de Calvillito.

PI 620769. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 21; MEX 21 (INIFAP ACC NO); Maiz Ojo Caliente; CH-86 7#; Ames 8165. Collected 01/31/1952 in Aguascalientes, Mexico. Latitude 21° 53' N. Longitude 102° 20' W. Elevation 1944 m. La Majada de Los Artones, Aguascalientes.

- PI 620770. *Zea mays* L. subsp. *mays***
Landrace. Population. Aguascalientes 38; MEX 38 (INIFAP ACC NO); NRC 1209; Maiz Amarillo; CH-86 9#; Ames 8166. Collected 02/05/1952 in Aguascalientes, Mexico. Latitude 22° 14' N. Longitude 102° 20' W. Elevation 2250 m. Cieneguita La Presa Calles, Rincon de Ramos.
- PI 620771. *Zea mays* L. subsp. *mays***
Landrace. Population. Aguascalientes 46; MEX 46 (INIFAP ACC NO); Cana Morada; CH-86 12#; Ames 8167. Collected 01/01/1961 in Aguascalientes, Mexico. Latitude 22° 15' N. Longitude 102° 6' W. Elevation 1930 m. Colonia Calles Agricultura, Asientos.
- PI 620772. *Zea mays* L. subsp. *mays***
Landrace. Population. Aguascalientes 51; MEX 51 (INIFAP ACC NO); Temporal; CH-86 13#; Ames 8168. Collected 01/01/1961 in Aguascalientes, Mexico. Latitude 22° 8' N. Longitude 102° 25' W. Elevation 1880 m. San Jose de Garcia.
- PI 620773. *Zea mays* L. subsp. *mays***
Landrace. Population. Baja California 10; MEX 75 (INIFAP ACC NO); Mexicano de Yum; IG-87AR 1#; Ames 8169. Collected in Baja Sur, Mexico.
- PI 620774. *Zea mays* L. subsp. *mays***
Landrace. Population. Chiapas 70; NRC 1388; MEX 301 (INIFAP ACC NO); IG-87AR 32#; Ames 8170. Collected 01/01/1944 in Chiapas, Mexico. Latitude 16° 34' N. Longitude 92° 49' W. Elevation 519 m. Acala.
- PI 620775. *Zea mays* L. subsp. *mays***
Landrace. Population. Chiapas 503; MEX 738 (INIFAP ACC NO); Zapalote; IG-86/87 48#; Ames 8171. Collected 01/01/1972 in Chiapas, Mexico. Latitude 16° 14' N. Longitude 93° 16' W. Elevation 550 m. Co. 16 de Septiembre, Villa Flores.
- PI 620776. *Zea mays* L. subsp. *mays***
Landrace. Population. Chihuahua 54; MEX 989 (INIFAP ACC NO); NRC 1605; Maiz de Jimenez; B-86 26#; Ames 8173. Collected 02/09/1943 in Chihuahua, Mexico. Latitude 27° 8' N. Longitude 104° 55' W. Elevation 1480 m. Rancho Rodriguez, Jimenez.
- PI 620777. *Zea mays* L. subsp. *mays***
Landrace. Population. Chihuahua 56; MEX 991 (INIFAP ACC NO); NRC 1607; Jaraleno; B-86 27#; Ames 8174. Collected 02/09/1943 in Chihuahua, Mexico. Latitude 27° 1' N. Longitude 105° 17' W. Elevation 1480 m. San Juan de Allende, Valle de Allende.
- PI 620778. *Zea mays* L. subsp. *mays***
Landrace. Population. Chihuahua 93; MEX 1028 (INIFAP ACC NO); Pepitilla; CH-86 27#; Ames 8175. Collected 01/01/1954 in Chihuahua, Mexico. Latitude 28° 38' N. Longitude 106° 5' W. Elevation 1850 m. Colonia Guerrero, Chihuahua.
- PI 620779. *Zea mays* L. subsp. *mays***
Landrace. Population. Chihuahua 107; Olote Blanco; CH-86R 30#; Ames 8176. Collected in Chihuahua, Mexico.

- PI 620780. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-007964; Chihuahua 230; MEX 1165 (INIFAP ACC NO); Dulce Rojo; IG-86/87 13#; Ames 8177. Collected 01/01/1968 in Chihuahua, Mexico. Latitude 28° 10' N. Longitude 108° 32' W. Elevation 950 m. Moris.
- PI 620781. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 82; MEX 1366 (INIFAP ACC NO); Palomero; IG-86/87 2#; Ames 8178. Collected in Coahuila, Mexico. Latitude 28° 30' N. Longitude 100° 56' W. Elevation 250 m. Zaragoza.
- PI 620782. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 92; MEX 1376 (INIFAP ACC NO); Ames 8179. Collected in Coahuila, Mexico. Latitude 28° 25' N. Longitude 100° 47' W. Elevation 300 m. Nava.
- PI 620783. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 107; MEX 1390 (INIFAP ACC NO); IG-86/87 6#; Ames 8180. Collected in Coahuila, Mexico. Latitude 27° 20' N. Longitude 102° 0' W. C.A.E.A. Narro.
- PI 620784. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-002133; Colima 8; MEX 1415 (INIFAP ACC NO); NRC 1731; Criollo; IG-86/87 8#; Ames 8181. Collected 01/30/1953 in Colima, Mexico. Latitude 19° 20' N. Longitude 103° 44' W. Elevation 500 m. Comala. ALIMENTACION.
- PI 620785. *Zea mays* L. subsp. *mays***
Landrace. Population. Durango 29; NRC 1777; MEX 1489 (INIFAP ACC NO); Oloton; CH-86 47#; Ames 8182. Collected 02/01/1952 in Durango, Mexico. Latitude 24° 31' N. Longitude 104° 46' W. Elevation 2080 m. Venustiano Carranza, Canatlan.
- PI 620786. *Zea mays* L. subsp. *mays***
Landrace. Population. Durango 61; MEX 1521 (INIFAP ACC NO); B-86R 55#; Ames 8183. Collected 01/01/1950 in Durango, Mexico. Latitude 25° 30' N. Longitude 103° 31' W. Carlos Real.
- PI 620787. *Zea mays* L. subsp. *mays***
Landrace. Population. Durango 84; MEX 1544 (INIFAP ACC NO); IG-86/87 56#; Ames 8184. Collected 01/01/1968 in Durango, Mexico. Latitude 22° 30' N. Longitude 104° 30' W. Elevation 510 m. Huazamota, Mezquital. Esta coleccion es Igual a Nayarit 271 en CIMMYT (from note on MEX_ALL/LAMP CD).
- PI 620788. *Zea mays* L. subsp. *mays***
Landrace. Population. Durango 85; MEX 1545 (INIFAP ACC NO); Arroz; IG-85AR 57#; Ames 8185. Collected 01/01/1968 in Durango, Mexico. Latitude 22° 30' N. Longitude 104° 30' W. Elevation 510 m. Huazamota, Mezquital. Esta coleccion es igual a Nayarit 272 en CIMMYT (from Note section of MEX_ALL CD).
- PI 620789. *Zea mays* L. subsp. *mays***
Landrace. Population. Durango 87; MEX 1547 (INIFAP ACC NO); Hibrido Chaparrito; IG-86/87 58#; Ames 8186. Collected 01/01/1968 in Durango,

Mexico. Latitude 22° 30' N. Longitude 104° 30' W. Elevation 510 m. Huazamota, Mezquital. Esta coleccion es Igual A Nayarit 274 en CIMMYT (from note on MEX_ALL/LAMP CD).

PI 620790. Zea mays L. subsp. mays

Landrace. Population. CIMMYTMA-010633; Durango 101; MEX 1561 (INIFAP ACC NO); Maiz Ajo; IG-86/87; Ames 8187. Collected 01/01/1968 in Durango, Mexico. Latitude 23° 28' N. Longitude 104° 21' W. Elevation 700 m. Rancho Calitique, Mezquital. Esta coleccion ed Igual a Nayarit 288 en CIMMYT (from note on MEX_ALL/LAMP CD).

PI 620791. Zea mays L. subsp. mays

Landrace. Population. CIMMYTMA-007232; Durango 108; MEX 1568 (INIFAP ACC NO); Quino; IG-86/87 60#; Ames 8188. Collected 01/01/1968 in Durango, Mexico. Latitude 24° 58' N. Longitude 106° 59' W. Elevation 500 m. San Jose del Palmar, Tamazula. 10-12 hileras rectas, olote grueso blanco < rosadorigido, grano redondeado tipo tuxpeno (from MEX_ALL CD).

PI 620792. Zea mays L. subsp. mays

Landrace. Population. Durango 250; MEX 1710 (INIFAP ACC NO); Temporal Blanco; CH-86 56#; Ames 8189. Collected 01/15/1974 in Durango, Mexico. Latitude 24° 27' N. Longitude 104° 7' W. Elevation 2000 m. Fraccionamiento San Pantalion, Guadalupe Victoria.

PI 620793. Zea mays L. subsp. mays

Landrace. Population. Durango 262; MEX 1722 (INIFAP ACC NO); Amarillo; CH-86R 57#; Ames 8190. Collected 01/12/1974 in Durango, Mexico. Latitude 24° 53' N. Longitude 103° 42' W. Cuauhtemoc, Cuencame.

PI 620794. Zea mays L. subsp. mays

Landrace. Population. Durango 269; MEX 1729 (INIFAP ACC NO); Blanco 4 Meses; CH-86 58#; Ames 8191. Collected 01/11/1974 in Durango, Mexico. Latitude 25° 35' N. Longitude 105° 3' W. Lazaro Cardenas, Panuco de Coronado.

PI 620795. Zea mays L. subsp. mays

Landrace. Population. Guanajuato 79A; MEX 1814 (INIFAP ACC NO); B-86 85# ; Ames 8192. Collected 01/01/1945 in Guanajuato, Mexico. Latitude 20° 13' N. Longitude 100° 53' W. Rancho Magdalena, Salvatierra. Collection date for Guanajuato 79A is one year after Gaunajuato 79 (PI 484678).

PI 620796. Zea mays L. subsp. mays

Landrace. Population. Guanajuato 187; MEX 1918 (INIFAP ACC NO); Negro; CH-86 69#; Ames 8193. Collected 04/03/1974 in Guanajuato, Mexico. Latitude 20° 57' N. Longitude 101° 25' W. Elevation 1900 m. Ejido El Capulin, Silao.

PI 620797. Zea mays L. subsp. mays

Landrace. Population. Guerrero 1; MEX 2075 (INIFAP ACC NO); NRC 1879; Semi Pepitilla; IG-86/87 61#; Ames 8194. Collected 01/01/1943 in Guerrero, Mexico. Latitude 18° 22' N. Longitude 99° 33' W. Elevation 747 m. Iguala.

- PI 620798. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 21; MEX 2095 (INIFAP ACC NO); NRC 1899; Pink(Rosado); IG-86/87 63#; Ames 8195. Collected 01/01/1946 in Guerrero, Mexico. Latitude 18° 22' N. Longitude 99° 33' W. Elevation 747 m. Iguala.
- PI 620799. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 38; MEX 2112 (INIFAP ACC NO); NRC 1916; 3 Mesino Blas; IG-87AR 64#; IG-86/87 64#; Ames 8196. Collected 01/01/1947 in Guerrero, Mexico. Latitude 18° 18' N. Longitude 100° 42' W. Elevation 300 m. Coyuca de Catalan.
- PI 620800. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 92; NRC 1970; MEX 2167 (INIFAP ACC NO); Camileno; IG-86/87 66#; Ames 8197. Collected 01/01/1947 in Guerrero, Mexico. Latitude 17° 39' N. Longitude 101° 34' W. Elevation 30 m. Zihuatanejo.
- PI 620801. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-000212; Guerrero 114; MEX 2190 (INIFAP ACC NO); NRC 1992; San Blaseno; IG-86/87 67#; Ames 8198. Collected 01/01/1947 in Guerrero, Mexico. Latitude 18° 25' N. Longitude 102° 27' W. Elevation 480 m. Vallecito.
- PI 620802. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 119; MEX 2195 (INIFAP ACC NO); NRC 1997; Grande; IG-86/87 69#; Ames 8199. Collected 01/01/1947 in Guerrero, Mexico. Latitude 17° 32' N. Longitude 101° 17' W. Elevation 1000 m. Real de Guadalupe, Petatlan.
- PI 620803. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 120; MEX 2196 (INIFAP ACC NO); NRC 1998; 3 Mesino; IG-86/87 70#; Ames 8200. Collected 01/01/1947 in Guerrero, Mexico. Latitude 17° 32' N. Longitude 101° 17' W. Elevation 1000 m. Real de Guadalupe, Petatlan.
- PI 620804. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 197; MEX 2276 (INIFAP ACC NO); NRC 2688; Camileno; IG-86/87 82#; Ames 8201. Collected 03/06/1952 in Guerrero, Mexico. Latitude 17° 58' N. Longitude 101° 48' W. Elevation 60 m. La Union. No resiste sequias, resistente a lluvias, tallodelgado y pocas hojas.(From LAMP 95 CD< INIFAP DB).
- PI 620805. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-000177; GUER 200; NRC 2691; MEX 2279 (INIFAP ACC NO); Vandeno; Guerrero 200; IG-86/87 72#; FN83017101; Ames 8202. Collected 03/06/1952 in Guerrero, Mexico. Latitude 17° 58' N. Longitude 101° 48' W. Elevation 10 m. Troncones, La Union. Resistant to drought, winds, thick stalk. (From LAMP 95 CD, INIFAP DB).
- PI 620806. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 263; MEX 2342 (INIFAP ACC NO); Pepitilla Roman; IG-86/87 75#; Ames 8203. Collected in Guerrero, Mexico.
- PI 620807. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 268; MEX 2347 (INIFAP ACC NO); Pepitilla Roman; IG-86/87 76#; Ames 8204. Collected in Guerrero, Mexico.

- PI 620808. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 291; MEX 2370 (INIFAP ACC NO); Lengua de Pajaro; IG-86/87 78#; Ames 8205. Collected 11/26/1973 in Guerrero, Mexico. Latitude 18° 27' N. Longitude 100° 59' W. Elevation 100 m. La Hacienda, Zirandaro.
- PI 620809. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 292; MEX 2371 (INIFAP ACC NO); Criollo; IG-86/87 79#; Ames 8206. Collected 11/26/1973 in Guerrero, Mexico. Latitude 18° 27' N. Longitude 100° 59' W. Elevation 193 m. La Hacienda, Zirandaro.
- PI 620810. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 295; MEX 2374 (INIFAP ACC NO); Arrocillo; IG-86/87 80#; Ames 8207. Collected 11/26/1973 in Guerrero, Mexico. Latitude 16° 54' N. Longitude 99° 13' W. La Concordia, Ayutla.
- PI 620811. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 300; MEX 2379 (INIFAP ACC NO); Huachinanteco; IG-86/87 84#; Ames 8208. Collected 11/27/1973 in Guerrero, Mexico. Latitude 16° 40' N. Longitude 98° 54' W. Paso Morelos, Cuauhtepic.
- PI 620812. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 301; MEX 2380 (INIFAP ACC NO); Blanco Delgado; IG-86/87 85#; Ames 8209. Collected 11/27/1973 in Guerrero, Mexico. Latitude 18° 18' N. Longitude 99° 29' W. Elevation 1000 m. Tuzantla, Tepecoacuilco.
- PI 620813. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 304; MEX 2383 (INIFAP ACC NO); Itzihuini Morado; IG-86/87 87#; Ames 8210. Collected 11/27/1973 in Guerrero, Mexico. Latitude 18° 18' N. Longitude 99° 29' W. Elevation 1000 m. Tuzantla, Tepecoacuilco.
- PI 620814. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 336; MEX 2415 (INIFAP ACC NO); Arrocillo; IG-86/87 89#; Ames 8211. Collected 12/11/1973 in Guerrero, Mexico. Latitude 18° 18' N. Longitude 99° 21' W. Elevation 900 m. Huitzuco.
- PI 620815. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 337; MEX 2416 (INIFAP ACC NO); Colorado; IG-86/87 90#; Ames 8212. Collected 12/11/1973 in Guerrero, Mexico. Latitude 18° 18' N. Longitude 99° 21' W. Elevation 900 m. Huitzuco.
- PI 620816. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 338; MEX 2417 (INIFAP ACC NO); Ancho Pozolero; IG-86/87 91#; Ames 8213. Collected 12/11/1973 in Guerrero, Mexico. Latitude 18° 18' N. Longitude 99° 21' W. Elevation 900 m. Huitzuco.
- PI 620817. *Zea mays* L. subsp. *mays***
Landrace. Population. Guerrero 339; MEX 2418 (INIFAP ACC NO); Pepitilla; IG-86/87 92#; Ames 8214. Collected 12/11/1973 in Guerrero, Mexico.

Latitude 18° 18' N. Longitude 99° 21' W. Elevation 900 m.
Huitzucó.

PI 620818. *Zea mays* L. subsp. *mays*

Landrace. Population. Guerrero 342; MEX 2421 (INIFAP ACC NO); Blanco Delgado; IG-86/87 94#; Ames 8215. Collected 12/13/1973 in Guerrero, Mexico. Latitude 18° 22' N. Longitude 99° 33' W. Elevation 740 m. Tuxpan, Iguala.

PI 620819. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 39; MEX 2500 (INIFAP ACC NO); NRC 2750; Pinto; IG-87AR 103#; Ames 8216. Collected 01/19/1952 in Hidalgo, Mexico. Latitude 20° 32' N. Longitude 98° 38' W. Elevation 1400 m. San Isidro, Metzquititlan.

PI 620820. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 125; HGO 125; MEX 2586 (INIFAP ACC NO); Criollo; CH-88 13#; Ames 8217. Collected 01/01/1972 in Hidalgo, Mexico. Latitude 19° 53' N. Longitude 98° 49' W. Elevation 2420 m. Tezontepec.

PI 620821. *Zea mays* L. subsp. *mays*

Landrace. Population. Jalisco 9; MEX 2706 (INIFAP ACC NO); NRC 2776; Amarillo Legitimo; IG-87AR 105#; Ames 8218. Collected 01/01/1943 in Jalisco, Mexico. Latitude 20° 34' N. Longitude 104° 4' W. Elevation 1250 m. Ameca y San Martin Hidalgo.

PI 620822. *Zea mays* L. subsp. *mays*

Landrace. Population. Jalisco 58A; MEX 2760 (INIFAP ACC NO); NRC 2828; Arrieta; IG-87AR 110#; Ames 8219. Collected 01/01/1945 in Jalisco, Mexico. Latitude 20° 34' N. Longitude 104° 4' W. Elevation 1250 m. Comunidad de Ameca. Collection date for Jalisco 58A is different than for Jalisco 58 (PI 515286). They were also grown in different nurseries.

PI 620823. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-000620; Jalisco 166; MEX 2871 (INIFAP ACC NO); NRC 2937; IG-87AR 115#; Ames 8220. Collected 01/01/1946 in Jalisco, Mexico.

PI 620824. *Zea mays* L. subsp. *mays*

Landrace. Population. Jalisco 201; MEX 2911 (INIFAP ACC NO); NRC 2972; Blanco; B-86 168#; Ames 8221. Collected 01/01/1952 in Jalisco, Mexico. Latitude 20° 16' N. Longitude 104° 30' W. Elevation 1645 m. San Jose de Los Andrades.

PI 620825. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-007024; Jalisco 286; MEX 3000 (INIFAP ACC NO); Tabasqueno; IG-86/87 120#; Ames 8222. Collected 11/14/1968 in Jalisco, Mexico. Latitude 20° 19' N. Longitude 105° 20' W. Elevation 350 m. El Tuito de San Pedro, Cabo Corrientes. 21cm. cilindrico, grano grueso con ligera capablanca dentado, 12-14 hileras olote blanco rigido. From Lamp 95 CD, INIFAP DB.

PI 620826. *Zea mays* L. subsp. *mays*

Landrace. Population. Jalisco 334; MEX 3049 (INIFAP ACC NO); CH-86 89#; Ames 8223. Collected 04/04/1974 in Jalisco, Mexico. Latitude 21° 22'

N. Longitude 101° 55' W. Elevation 2130 m. R. El Mosco 25 km north,
Lagos de Moreno.

PI 620827. *Zea mays* L. subsp. *mays*

Landrace. Population. Jalisco 412; MEX 3127 (INIFAP ACC NO); Cristalino
Amarillo; IG-86/87 121#; Ames 8224. Collected in Jalisco, Mexico.
Latitude 19° 28' N. Longitude 104° 54' W. Pie de Puerco, La
Huerta.

PI 620828. *Zea mays* L. subsp. *mays*

Landrace. Population. Mexico 81; MEX 3481 (INIFAP ACC NO); NRC 3108;
Criollo; CH-86 93#; Ames 8225. Collected 02/14/1952 in Mexico, Mexico.
Latitude 18° 56' N. Longitude 99° 53' W. Elevation 2480 m. Los
Morales, Ejido de Mexico.

PI 620829. *Zea mays* L. subsp. *mays*

Landrace. Population. Mexico 176; MEX 176; MEX 3576 (INIFAP ACC NO);
Blanco; CH-88 99#; Ames 8226. Collected 01/01/1954 in Mexico, Mexico.
Latitude 19° 44' N. Longitude 99° 27' W. Elevation 2600 m. Villa
del Carbon.

PI 620830. *Zea mays* L. subsp. *mays*

Landrace. Population. Mexico 329; MEX 3729 (INIFAP ACC NO); CH-86 172#;
Ames 8227. Collected in Mexico, Mexico. Latitude 19° 28' N.
Longitude 99° 35' W. Cuautemoc Zanacatlan, Temoaya.

PI 620831. *Zea mays* L. subsp. *mays*

Landrace. Population. Mexico 335; MEX 3735 (INIFAP ACC NO); Palomero
Milpa; CH-86 104#; Ames 8228. Collected 01/01/1950 in Mexico, Mexico.
Latitude 19° 11' N. Longitude 99° 1' W. Milpa Alta.

PI 620832. *Zea mays* L. subsp. *mays*

Landrace. Population. Mexico 358; MEX 3758 (INIFAP ACC NO); CH-86 106#;
Ames 8229. Collected 01/01/1950 in Mexico, Mexico. Latitude 19° 9'
N. Longitude 99° 28' W. San Pedro, Tianguistenco.

PI 620833. *Zea mays* L. subsp. *mays*

Landrace. Population. Michoacan 108; NRC 3256; MEX 4233 (INIFAP ACC NO);
3 Mezino; Ames 8230. Collected 01/01/1946 in Michoacan, Mexico. Latitude
18° 54' N. Longitude 100° 46' W. Elevation 340 m. Tiquicheo.

PI 620834. *Zea mays* L. subsp. *mays*

Landrace. Population. Michoacan 113; NRC 3261; MEX 4238 (INIFAP ACC NO);
IG-86/87 128#; Ames 8231. Collected 01/01/1946 in Michoacan, Mexico.
Latitude 19° 10' N. Longitude 101° 50' W. Coyacho.

PI 620835. *Zea mays* L. subsp. *mays*

Landrace. Population. Michoacan 127; MEX 4253 (INIFAP ACC NO); NRC 3275;
Ames 8232. Collected 01/01/1946 in Michoacan, Mexico.

PI 620836. *Zea mays* L. subsp. *mays*

Landrace. Population. Michoacan 293; MEX 4423 (INIFAP ACC NO); Trimesino;
IG-86/87 139#; Ames 8233. Collected 01/01/1968 in Michoacan, Mexico.

PI 620837. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-002240; Morelos 3; MEX 4583 (INIFAP ACC
NO); NRC 3370; Mezclado; IG-86/87 142#; Ames 8234. Collected 01/01/1943

in Morelos, Mexico. Latitude 18° 36' N. Longitude 99° 10' W.
Elevation 884 m. Jojutla Mercado.

PI 620838. Zea mays L. subsp. mays

Landrace. Population. Nayarit 147; MEX 4891 (INIFAP ACC NO); Criollo;
IG-86/87 156#; Ames 8236. Collected 01/01/1951 in Nayarit, Mexico.
Latitude 21° 49' N. Longitude 105° 12' W. Elevation 15 m. Rancho
La Trozada, Santiago Ixcuintla.

PI 620839. Zea mays L. subsp. mays

Landrace. Population. CIMMYTMA-007077; Nayarit 225; MEX 4969 (INIFAP ACC
NO); Maiz Bofo; IG-86/87 159#; Ames 8237. Collected 01/01/1968 in Nayarit,
Mexico. Latitude 21° 40' N. Longitude 104° 54' W. Elevation 900 m.
Comunidad Santa Rosa, Las Noras.

PI 620840. Zea mays L. subsp. mays

Landrace. Population. Nayarit 289; MEX 5033 (INIFAP ACC NO); Ames 8238.
Collected 01/01/1975 in Nayarit, Mexico. Latitude 21° 21' N.
Longitude 104° 35' W. Elevation 1200 m. Colonia Moderna, Santa Maria
del Oro. Esta coleccion se encuentra en CIMMYT pero no es la misma
semilla que hay en inia (Note on LAMP 95 CD, INIFAP DB).

PI 620841. Zea mays L. subsp. mays

Landrace. Population. Nuevo Leon 68; MEX 5148 (INIFAP ACC NO); Blanco;
IG-86/87 163#; Ames 8239. Collected 01/01/1977 in Nuevo Leon, Mexico.
Latitude 25° 23' N. Longitude 99° 18' W. Carmen.

PI 620842. Zea mays L. subsp. mays

Landrace. Population. Oaxaca 49; MEX 5249 (INIFAP ACC NO); Elotillo;
IG-86/87 173#; Ames 8240. Collected 01/01/1946 in Oaxaca, Mexico.
Latitude 16° 24' N. Longitude 94° 28' W. Elevation 45 m. Reforma
de Pineda.

PI 620843. Zea mays L. subsp. mays

Landrace. Population. Oaxaca 99; MEX 5300 (INIFAP ACC NO); NRC 3580; Del
Cerro Amole; CH-86 157#; Ames 8241. Collected in Oaxaca, Mexico. Latitude
18° 52' N. Longitude 98° 37' W. Elevation 2400 m. San Martin Zacatepec.

PI 620844. Zea mays L. subsp. mays

Landrace. Population. Oaxaca 151; MEX 5352 (INIFAP ACC NO); IG-86/87
185#; Ames 8242. Collected 01/01/1954 in Oaxaca, Mexico. Latitude
16° 25' N. Longitude 98° 4' W. Elevation 250 m. Tlacamama, San Miguel
Tlacamama.

PI 620845. Zea mays L. subsp. mays

Landrace. Population. Oaxaca 201; MEX 5404 (INIFAP ACC NO); Amarillo;
CH-86 160#; Ames 8243. Collected 01/01/1951 in Oaxaca, Mexico. Latitude
16° 31' N. Longitude 96° 59' W. Elevation 1900 m. Sola de Vega.

PI 620846. Zea mays L. subsp. mays

Landrace. Population. Puebla 19; NRC 3645; MEX 5785 (INIFAP ACC NO);
CH-86 173#; Ames 8244. Collected 01/01/1943 in Puebla, Mexico. Latitude
18° 58' N. Longitude 97° 54' W. Elevation 2270 m. Mercado de Tepeaca.

PI 620847. Zea mays L. subsp. mays

Landrace. Population. Puebla 22; NRC 3648; MEX 5788 (INIFAP ACC NO);
Some Calido; CH-86 174#; Ames 8245. Collected 01/01/1943 in Puebla,

Mexico. Latitude 18° 58' N. Longitude 97° 54' W. Elevation 2270 m. Mercado de Tepeaca.

PI 620848. Zea mays L. subsp. mays

Landrace. Population. Puebla 147; MEX 5918 (INIFAP ACC NO); NRC 3773; Criollo; CH-86R 188#; Ames 8246. Collected 01/20/1952 in Puebla, Mexico. Latitude 18° 59' N. Longitude 97° 47' W. Elevation 2080 m. Acatzingo.

PI 620849. Zea mays L. subsp. mays

Landrace. Population. Puebla 199; MEX 5970 (INIFAP ACC NO); NRC 3825; Criollo Pinto; IG 86/87 193#; Ames 8247. Collected 01/23/1952 in Puebla, Mexico. Latitude 18° 21' N. Longitude 97° 44' W. Elevation 1150 m. Tehuixtla, San Martin.

PI 620850. Zea mays L. subsp. mays

Landrace. Population. Puebla 319; MEX 6079 (INIFAP ACC NO); Colorado; CH-86 201#; Ames 8248. Collected 01/01/1971 in Puebla, Mexico. Latitude 19° 15' N. Longitude 97° 46' W. Elevation 2400 m. Hacienda Ojo de Agua, San Jose Chiapa.

PI 620851. Zea mays L. subsp. mays

Landrace. Population. Quintana Roo 104; MEX 6820 (INIFAP ACC NO); Cubano; IG-86/87 211#; Ames 8249. Collected 04/10/1974 in Quintana Roo, Mexico. Latitude 19° 37' N. Longitude 89° 0' W. Francisco Villa, Othon P. Blanco.

PI 620852. Zea mays L. subsp. mays

Landrace. Population. CIMMYTMA-002540; San Luis Potosi 56; MEX 6908 (INIFAP ACC NO); NRC 3986; Maiz Liso; IG-86/87 218#; Ames 8250. Collected 01/14/1952 in San Luis Potosi, Mexico. Latitude 21° 38' N. Longitude 99° 50' W. Elevation 980 m. San Ciro de Acosta.

PI 620853. Zea mays L. subsp. mays

Landrace. Population. CIMMYTMA-001675; San Luis Potosi 57; MEX 6909 (INIFAP ACC NO); NRC 3987; Maiz Delgado; IG-86/87 219#; Ames 8251. Collected 01/14/1952 in San Luis Potosi, Mexico. Latitude 21° 38' N. Longitude 99° 50' W. Elevation 980 m. San Ciro de Acosta.

PI 620854. Zea mays L. subsp. mays

Landrace. Population. San Luis Potosi 60; MEX 6912 (INIFAP ACC NO); NRC 3990; Breve Pinto; IG-86/87 221#; Ames 8252. Collected 01/14/1952 in San Luis Potosi, Mexico. Latitude 21° 38' N. Longitude 99° 50' W. Elevation 980 m. San Ciro de Acosta.

PI 620855. Zea mays L. subsp. mays

Landrace. Population. San Luis Potosi 84; MEX 6936 (INIFAP ACC NO); NRC 4014; Opinto Breve; IG-86/87 223#; Ames 8253. Collected 01/16/1952 in San Luis Potosi, Mexico. Latitude 21° 35' N. Longitude 99° 33' W. Elevation 780 m. Pinihuacan, Lagunillas.

PI 620856. Zea mays L. subsp. mays

Landrace. Population. CIMMYTMA-007127; Sinaloa 20; MEX 7078 (INIFAP ACC NO); IG-86/87 225#; Ames 8254. Collected 11/27/1968 in Sinaloa, Mexico. Latitude 23° 17' N. Longitude 106° 30' W. Elevation 150 m. La Noria, M. de Mazatlan.

- PI 620857. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-007192; Sinaloa 84; MEX 7142 (INIFAP ACC NO); Blando; IG-86/87 228#; Ames 8255. Collected 01/01/1968 in Sinaloa, Mexico. Latitude 26° 38' N. Longitude 108° 38' W. Elevation 200 m. Buyobampo, Choix.
- PI 620858. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-007204; Sinaloa 98; MEX 7156 (INIFAP ACC NO); IG-86/87 229#; Ames 8256. Collected 01/01/1968 in Sinaloa, Mexico. Latitude 26° 43' N. Longitude 108° 20' W. Elevation 450 m. Chicuras, Choix.
- PI 620859. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-007329; Sonora 153; MEX 7384 (INIFAP ACC NO); Chapalote; IG-86/87 234#; Ames 8257. Collected 12/15/1968 in Sonora, Mexico. Latitude 29° 1' N. Longitude 110° 8' W. Elevation 500 m. Mazatan.
- PI 620860. *Zea mays* L. subsp. *mays***
Landrace. Population. Veracruz 273; MEX 8182 (INIFAP ACC NO); IG-86/87 254#; Ames 8258. Collected in Veracruz, Mexico. Latitude 19° 20' N. Longitude 96° 40' W. Monte Alto Palmar.
- PI 620861. *Zea mays* L. subsp. *mays***
Landrace. Population. Veracruz 298; MEX 8207 (INIFAP ACC NO); Soconusco; IG-86/87 255#; Ames 8259. Collected in Veracruz, Mexico. Latitude 17° 58' N. Longitude 94° 53' W. Soconusco.
- PI 620862. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-010622; Zacatecas 58; MEX 8802 (INIFAP ACC NO); Maiz Chaparro; CH-86 240#; Ames 8261. Collected 01/01/1961 in Zacatecas, Mexico. Latitude 23° 37' N. Longitude 103° 21' W. Elevation 2196 m. Cantuna, Sain Alto.
- PI 620863. *Zea mays* L. subsp. *mays***
Landrace. Population. Zacatecas 77; MEX 8821 (INIFAP ACC NO); Santa Rosa ; CH-86 243#; Ames 8262. Collected 01/01/1950 in Zacatecas, Mexico. Latitude 23° 0' N. Longitude 103° 0' W. Rosa Villa.
- PI 620864. *Zea mays* L. subsp. *mays***
Landrace. Population. Zacatecas 115; MEX 8862 (INIFAP ACC NO); Criollo de 4 Meses; Ames 8263. Collected 01/01/1963 in Zacatecas, Mexico. Latitude 23° 38' N. Longitude 103° 39' W. Elevation 2100 m. Colonia Gonzalez Ortega, Sombrerete.
- PI 620865. *Zea mays* L. subsp. *mays***
Landrace. Population. Zacatecas 144; MEX 8891 (INIFAP ACC NO); CH-86 256#; Ames 8264. Collected 01/01/1963 in Zacatecas, Mexico. Latitude 22° 57' N. Longitude 102° 42' W. Elevation 2000 m. Calera, Victor Rosales.
- PI 620866. *Zea mays* L. subsp. *mays***
Landrace. Population. Zacatecas 241; MEX 8988 (INIFAP ACC NO); Criollo; CH-86 258#; Ames 8265. Collected 04/05/1974 in Zacatecas, Mexico. Latitude 22° 26' N. Longitude 101° 53' W. Elevation 2150 m. Estancia de La Honda, Noria de Angeles.

PI 620867. *Zea mays* L. subsp. *mays*

Landrace. Population. Zacatecas 248; MEX 8995 (INIFAP ACC NO); Tres Meses; CH-86 259#; Ames 8266. Collected 04/06/1974 in Zacatecas, Mexico. Latitude 22° 18' N. Longitude 101° 34' W. Elevation 2160 m. El Obraje, Pinos.

PI 620868. *Zea mays* L. subsp. *mays*

Landrace. Population. Zacatecas 258; MEX 9005 (INIFAP ACC NO); CH-86 22# ; Ames 8267. Collected 01/01/1974 in Zacatecas, Mexico. Santa Rosa.

The following were collected by John Bamberg, USDA, ARS, Potato Introduction Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 54235, United States; Charles Fernandez, University of Wisconsin, Potato Introduction Station, Peninsula Experiment Station, Sturgeon Bay, Wisconsin 54235, United States. Received 09/14/2001.

PI 620869. *Solanum jamesii* Torr.

Wild. BF 82. Collected 09/07/2001 in New Mexico, United States. Latitude 34° 4' 36" N. Longitude 107° 27' 6" W. Elevation 2552 m. Socorro County. Magdalena vicinity. On 60 12.2 mile W of Magdalena at roadside picnic area, N side of road. Moist sand under junipers and pines and in open grassy areas, pure gravel along roadside. Plants not as abundant as in best previous years, but easily found. Most plants mature with occasional fruit. Collected pairs of tubers and fruit for apomixis analysis.

PI 620870. *Solanum jamesii* Torr.

Wild. BF 83. Collected 09/08/2001 in Texas, United States. Latitude 30° 42' 22" N. Longitude 104° 6' 20" W. Elevation 1550 m. Jeff Davis County. Ft. Davis vicinity. On 118 at Madera Canyon (L.E. Wood picnic area). Along canyon edge of park near the fenceline. Growing in shade under Ponderosas and full sun in grass among rocks near fence along canyon edge. Plants small green and abundant under large junipers. Collected 8 plants, one from under each tree scattered within the circle loop of the park.

PI 620871. *Solanum stoloniferum* Schltdl. & Bouche

Wild. BF 84. Collected 09/08/2001 in Texas, United States. Latitude 30° 42' 22" N. Longitude 104° 6' 20" W. Elevation 1550 m. Jeff Davis County. Ft. Davis vicinity. On 118 at Madera Canyon (L.E. Wood picnic area). Along canyon edge of park near the fenceline. Growing in shade under Ponderosas and full sun in grass among rocks near fence along canyon edge. A few large plans, perhaps to 30" but pushed own in grass among rocks. Clusters of fruit on the ground. No trace could be found of the large population across the fence near the stile seen and sampled in 1996. Collected a few fruit.

PI 620872. *Solanum jamesii* Torr.

Wild. BF 85; WRF 3592 - 620872 x 620870. Collected 09/09/2001 in New Mexico, United States. Latitude 32° 47' 55" N. Longitude 108° 9' 14" W. Elevation 1880 m. Grant County. Silver City vicinity. Altos range of Mogollon Mts. in Gila National Forest. Just SE of main gate on the E side of Ft. Bayard Cemetery. Plants in fairly moist sand under Juniper. Only a few small green plants - collected 2 plants.

- PI 620873. *Solanum stoloniferum*** Schltdl. & Bouche
 Wild. BF 86. Collected 09/09/2001 in New Mexico, United States. Latitude 32° 56' 55" N. Longitude 108° 10' 12" W. Elevation 2195 m. Grant County. Silver City vicinity. N on 15 to just before mile number 15. Here, take a gravel road 3 miles E to Meadow Creek to a road which runs S-N along the creek. Location known as "Redstone". Growing under large Ponderosas commonly on the W sides in moist soil under needle mulch. Mostly small but usually green plants. Occasional mature fruit. Collected 34 fruit and 15 plants under many scattered trees.
- PI 620874. *Solanum stoloniferum*** Schltdl. & Bouche
 Wild. BF 87. Collected 09/10/2001 in Arizona, United States. Latitude 31° 22' 49" N. Longitude 110° 41' 21" W. Elevation 1625 m. Santa Cruz County. Nogales vicinity. Patagonia Mountains. About 13.4 miles E of 82 on Dusquene Rd. About 100 ft W of Majalca Drive at Washington Camp. Growing under one big tree along the S ditch of road. Tree has a cable scare. Creek bank habitat generally appropriate, but otherwise quite rocky and dry. A few small, old plants. Collected 2 fruit, no tubers.
- PI 620875. *Solanum jamesii*** Torr.
 Wild. BF 88; WRF 3586 - 620875 x 620872. Collected 09/11/2001 in New Mexico, United States. Latitude 35° 26' 30" N. Longitude 108° 33' W. Elevation 2255 m. McKinley County. Gallup vicinity. About 5 miles S of Ft. Wingate on 400 where there is an open meadow to the E. In fork of dirt road about 1/10 mile E. Plants in grass and sage. Plants rare and small, often completely withered. Very dry. Collected 3 sets of 3-4 tubers from each of 3 colonies. Tubers have odd scars.
- PI 620876. *Solanum jamesii*** Torr.
 Wild. BF 89; WRF 3593 - 620876 x 620872. Collected 09/12/2001 in New Mexico, United States. Latitude 36° 14' 2" N. Longitude 107° 27' 51" W. Elevation 2080 m. Rio Arriba County. Cuba vicinity. About 1.8 miles N of Counselor, NM on 379 N of 44/550. Haynes Canyon according to DeLorme's Topo 2.0 map. At wash where road bends from 345 to 300. Concave low cliffs to E. Growing only under one juniper about 30 ft E of road. Moist sand under about 1 inch of needle mulch. Some 20-30 green robust plants to 9", some flowering, but no fruit. Collected 7 plants.
- PI 620877. *Solanum jamesii*** Torr.
 Wild. BF 90. Collected 09/12/2001 in New Mexico, United States. Latitude 35° 41' 9" N. Longitude 105° 57' 44" W. Elevation 2662 m. Santa Fe County. Sante Fe City. Near residence of Bob Sivinski (144 Cedar Street), endangered plant botanist for USFS. Open lot just W of BS home at W end of Cedar Street. Sandy soil under trees in open lot. Plants green and robust, some flowering, occasional fruit. Less abundant perhaps because site has been developed--some trees removed and area landscaped.. Collected 18 fruit from scattered plants.
- PI 620878. *Solanum jamesii*** Torr.
 Wild. BF 91; WRF 3594 - 620878 x 620872; WRF 3628 - 320878 x 605361. Collected 09/12/2001 in New Mexico, United States. Latitude 35° 36' 15" N. Longitude 104° 52' 31" W. Elevation 1963 m. San Miguel County. Las Vegas vicinity. About 19 miles E of Las Vegas, NM on 104 then 2/10 mile S on SSR 97 toward Joe Harris ranch. E side of road near an iron gate. Only under one large juniper. Sandy soil with some moisture. Many small but green and robust plants without flowers or fruit.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 620879. *Lens culinaris* Medik. subsp. *culinaris*

Cultivated. B96-12; "Nadejda"; W6 19254. Collected 07/1996 in Bulgaria. Latitude 43° 39' 22" N. Longitude 28° 1' 48" E. Elevation 274 m. Droboudja.

The following were collected by Bassam Al-Safadi, Atomic Energy Commission, P.O. Box 6091, Damascus, Syria. Donated by Philipp W. Simon, USDA, ARS, Vegetable Crops Research Unit, University of Wisconsin, Department of Horticulture, Madison, Wisconsin 53706, United States; Bassam Al-Safadi, Atomic Energy Commission, P.O. Box 6091, Damascus, Syria. Received 10/14/1999.

PI 620880. *Lens culinaris* Medik. subsp. *culinaris*

Cultivated. S114; W6 22015. Collected 08/1999 in Syria. Latitude 33° 30' N. Longitude 36° 18' E. Damascus. Market. Red lentil.

PI 620881. *Lens culinaris* Medik. subsp. *culinaris*

Cultivated. S119; W6 22016. Collected 08/1999 in Syria. Latitude 33° 30' N. Longitude 36° 18' E. Damascus. Market. White lentil.

The following were donated by Will Bonsall, Scatterseed Project, 39 Bailey Road, Industry, Maine 04938, United States. Received 05/10/2000.

PI 620882. *Lens culinaris* Medik. subsp. *culinaris*

Cultivated. LE-00-01; W6 22461. Collected in Yunnan, China. Latitude 26° 0' N. Longitude 100° 0' E. Elevation 1515 m. either the town of Lijiang or Dali.

The following were developed by James Klein, Southern Illinois University, Dept. of Plant and Soil Science, Carbondale, Illinois 62901-4415, United States; Mike E. Schmidt, Southern Illinois University, Department of Plant and Soil Sciences, MC 4415, Carbondale, Illinois 62901-4415, United States. Received 11/30/2001.

PI 620883. *Glycine max* (L.) Merr.

Cultivar. Pureline. "LS93-0375". CV-436. Pedigree - Asgrow A3935 X Pioneer 9402. F5 plant selection from a population advanced by single pod descent. Mid-maturity Group IV (relative maturity=4.4) indeterminate in growth habit and has purple flowers, tawny pubescence, and tan pod walls. Seedcoat shiny yellow with black hila. Seed size approx. 159 mg seed-1 and seed composition averages 422 g kg-1 protein and 200 g kg-1 oil on a dry weight basis. Plant height averages 81 cm, lodging score averages 1.2. Resistant to soybean cyst nematode (*Heterodera glycines*) races 3 and 14 and is moderately resistant to race 4. Moderately

resistant to soybean sudden death syndrome (*Fusarium solani*) and is resistant to stem canker (*Diaporthe phaseolorum*) and frog-eye leaf spot (*Cercospora sojina*). Susceptible to races 1 and 4 of phytophthora rot (*Phytophthora sojae*) and soybean mosaic virus.

The following were donated by Calvin O. Qualset, University of California, Genetic Resources Conservation Program, Division of Agriculture & Nat'l Resources, Davis, California 95616-8602, United States. Received 10/23/1997.

PI 620884. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8606066; NSGC 10001. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

PI 620885. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. IWA8606078; NSGC 10002. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

PI 620886. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8606102; NSGC 10003. Collected in Ilam, Iran. Latitude 33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.

PI 620887. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8606103; NSGC 10004. Collected in Ilam, Iran. Latitude 33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.

PI 620888. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. IWA8606104; NSGC 10005. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

PI 620889. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8606116; NSGC 10006. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

PI 620890. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. IWA8606118; NSGC 10007. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

PI 620891. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. IWA8606120; NSGC 10008. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

PI 620892. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Landrace. IWA8606138; NSGC 10009. Collected in Ilam, Iran. Latitude 33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.

PI 620893. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8606140; NSGC 10010. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.

PI 620894. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8606141; NSGC 10011. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.

- PI 620895. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606142; NSGC 10012. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 620896. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606143; NSGC 10013. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 620897. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606144; NSGC 10014. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 620898. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606145; NSGC 10015. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 620899. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606147; NSGC 10016. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 620900. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606152; NSGC 10017. Collected in Bakhtaran, Iran. Latitude 34° 18' N. Longitude 47° 3' E. Elevation 1580 m. Bakhtaran.
- PI 620901. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606154; NSGC 10018. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620902. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606156; NSGC 10019. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620903. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606159; NSGC 10020. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620904. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606160; NSGC 10021. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620905. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606163; NSGC 10022. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620906. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606169; NSGC 10023. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620907. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606173; NSGC 10024. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620908. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606176; NSGC 10025. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.

- PI 620909. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606177; NSGC 10026. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620910. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606178; NSGC 10027. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620911. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606182; NSGC 10028. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620912. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606184; NSGC 10029. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620913. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606199; NSGC 10030. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620914. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606208; NSGC 10031. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620915. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606209; NSGC 10032. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620916. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606221; NSGC 10033. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620917. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606224; NSGC 10034. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620918. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606225; NSGC 10035. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620919. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606227; NSGC 10036. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620920. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606234; NSGC 10037. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620921. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606235; NSGC 10038. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620922. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606236; NSGC 10039. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 620923. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606238; NSGC 10040. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620924. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606239; NSGC 10041. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620925. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606240; NSGC 10042. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620926. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606242; NSGC 10043. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620927. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606245; NSGC 10044. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620928. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606246; NSGC 10045. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620929. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606247; NSGC 10046. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620930. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606261; NSGC 10047. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620931. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606281; NSGC 10048. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620932. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606298; NSGC 10049. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620933. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606319; NSGC 10050. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620934. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606321; NSGC 10051. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620935. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606328; NSGC 10052. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620936. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606341; NSGC 10053. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 620937. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606344; NSGC 10054. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620938. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606346; NSGC 10055. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620939. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606361; NSGC 10056. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606367; NSGC 10057. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620941. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606369; NSGC 10058. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620942. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606373; NSGC 10059. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620943. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8606374; NSGC 10060. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620944. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8606375; NSGC 10061. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620945. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606376; NSGC 10062. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620946. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606377; NSGC 10063. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620947. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606382; NSGC 10064. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620948. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606387; NSGC 10065. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620949. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606388; NSGC 10066. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620950. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606390; NSGC 10067. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 620951. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606398; NSGC 10068. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620952. *Triticum turgidum* **subsp. durum** (Desf.) Husn.
Landrace. IWA8606401; NSGC 10069. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620953. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606407; NSGC 10070. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620954. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606408; NSGC 10071. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620955. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606409; NSGC 10072. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620956. *Triticum turgidum* **subsp. durum** (Desf.) Husn.
Landrace. IWA8606415; NSGC 10073. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620957. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606416; NSGC 10074. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620958. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606417; NSGC 10075. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620959. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606418; NSGC 10076. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620960. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606422; NSGC 10077. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620961. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606426; NSGC 10078. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620962. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606428; NSGC 10079. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620963. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606433; NSGC 10080. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620964. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606438; NSGC 10081. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 620965. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606441; NSGC 10082. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620966. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606443; NSGC 10083. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620967. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606444; NSGC 10084. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620968. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606447; NSGC 10085. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620969. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606448; NSGC 10086. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620970. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606451; NSGC 10087. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620971. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606453; NSGC 10088. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620972. *Triticum turgidum* L. subsp. *turgidum*
Landrace. IWA8606457; NSGC 10089. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620973. *Triticum turgidum* L. subsp. *turgidum*
Landrace. IWA8606458; NSGC 10090. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620974. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606461; NSGC 10091. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620975. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606463; NSGC 10092. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620976. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606467; NSGC 10093. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620977. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606469; NSGC 10094. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620978. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606470; NSGC 10095. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 620979. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606471; NSGC 10096. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620980. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606472; NSGC 10097. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606473; NSGC 10098. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606476; NSGC 10099. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606480; NSGC 10100. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620984. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606483; NSGC 10101. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606484; NSGC 10102. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606485; NSGC 10103. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606486; NSGC 10104. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620988. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606491; NSGC 10105. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620989. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606497; NSGC 10106. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620990. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606506; NSGC 10107. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606508; NSGC 10108. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620992. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606509; NSGC 10109. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 620993. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606512; NSGC 10110. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620994. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606514; NSGC 10111. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620995. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606515; NSGC 10112. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620996. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606516; NSGC 10113. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620997. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606517; NSGC 10114. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620998. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606518; NSGC 10115. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 620999. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606520; NSGC 10116. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621000. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606521; NSGC 10117. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621001. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606522; NSGC 10118. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621002. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606523; NSGC 10119. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621003. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606525; NSGC 10120. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621004. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606527; NSGC 10121. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621005. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606528; NSGC 10122. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621006. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606530; NSGC 10123. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621007. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606531; NSGC 10124. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621008. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606532; NSGC 10125. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621009. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606534; NSGC 10126. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621010. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606535; NSGC 10127. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621011. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606536; NSGC 10128. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621012. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606538; NSGC 10129. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621013. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606539; NSGC 10130. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621014. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606540; NSGC 10131. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621015. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606544; NSGC 10132. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621016. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606546; NSGC 10133. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621017. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606548; NSGC 10134. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621018. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606549; NSGC 10135. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621019. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606550; NSGC 10136. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621020. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606552; NSGC 10137. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621021. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606553; NSGC 10138. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621022. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606554; NSGC 10139. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621023. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606555; NSGC 10140. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621024. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606556; NSGC 10141. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621025. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606558; NSGC 10142. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621026. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606559; NSGC 10143. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621027. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606561; NSGC 10144. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621028. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606562; NSGC 10145. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621029. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606564; NSGC 10146. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621030. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606565; NSGC 10147. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621031. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606566; NSGC 10148. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621032. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606567; NSGC 10149. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621033. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606568; NSGC 10150. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621034. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606571; NSGC 10151. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621035. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606573; NSGC 10152. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621036. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606574; NSGC 10153. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621037. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606577; NSGC 10154. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621038. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606578; NSGC 10155. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621039. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606579; NSGC 10156. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621040. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606584; NSGC 10157. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621041. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606585; NSGC 10158. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621042. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606586; NSGC 10159. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621043. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606588; NSGC 10160. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621044. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606589; NSGC 10161. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621045. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606591; NSGC 10162. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621046. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606592; NSGC 10163. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621047. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606593; NSGC 10164. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621048. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606597; NSGC 10165. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621049. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606600; NSGC 10166. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621050. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606601; NSGC 10167. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621051. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606603; NSGC 10168. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621052. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606604; NSGC 10169. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621053. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606605; NSGC 10170. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621054. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606610; NSGC 10171. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621055. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606611; NSGC 10172. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621056. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606626; NSGC 10173. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621057. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606629; NSGC 10174. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621058. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606642; NSGC 10175. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621059. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606653; NSGC 10176. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621060. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606657; NSGC 10177. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621061. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606666; NSGC 10178. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621062. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606667; NSGC 10179. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621063. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606668; NSGC 10180. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621064. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606669; NSGC 10181. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621065. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606670; NSGC 10182. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621066. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606679; NSGC 10183. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621067. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606681; NSGC 10184. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621068. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606682; NSGC 10185. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621069. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606683; NSGC 10186. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621070. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606688; NSGC 10187. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621071. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606690; NSGC 10188. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621072. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606694; NSGC 10189. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621073. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606695; NSGC 10190. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621074. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606700; NSGC 10191. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621075. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606726; NSGC 10192. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621076. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606730; NSGC 10193. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621077. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606732; NSGC 10194. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621078. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606736; NSGC 10195. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621079. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606738; NSGC 10196. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621080. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606747; NSGC 10197. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621081. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606748; NSGC 10198. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621082. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606749; NSGC 10199. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621083. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606752; NSGC 10200. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621084. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606757; NSGC 10201. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621085. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606764; NSGC 10202. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621086. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606766; NSGC 10203. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621087. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606769; NSGC 10204. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621088. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606774; NSGC 10205. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621089. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606775; NSGC 10206. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621090. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606776; NSGC 10207. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621091. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606777; NSGC 10208. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621092. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606778; NSGC 10209. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621093. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606779; NSGC 10210. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621094. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606781; NSGC 10211. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621095. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606783; NSGC 10212. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621096. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606787; NSGC 10213. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621097. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606791; NSGC 10214. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621098. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606795; NSGC 10215. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621099. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606798; NSGC 10216. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621100. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606802; NSGC 10217. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621101. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606809; NSGC 10218. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621102. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606810; NSGC 10219. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621103. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606811; NSGC 10220. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621104. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606812; NSGC 10221. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621105. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606813; NSGC 10222. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621106. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606814; NSGC 10223. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621107. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606815; NSGC 10224. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621108. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606816; NSGC 10225. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621109. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606819; NSGC 10226. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621110. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606820; NSGC 10227. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621111. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606822; NSGC 10228. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621112. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606823; NSGC 10229. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621113. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606827; NSGC 10230. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621114. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606829; NSGC 10231. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621115. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606836; NSGC 10232. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621116. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606837; NSGC 10233. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621117. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606840; NSGC 10234. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621118. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606841; NSGC 10235. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621119. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606843; NSGC 10236. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621120. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606846; NSGC 10237. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621121. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606855; NSGC 10238. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621122. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606856; NSGC 10239. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621123. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606858; NSGC 10240. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621124. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606862; NSGC 10241. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621125. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606864; NSGC 10242. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621126. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606866; NSGC 10243. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621127. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606871; NSGC 10244. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621128. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606877; NSGC 10245. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621129. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606878; NSGC 10246. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621130. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606880; NSGC 10247. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621131. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606883; NSGC 10248. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621132. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606904; NSGC 10249. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606908; NSGC 10250. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606914; NSGC 10251. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621135. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606915; NSGC 10252. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621136. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606916; NSGC 10253. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606917; NSGC 10254. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621138. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606918; NSGC 10255. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621139. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606921; NSGC 10256. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606922; NSGC 10257. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606924; NSGC 10258. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606927; NSGC 10259. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606929; NSGC 10260. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621144. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606935; NSGC 10261. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621145. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606937; NSGC 10262. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621146. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606947; NSGC 10263. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621147. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606953; NSGC 10264. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621148. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606954; NSGC 10265. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621149. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606965; NSGC 10266. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621150. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606966; NSGC 10267. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621151. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606971; NSGC 10268. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621152. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606974; NSGC 10269. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621153. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606975; NSGC 10270. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621154. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606977; NSGC 10271. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621155. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606978; NSGC 10272. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621156. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606982; NSGC 10273. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621157. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606983; NSGC 10274. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621158. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606984; NSGC 10275. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621159. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606986; NSGC 10276. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621160. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606987; NSGC 10277. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621161. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606988; NSGC 10278. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621162. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606989; NSGC 10279. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621163. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607001; NSGC 10280. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621164. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607002; NSGC 10281. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621165. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607003; NSGC 10282. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621166. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607005; NSGC 10283. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621167. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607007; NSGC 10284. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621168. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607008; NSGC 10285. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621169. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607009; NSGC 10286. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621170. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607010; NSGC 10287. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621171. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607011; NSGC 10288. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621172. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607013; NSGC 10289. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621173. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607014; NSGC 10290. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621174. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607016; NSGC 10291. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621175. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607018; NSGC 10292. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621176. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607020; NSGC 10293. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621177. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607023; NSGC 10294. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621178. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607024; NSGC 10295. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621179. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607026; NSGC 10296. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621180. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607027; NSGC 10297. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621181. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607028; NSGC 10298. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621182. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607030; NSGC 10299. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621183. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607032; NSGC 10300. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621184. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607033; NSGC 10301. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621185. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607034; NSGC 10302. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621186. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607035; NSGC 10303. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621187. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607037; NSGC 10304. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621188. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607038; NSGC 10305. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621189. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607039; NSGC 10306. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621190. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607040; NSGC 10307. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621191. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607041; NSGC 10308. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621192. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607042; NSGC 10309. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621193. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607043; NSGC 10310. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621194. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607044; NSGC 10311. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621195. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607046; NSGC 10312. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621196. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607047; NSGC 10313. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621197. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607049; NSGC 10314. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621198. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607050; NSGC 10315. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621199. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607051; NSGC 10316. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621200. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607052; NSGC 10317. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621201. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607054; NSGC 10318. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621202. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607055; NSGC 10319. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621203. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607056; NSGC 10320. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621204. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607057; NSGC 10321. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621205. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607058; NSGC 10322. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621206. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607061; NSGC 10323. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621207. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607062; NSGC 10324. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621208. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607064; NSGC 10325. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621209. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607066; NSGC 10326. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621210. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607067; NSGC 10327. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621211. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607068; NSGC 10328. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621212. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607069; NSGC 10329. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621213. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607070; NSGC 10330. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621214. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607071; NSGC 10331. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621215. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607072; NSGC 10332. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621216. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607075; NSGC 10333. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621217. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607077; NSGC 10334. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621218. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607079; NSGC 10335. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621219. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607080; NSGC 10336. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621220. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607081; NSGC 10337. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621221. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607085; NSGC 10338. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621222. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607086; NSGC 10339. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621223. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607092; NSGC 10340. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621224. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607094; NSGC 10341. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621225. *Triticum turgidum* **subsp. durum** (Desf.) Husn.
Landrace. IWA8607097; NSGC 10342. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621226. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607098; NSGC 10343. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621227. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607101; NSGC 10344. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621228. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607102; NSGC 10345. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621229. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607103; NSGC 10346. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621230. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607109; NSGC 10347. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621231. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607121; NSGC 10348. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621232. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607122; NSGC 10349. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621233. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607123; NSGC 10350. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621234. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607124; NSGC 10351. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621235. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607127; NSGC 10352. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621236. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607129; NSGC 10353. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621237. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607130; NSGC 10354. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621238. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607134; NSGC 10355. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621239. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607135; NSGC 10356. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621240. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607140; NSGC 10357. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621241. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607144; NSGC 10358. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621242. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607145; NSGC 10359. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621243. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607146; NSGC 10360. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621244. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607148; NSGC 10361. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621245. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607149; NSGC 10362. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621246. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607153; NSGC 10363. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621247. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607154; NSGC 10364. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621248. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607156; NSGC 10365. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621249. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607157; NSGC 10366. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621250. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607161; NSGC 10367. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621251. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607162; NSGC 10368. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621252. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607163; NSGC 10369. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621253. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607165; NSGC 10370. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621254. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607167; NSGC 10371. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621255. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607168; NSGC 10372. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621256. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607169; NSGC 10373. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621257. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607172; NSGC 10374. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621258. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607175; NSGC 10377. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607176; NSGC 10378. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621260. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607177; NSGC 10379. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621261. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607178; NSGC 10380. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621262. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607182; NSGC 10381. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621263. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607188; NSGC 10382. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621264. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607189; NSGC 10383. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621265. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607191; NSGC 10384. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621266. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607192; NSGC 10385. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621267. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607193; NSGC 10386. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607196; NSGC 10387. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607199; NSGC 10388. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607200; NSGC 10389. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621271. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607201; NSGC 10390. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621272. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607202; NSGC 10391. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621273. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607205; NSGC 10392. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621274. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607206; NSGC 10393. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621275. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607208; NSGC 10394. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621276. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607211; NSGC 10395. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621277. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607214; NSGC 10396. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621278. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607218; NSGC 10397. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621279. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607219; NSGC 10398. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621280. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607222; NSGC 10399. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621281. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607226; NSGC 10400. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621282. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607227; NSGC 10401. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621283. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607230; NSGC 10402. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621284. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607232; NSGC 10403. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621285. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607233; NSGC 10404. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621286. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607236; NSGC 10405. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 621287. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607237; NSGC 10406. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621288. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607238; NSGC 10407. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621289. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607239; NSGC 10408. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621290. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607245; NSGC 10409. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621291. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607246; NSGC 10410. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621292. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607255; NSGC 10411. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621293. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607261; NSGC 10412. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621294. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607299; NSGC 10413. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621295. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607312; NSGC 10414. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621296. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607317; NSGC 10415. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621297. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607318; NSGC 10416. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621298. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607322; NSGC 10417. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621299. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607323; NSGC 10418. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 621300. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607337; NSGC 10419. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 621301. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607339; NSGC 10420. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621302. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607343; NSGC 10421. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621303. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607344; NSGC 10422. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621304. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607345; NSGC 10423. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607346; NSGC 10424. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607347; NSGC 10425. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607348; NSGC 10426. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621308. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607354; NSGC 10427. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621309. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607360; NSGC 10428. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621310. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607361; NSGC 10429. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621311. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607364; NSGC 10430. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621312. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607373; NSGC 10431. Collected in Ilam, Iran. Latitude 33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.
- PI 621313. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607389; NSGC 10432. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621314. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607402; NSGC 10433. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.

- PI 621315. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607411; NSGC 10434. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621316. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607417; NSGC 10435. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621317. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607423; NSGC 10436. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621318. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607424; NSGC 10437. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621319. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607425; NSGC 10438. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621320. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607426; NSGC 10439. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 621321. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607427; NSGC 10440. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621322. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607429; NSGC 10441. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621323. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607432; NSGC 10442. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621324. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607437; NSGC 10443. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621325. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607459; NSGC 10444. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621326. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607467; NSGC 10445. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 621327. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607472; NSGC 10446. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621328. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607478; NSGC 10447. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621329. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607479; NSGC 10448. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621330. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607482; NSGC 10449. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621331. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607484; NSGC 10450. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621332. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607490; NSGC 10451. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621333. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607491; NSGC 10452. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621334. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607492; NSGC 10453. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607493; NSGC 10454. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621336. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607496; NSGC 10455. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621337. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607497; NSGC 10456. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607498; NSGC 10457. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621339. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607501; NSGC 10458. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 621340. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607504; NSGC 10459. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 621341. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607508; NSGC 10460. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607512; NSGC 10461. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621343. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607535; NSGC 10462. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621344. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607539; NSGC 10463. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621345. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607548; NSGC 10464. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621346. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607550; NSGC 10465. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621347. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607552; NSGC 10466. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621348. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607555; NSGC 10467. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607560; NSGC 10468. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621350. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607565; NSGC 10469. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621351. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607590; NSGC 10470. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621352. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607591; NSGC 10471. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621353. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607593; NSGC 10472. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 621354. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607599; NSGC 10473. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607611; NSGC 10474. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607613; NSGC 10475. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621357. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607622; NSGC 10476. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621358. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607625; NSGC 10477. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607641; NSGC 10478. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607648; NSGC 10479. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621361. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607654; NSGC 10480. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621362. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607661; NSGC 10481. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621363. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607663; NSGC 10482. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621364. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607669; NSGC 10483. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621365. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607670; NSGC 10484. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621366. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607675; NSGC 10485. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 621367. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607679; NSGC 10486. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621368. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607683; NSGC 10487. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621369. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607703; NSGC 10488. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621370. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607709; NSGC 10489. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621371. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607713; NSGC 10490. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621372. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607714; NSGC 10491. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621373. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607717; NSGC 10492. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621374. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607722; NSGC 10493. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621375. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607723; NSGC 10494. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621376. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607724; NSGC 10495. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621377. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607728; NSGC 10496. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621378. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607738; NSGC 10497. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621379. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607742; NSGC 10498. Collected in Bakhtaran, Iran. Latitude

34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m.
Shah-Abad.

- PI 621380. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607743; NSGC 10499. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m.
Shah-Abad.
- PI 621381. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607744; NSGC 10500. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m.
Shah-Abad.
- PI 621382. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607748; NSGC 10501. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607749; NSGC 10502. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621384. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607750; NSGC 10503. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607754; NSGC 10504. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607756; NSGC 10505. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621387. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607757; NSGC 10506. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621388. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607761; NSGC 10507. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621389. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607762; NSGC 10508. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621390. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607764; NSGC 10509. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621391. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607765; NSGC 10510. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621392. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607767; NSGC 10511. Collected in Hamadan, Iran. Latitude
34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 621393. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607768; NSGC 10512. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621394. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607769; NSGC 10513. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621395. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607771; NSGC 10514. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621396. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607772; NSGC 10515. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621397. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607788; NSGC 10516. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621398. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607791; NSGC 10517. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621399. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607798; NSGC 10518. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621400. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607801; NSGC 10519. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621401. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607802; NSGC 10520. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621402. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607807; NSGC 10521. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621403. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607808; NSGC 10522. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621404. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607810; NSGC 10523. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621405. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607811; NSGC 10524. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621406. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607813; NSGC 10525. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 621407. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607814; NSGC 10526. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621408. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607825; NSGC 10527. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621409. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607829; NSGC 10528. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621410. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607830; NSGC 10529. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621411. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607835; NSGC 10530. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621412. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607857; NSGC 10531. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621413. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607858; NSGC 10532. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621414. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607861; NSGC 10533. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621415. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607875; NSGC 10534. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621416. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607878; NSGC 10535. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621417. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607879; NSGC 10536. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621418. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607880; NSGC 10537. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 621419. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607895; NSGC 10538. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621420. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607898; NSGC 10539. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621421. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607899; NSGC 10540. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621422. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607900; NSGC 10541. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 621423. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607902; NSGC 10542. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621424. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607907; NSGC 10543. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621425. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607913; NSGC 10544. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621426. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607915; NSGC 10545. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621427. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607921; NSGC 10546. Collected in Ilam, Iran. Latitude 33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.
- PI 621428. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607929; NSGC 10547. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621429. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607930; NSGC 10548. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621430. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607932; NSGC 10549. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621431. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607935; NSGC 10550. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621432. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607936; NSGC 10551. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.

- PI 621433. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607939; NSGC 10552. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621434. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607941; NSGC 10553. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 621435. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607945; NSGC 10554. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 621436. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607970; NSGC 10555. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621437. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607977; NSGC 10556. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621438. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607987; NSGC 10557. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621439. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608000; NSGC 10558. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621440. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608001; NSGC 10559. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 621441. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608019; NSGC 10560. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621442. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608020; NSGC 10561. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621443. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608021; NSGC 10562. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621444. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608022; NSGC 10563. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621445. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608024; NSGC 10564. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621446. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608025; NSGC 10565. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.

- PI 621447. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608026; NSGC 10566. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621448. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608041; NSGC 10567. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621449. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608044; NSGC 10568. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621450. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608052; NSGC 10569. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621451. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608054; NSGC 10570. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621452. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608055; NSGC 10571. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621453. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608061; NSGC 10572. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621454. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608065; NSGC 10573. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621455. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608070; NSGC 10574. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621456. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608071; NSGC 10575. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621457. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608075; NSGC 10576. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621458. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608077; NSGC 10577. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621459. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608079; NSGC 10578. Collected in East Azerbaijan, Iran. Latitude 38° 0' N. Longitude 46° 45' E.
- PI 621460. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608090; NSGC 10579. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.

- PI 621461. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608091; NSGC 10580. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621462. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608122; NSGC 10581. Collected in East Azerbaijan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621463. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608128; NSGC 10582. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621464. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608129; NSGC 10583. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621465. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608134; NSGC 10584. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621466. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608141; NSGC 10585. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621467. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608143; NSGC 10586. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621468. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608144; NSGC 10587. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621469. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608148; NSGC 10588. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621470. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608160; NSGC 10589. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621471. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608162; NSGC 10590. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621472. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608163; NSGC 10591. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621473. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608170; NSGC 10592. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621474. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608173; NSGC 10593. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.

- PI 621475. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608174; NSGC 10594. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621476. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608179; NSGC 10595. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621477. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608184; NSGC 10596. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621478. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608185; NSGC 10597. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621479. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608191; NSGC 10598. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621480. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608194; NSGC 10599. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621481. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608196; NSGC 10600. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621482. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608209; NSGC 10601. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621483. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608213; NSGC 10602. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621484. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608214; NSGC 10603. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621485. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608217; NSGC 10604. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621486. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608218; NSGC 10605. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 621487. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608221; NSGC 10606. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621488. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608231; NSGC 10607. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.

- PI 621489. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608241; NSGC 10608. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621490. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608243; NSGC 10609. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621491. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608246; NSGC 10610. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621492. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608259; NSGC 10611. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621493. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608262; NSGC 10612. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621494. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608264; NSGC 10613. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621495. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608272; NSGC 10614. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621496. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608273; NSGC 10615. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621497. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608275; NSGC 10616. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621498. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608288; NSGC 10617. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621499. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608292; NSGC 10618. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.

- PI 621500. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608319; NSGC 10619. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621501. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608335; NSGC 10620. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621502. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608344; NSGC 10621. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621503. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608346; NSGC 10622. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621504. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608348; NSGC 10623. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621505. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608349; NSGC 10624. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621506. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608352; NSGC 10625. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621507. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608353; NSGC 10626. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621508. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608377; NSGC 10627. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621509. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608390; NSGC 10628. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621510. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608391; NSGC 10629. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.

- PI 621511. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608394; NSGC 10630. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621512. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608400; NSGC 10631. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621513. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608401; NSGC 10632. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621514. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608402; NSGC 10633. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621515. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608409; NSGC 10634. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621516. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608427; NSGC 10635. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621517. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608430; NSGC 10636. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621518. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608453; NSGC 10637. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621519. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608458; NSGC 10638. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621520. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608466; NSGC 10639. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621521. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608474; NSGC 10640. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621522. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608476; NSGC 10641. Collected in Bakhtaran, Iran. Latitude

34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.

- PI 621523. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608480; NSGC 10642. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621524. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608483; NSGC 10643. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621525. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608490; NSGC 10644. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621526. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608493; NSGC 10645. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621527. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608496; NSGC 10646. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621528. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608497; NSGC 10647. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621529. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608505; NSGC 10648. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621530. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608511; NSGC 10649. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621531. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608517; NSGC 10650. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621532. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608519; NSGC 10651. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.
- PI 621533. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608526; NSGC 10652. Collected in Bakhtaran, Iran. Latitude
34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m.
Bakhtaran.

- PI 621534. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608528; NSGC 10653. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621535. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608529; NSGC 10654. Collected in Bakhtaran, Iran. Latitude 34° 18' 36" N. Longitude 47° 3' 36" E. Elevation 1580 m. Bakhtaran.
- PI 621536. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608561; NSGC 10655. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621537. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608562; NSGC 10656. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621538. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608564; NSGC 10657. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621539. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608568; NSGC 10658. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621540. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608573; NSGC 10659. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621541. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608575; NSGC 10660. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621542. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608587; NSGC 10661. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621543. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608592; NSGC 10662. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621544. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608595; NSGC 10663. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621545. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608596; NSGC 10664. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621546. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608607; NSGC 10665. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.

- PI 621547. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608614; NSGC 10666. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621548. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608620; NSGC 10667. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621549. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608624; NSGC 10668. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621550. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608626; NSGC 10669. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621551. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608629; NSGC 10670. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621552. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608630; NSGC 10671. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621553. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608632; NSGC 10672. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621554. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608636; NSGC 10673. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621555. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608637; NSGC 10674. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621556. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608638; NSGC 10675. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621557. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608640; NSGC 10676. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621558. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608652; NSGC 10677. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621559. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608653; NSGC 10678. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621560. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608655; NSGC 10679. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.

- PI 621561. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608659; NSGC 10680. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621562. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608661; NSGC 10681. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621563. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608662; NSGC 10682. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621564. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608667; NSGC 10683. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621565. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608669; NSGC 10684. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621566. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608671; NSGC 10685. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621567. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608675; NSGC 10686. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621568. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608677; NSGC 10687. Collected in Hamadan, Iran. Latitude 34° 50' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 621569. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608687; NSGC 10688. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621570. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608698; NSGC 10689. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621571. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608699; NSGC 10690. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621572. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608704; NSGC 10691. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621573. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608705; NSGC 10692. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621574. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608722; NSGC 10693. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.

- PI 621575. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608730; NSGC 10694. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621576. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608732; NSGC 10695. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621577. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608733; NSGC 10696. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621578. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608735; NSGC 10697. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621579. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608736; NSGC 10698. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621580. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608738; NSGC 10699. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621581. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608739; NSGC 10700. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621582. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608740; NSGC 10701. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621583. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608747; NSGC 10702. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621584. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608753; NSGC 10703. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621585. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608759; NSGC 10704. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621586. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608765; NSGC 10705. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 621587. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608776; NSGC 10706. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621588. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608781; NSGC 10707. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 621589. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608784; NSGC 10708. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621590. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608790; NSGC 10709. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621591. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608796; NSGC 10710. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621592. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608806; NSGC 10711. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621593. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608820; NSGC 10712. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621594. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608835; NSGC 10713. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621595. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608836; NSGC 10714. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621596. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608841; NSGC 10715. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621597. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608854; NSGC 10716. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621598. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608860; NSGC 10717. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 621599. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608864; NSGC 10718. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 621600. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608866; NSGC 10719. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m.
Shah-Abad.
- PI 621601. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608889; NSGC 10720. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621602. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608893; NSGC 10721. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621603. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608907; NSGC 10722. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621604. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608922; NSGC 10723. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621605. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608926; NSGC 10724. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621606. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608958; NSGC 10725. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621607. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608969; NSGC 10726. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621608. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608970; NSGC 10727. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621609. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608977; NSGC 10728. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 621610. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609005; NSGC 10729. Collected in Ilam, Iran. Latitude
33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.
- PI 621611. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8609010; NSGC 10730. Collected in Ilam, Iran. Latitude
33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.
- PI 621612. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609043; NSGC 10731. Collected in Ilam, Iran. Latitude
33° 10' N. Longitude 47° 0' E. Elevation 1559 m. Ilam.
- PI 621613. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609057; NSGC 10732. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.

- PI 621614. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609058; NSGC 10733. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 621615. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609065; NSGC 10734. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 621616. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609079; NSGC 10735. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 621617. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609080; NSGC 10736. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 621618. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609081; NSGC 10737. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 621619. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609087; NSGC 10738. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 621620. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609089; NSGC 10739. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 621621. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609097; NSGC 10740. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 621622. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609099; NSGC 10741. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 621623. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609107; NSGC 10742. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 621624. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609112; NSGC 10743. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621625. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609113; NSGC 10744. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621626. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609115; NSGC 10745. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621627. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609116; NSGC 10746. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.

- PI 621628. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609120; NSGC 10747. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621629. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609124; NSGC 10748. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621630. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609126; NSGC 10749. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621631. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609133; NSGC 10750. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toyserkan.
- PI 621632. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609134; NSGC 10751. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toyserkan.
- PI 621633. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609135; NSGC 10752. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toyserkan.
- PI 621634. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609136; NSGC 10753. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toyserkan.
- PI 621635. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609137; NSGC 10754. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621636. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609138; NSGC 10755. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621637. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609139; NSGC 10756. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621638. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609140; NSGC 10757. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621639. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609143; NSGC 10758. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621640. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609145; NSGC 10759. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621641. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609147; NSGC 10760. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.

- PI 621642. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609149; NSGC 10761. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621643. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609152; NSGC 10762. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 621644. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609154; NSGC 10763. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 621645. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609160; NSGC 10764. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 621646. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609163; NSGC 10765. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 621647. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609168; NSGC 10766. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 621648. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609169; NSGC 10767. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 621649. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609173; NSGC 10768. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621650. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609174; NSGC 10769. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621651. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609176; NSGC 10770. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621652. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609178; NSGC 10771. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621653. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609180; NSGC 10772. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621654. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609181; NSGC 10773. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621655. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609182; NSGC 10774. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 621656. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609183; NSGC 10775. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621657. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609184; NSGC 10776. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621658. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609185; NSGC 10777. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621659. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609187; NSGC 10778. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621660. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609189; NSGC 10779. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621661. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609190; NSGC 10780. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621662. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609191; NSGC 10781. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621663. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609194; NSGC 10782. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621664. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609198; NSGC 10783. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621665. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609201; NSGC 10784. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621666. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609202; NSGC 10785. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621667. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609203; NSGC 10786. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621668. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609212; NSGC 10787. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621669. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609214; NSGC 10788. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 621670. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609215; NSGC 10789. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621671. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609216; NSGC 10790. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621672. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609217; NSGC 10791. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621673. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609221; NSGC 10792. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621674. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609222; NSGC 10793. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621675. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609228; NSGC 10794. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621676. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609232; NSGC 10795. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621677. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609235; NSGC 10796. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621678. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609238; NSGC 10797. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621679. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609240; NSGC 10798. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621680. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609243; NSGC 10799. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621681. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609246; NSGC 10800. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621682. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609247; NSGC 10801. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621683. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609248; NSGC 10802. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 621684. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609254; NSGC 10803. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621685. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609255; NSGC 10804. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621686. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609258; NSGC 10805. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621687. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609259; NSGC 10806. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621688. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609260; NSGC 10807. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621689. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609263; NSGC 10808. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621690. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609266; NSGC 10809. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621691. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602968; NSGC 10810. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621692. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609270; NSGC 10811. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621693. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609274; NSGC 10812. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621694. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609280; NSGC 10813. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621695. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609281; NSGC 10814. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621696. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609282; NSGC 10815. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621697. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609283; NSGC 10816. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 621698. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609288; NSGC 10817. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621699. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609289; NSGC 10818. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621700. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609295; NSGC 10819. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621701. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609304; NSGC 10820. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621702. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609310; NSGC 10821. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621703. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609311; NSGC 10822. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 621704. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609312; NSGC 10823. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621705. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609313; NSGC 10824. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621706. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609315; NSGC 10825. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621707. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609316; NSGC 10826. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621708. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609317; NSGC 10827. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621709. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609328; NSGC 10828. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621710. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609329; NSGC 10829. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621711. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609331; NSGC 10830. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 621712. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609332; NSGC 10831. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621713. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609334; NSGC 10832. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621714. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609338; NSGC 10833. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621715. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609340; NSGC 10834. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621716. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609342; NSGC 10835. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621717. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609348; NSGC 10836. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621718. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609350; NSGC 10837. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621719. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609351; NSGC 10838. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621720. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609352; NSGC 10839. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621721. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609353; NSGC 10840. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621722. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609354; NSGC 10841. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621723. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609355; NSGC 10842. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621724. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609358; NSGC 10843. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621725. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609359; NSGC 10844. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 621726. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609360; NSGC 10845. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621727. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609362; NSGC 10846. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621728. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609363; NSGC 10847. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621729. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609364; NSGC 10848. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621730. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609367; NSGC 10849. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621731. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609370; NSGC 10850. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621732. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609371; NSGC 10851. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621733. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609372; NSGC 10852. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621734. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609373; NSGC 10853. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621735. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609375; NSGC 10854. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621736. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609376; NSGC 10855. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621737. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609378; NSGC 10856. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621738. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609384; NSGC 10857. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621739. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609386; NSGC 10858. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 621740. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609387; NSGC 10859. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621741. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609388; NSGC 10860. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621742. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609389; NSGC 10861. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621743. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609390; NSGC 10862. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621744. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609392; NSGC 10863. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621745. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609396; NSGC 10864. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621746. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609398; NSGC 10865. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621747. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609399; NSGC 10866. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621748. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609403; NSGC 10867. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621749. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609418; NSGC 10868. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621750. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609419; NSGC 10869. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621751. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609421; NSGC 10870. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621752. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609425; NSGC 10871. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621753. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609426; NSGC 10872. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 621754. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609432; NSGC 10873. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621755. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609433; NSGC 10874. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621756. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609437; NSGC 10875. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621757. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609440; NSGC 10876. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621758. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609441; NSGC 10877. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621759. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609442; NSGC 10878. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621760. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609443; NSGC 10879. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621761. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609444; NSGC 10880. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621762. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609445; NSGC 10881. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621763. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609446; NSGC 10882. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621764. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609447; NSGC 10883. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621765. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609448; NSGC 10884. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621766. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609449; NSGC 10885. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621767. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609450; NSGC 10886. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 621768. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609452; NSGC 10887. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621769. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609453; NSGC 10888. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621770. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609454; NSGC 10889. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621771. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609455; NSGC 10890. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621772. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609456; NSGC 10891. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621773. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609457; NSGC 10892. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621774. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609458; NSGC 10893. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621775. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609461; NSGC 10894. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621776. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609462; NSGC 10895. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621777. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609463; NSGC 10896. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621778. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609465; NSGC 10897. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621779. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609466; NSGC 10898. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621780. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609467; NSGC 10899. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621781. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609468; NSGC 10900. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 621782. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609469; NSGC 10901. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621783. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609471; NSGC 10902. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621784. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609476; NSGC 10903. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621785. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609477; NSGC 10904. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621786. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609487; NSGC 10905. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621787. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609488; NSGC 10906. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621788. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609489; NSGC 10907. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621789. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609497; NSGC 10908. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621790. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609502; NSGC 10909. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621791. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609506; NSGC 10910. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621792. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609511; NSGC 10911. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621793. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609513; NSGC 10912. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621794. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609514; NSGC 10913. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621795. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609517; NSGC 10914. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 621796. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609518; NSGC 10915. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621797. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609523; NSGC 10916. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 621798. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609539; NSGC 10917. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621799. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609540; NSGC 10918. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621800. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609543; NSGC 10919. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621801. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609547; NSGC 10920. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621802. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609548; NSGC 10921. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621803. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609552; NSGC 10922. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621804. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609554; NSGC 10923. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621805. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609561; NSGC 10924. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621806. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609566; NSGC 10925. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621807. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609568; NSGC 10926. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621808. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609570; NSGC 10927. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621809. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609575; NSGC 10928. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.

- PI 621810. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609582; NSGC 10929. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621811. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609584; NSGC 10930. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621812. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609586; NSGC 10931. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621813. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609587; NSGC 10932. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621814. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609589; NSGC 10933. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621815. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609591; NSGC 10934. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621816. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609594; NSGC 10935. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621817. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609595; NSGC 10936. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621818. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609601; NSGC 10937. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621819. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609606; NSGC 10938. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621820. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609613; NSGC 10939. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621821. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609616; NSGC 10940. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621822. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609622; NSGC 10941. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621823. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609623; NSGC 10942. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.

- PI 621824. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609628; NSGC 10945. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 621825. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609637; NSGC 10946. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621826. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609639; NSGC 10947. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621827. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609640; NSGC 10948. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621828. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609644; NSGC 10949. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621829. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609653; NSGC 10950. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621830. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609656; NSGC 10951. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621831. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609659; NSGC 10952. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621832. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609663; NSGC 10953. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621833. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609668; NSGC 10954. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621834. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609670; NSGC 10955. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621835. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609673; NSGC 10956. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621836. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609674; NSGC 10957. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 621837. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609676; NSGC 10958. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.

- PI 621838. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609681; NSGC 10959. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621839. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609683; NSGC 10960. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621840. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609684; NSGC 10961. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621841. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609685; NSGC 10962. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621842. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609686; NSGC 10963. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621843. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609687; NSGC 10964. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621844. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609688; NSGC 10965. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621845. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609689; NSGC 10966. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621846. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609690; NSGC 10967. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621847. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609691; NSGC 10968. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621848. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609692; NSGC 10969. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621849. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609694; NSGC 10970. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621850. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609695; NSGC 10971. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621851. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609697; NSGC 10972. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.

- PI 621852. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609700; NSGC 10973. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 621853. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609702; NSGC 10974. Collected in Markazi, Iran. Latitude 34° 39' N. Longitude 50° 54' E. Elevation 913 m. Ghom.
- PI 621854. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609708; NSGC 10975. Collected in Markazi, Iran. Latitude 34° 39' N. Longitude 50° 54' E. Elevation 913 m. Ghom.
- PI 621855. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609786; NSGC 10976. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621856. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609791; NSGC 10977. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621857. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609793; NSGC 10978. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621858. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609798; NSGC 10979. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621859. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609799; NSGC 10980. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621860. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609805; NSGC 10981. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621861. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609806; NSGC 10982. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621862. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609808; NSGC 10983. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621863. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609817; NSGC 10984. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621864. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609819; NSGC 10985. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621865. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609834; NSGC 10986. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621866. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609848; NSGC 10987. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621867. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609867; NSGC 10988. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621868. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609879; NSGC 10989. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621869. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609894; NSGC 10990. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621870. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609895; NSGC 10991. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621871. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609902; NSGC 10992. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621872. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609906; NSGC 10993. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621873. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609909; NSGC 10994. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621874. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609910; NSGC 10995. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621875. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609914; NSGC 10996. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621876. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609915; NSGC 10997. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621877. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609917; NSGC 10998. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621878. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609918; NSGC 10999. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621879. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8609920; NSGC 11000. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621880. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609921; NSGC 11001. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621881. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609922; NSGC 11002. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621882. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609923; NSGC 11003. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621883. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609924; NSGC 11004. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621884. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609925; NSGC 11005. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621885. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609927; NSGC 11006. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621886. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609828; NSGC 11007. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621887. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609929; NSGC 11008. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621888. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609930; NSGC 11009. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621889. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609931; NSGC 11010. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621890. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609934; NSGC 11011. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621891. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609935; NSGC 11012. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621892. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609938; NSGC 11013. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621893. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609939; NSGC 11014. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621894. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609940; NSGC 11015. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621895. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609941; NSGC 11016. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621896. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609942; NSGC 11017. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621897. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609943; NSGC 11018. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621898. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609944; NSGC 11019. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621899. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609947; NSGC 11020. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621900. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609948; NSGC 11021. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621901. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609952; NSGC 11022. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621902. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609957; NSGC 11023. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621903. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609959; NSGC 11024. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621904. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609960; NSGC 11025. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621905. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609961; NSGC 11026. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621906. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609962; NSGC 11027. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621907. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609967; NSGC 11028. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621908. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609968; NSGC 11029. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621909. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609969; NSGC 11030. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621910. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609970; NSGC 11031. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621911. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609971; NSGC 11032. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621912. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609972; NSGC 11033. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621913. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609974; NSGC 11034. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621914. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609975; NSGC 11035. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621915. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609976; NSGC 11036. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621916. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609979; NSGC 11037. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621917. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609980; NSGC 11038. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621918. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609982; NSGC 11039. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621919. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609987; NSGC 11040. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621920. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609988; NSGC 11041. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621921. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609989; NSGC 11042. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621922. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609990; NSGC 11043. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621923. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609992; NSGC 11044. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621924. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609995; NSGC 11045. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621925. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609996; NSGC 11046. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621926. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610001; NSGC 11047. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621927. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610004; NSGC 11048. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621928. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610005; NSGC 11049. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621929. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610021; NSGC 11050. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621930. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610024; NSGC 11051. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621931. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610025; NSGC 11052. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621932. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610026; NSGC 11053. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621933. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610027; NSGC 11054. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621934. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610029; NSGC 11055. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621935. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610030; NSGC 11056. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621936. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610031; NSGC 11057. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621937. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610032; NSGC 11058. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621938. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610033; NSGC 11059. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621939. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610035; NSGC 11060. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610036; NSGC 11061. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621941. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610039; NSGC 11062. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621942. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610043; NSGC 11063. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621943. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610061; NSGC 11064. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621944. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610063; NSGC 11065. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621945. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610064; NSGC 11066. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621946. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610066; NSGC 11067. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621947. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610069; NSGC 11068. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621948. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610070; NSGC 11069. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621949. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610072; NSGC 11070. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621950. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610075; NSGC 11071. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621951. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610076; NSGC 11072. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621952. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610080; NSGC 11073. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621953. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610082; NSGC 11074. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621954. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610083; NSGC 11075. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621955. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610085; NSGC 11076. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621956. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610087; NSGC 11077. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621957. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610088; NSGC 11078. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621958. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610090; NSGC 11079. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621959. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610093; NSGC 11080. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621960. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610104; NSGC 11081. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621961. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610108; NSGC 11082. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621962. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610109; NSGC 11083. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621963. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610114; NSGC 11084. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621964. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610119; NSGC 11085. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621965. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610120; NSGC 11086. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621966. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610121; NSGC 11087. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621967. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610122; NSGC 11088. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621968. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610123; NSGC 11089. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621969. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610125; NSGC 11090. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621970. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610126; NSGC 11091. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621971. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610127; NSGC 11092. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621972. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610128; NSGC 11093. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621973. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610129; NSGC 11094. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621974. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610130; NSGC 11095. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621975. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610131; NSGC 11096. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621976. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610134; NSGC 11097. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621977. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610142; NSGC 11098. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621978. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610143; NSGC 11099. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621979. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610162; NSGC 11100. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621980. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610164; NSGC 11101. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610166; NSGC 11102. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610167; NSGC 11103. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610168; NSGC 11104. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621984. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610178; NSGC 11105. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610180; NSGC 11106. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610190; NSGC 11107. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610198; NSGC 11108. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621988. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610210; NSGC 11109. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621989. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610211; NSGC 11110. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621990. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610212; NSGC 11111. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610213; NSGC 11112. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 621992. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610214; NSGC 11113. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621993. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610217; NSGC 11114. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621994. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610226; NSGC 11115. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621995. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610227; NSGC 11116. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621996. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610237; NSGC 11117. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621997. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610238; NSGC 11118. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621998. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610252; NSGC 11119. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 621999. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610258; NSGC 11120. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622000. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610260; NSGC 11121. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622001. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610261; NSGC 11122. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622002. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610263; NSGC 11123. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622003. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610265; NSGC 11124. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622004. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610266; NSGC 11125. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622005. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610270; NSGC 11126. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 622006. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610272; NSGC 11127. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622007. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610274; NSGC 11128. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622008. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610290; NSGC 11129. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622009. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610291; NSGC 11130. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622010. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610297; NSGC 11131. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622011. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610301; NSGC 11132. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622012. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610307; NSGC 11133. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622013. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610308; NSGC 11134. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622014. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610309; NSGC 11135. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622015. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610310; NSGC 11136. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622016. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610311; NSGC 11137. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622017. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610312; NSGC 11138. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622018. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610313; NSGC 11139. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622019. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610346; NSGC 11140. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 622020. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610354; NSGC 11141. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622021. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610355; NSGC 11142. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 622022. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610356; NSGC 11143. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622023. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610357; NSGC 11144. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622024. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610358; NSGC 11145. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622025. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610359; NSGC 11146. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622026. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610371; NSGC 11147. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622027. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610372; NSGC 11148. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622028. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610373; NSGC 11149. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622029. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610382; NSGC 11150. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622030. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610388; NSGC 11151. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622031. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610391; NSGC 11152. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622032. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610392; NSGC 11153. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622033. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610393; NSGC 11154. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 622034. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610400; NSGC 11155. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622035. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610402; NSGC 11156. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622036. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610411; NSGC 11157. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622037. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610412; NSGC 11158. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622038. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610417; NSGC 11159. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622039. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610418; NSGC 11160. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622040. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610422; NSGC 11161. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622041. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610423; NSGC 11162. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622042. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610425; NSGC 11163. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622043. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610426; NSGC 11164. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622044. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610438; NSGC 11165. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622045. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610442; NSGC 11166. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622046. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610443; NSGC 11167. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622047. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610457; NSGC 11168. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 622048. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610458; NSGC 11169. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622049. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610459; NSGC 11170. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622050. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610461; NSGC 11171. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622051. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610462; NSGC 11172. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622052. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610465; NSGC 11173. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622053. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610466; NSGC 11174. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622054. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610467; NSGC 11175. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622055. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610471; NSGC 11176. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622056. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610474; NSGC 11177. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622057. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610476; NSGC 11178. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622058. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610479; NSGC 11179. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622059. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610481; NSGC 11180. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622060. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610488; NSGC 11181. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622061. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610492; NSGC 11182. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 622062. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610493; NSGC 11183. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622063. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610503; NSGC 11184. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622064. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610507; NSGC 11185. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622065. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610508; NSGC 11186. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 622066. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610512; NSGC 11187. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622067. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610515; NSGC 11188. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622068. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610516; NSGC 11189. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622069. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610517; NSGC 11190. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622070. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610518; NSGC 11191. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622071. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610522; NSGC 11192. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622072. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610531; NSGC 11193. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622073. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610537; NSGC 11194. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622074. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610538; NSGC 11195. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 622075. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610539; NSGC 11196. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.

- PI 622076. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610540; NSGC 11197. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622077. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610543; NSGC 11198. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622078. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610547; NSGC 11199. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622079. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610548; NSGC 11200. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622080. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610551; NSGC 11201. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622081. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610552; NSGC 11202. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622082. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610553; NSGC 11203. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622083. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610557; NSGC 11204. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622084. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610560; NSGC 11205. Collected in Mazandaran, Iran.
Latitude 36° 30' N. Longitude 53° 30' E.
- PI 622085. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610562; NSGC 11206. Collected in Mazandaran, Iran.
Latitude 36° 30' N. Longitude 53° 30' E.
- PI 622086. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610563; NSGC 11207. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622087. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610567; NSGC 11208. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622088. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610571; NSGC 11209. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622089. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610572; NSGC 11210. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.

- PI 622090. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610576; NSGC 11211. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622091. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610577; NSGC 11212. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622092. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610580; NSGC 11213. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622093. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610581; NSGC 11214. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622094. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610583; NSGC 11215. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622095. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610596; NSGC 11216. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622096. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610597; NSGC 11217. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622097. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610599; NSGC 11218. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622098. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610600; NSGC 11219. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622099. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610603; NSGC 11220. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622100. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610604; NSGC 11221. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622101. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610609; NSGC 11222. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622102. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610610; NSGC 11223. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622103. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610613; NSGC 11224. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.

- PI 622104. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610614; NSGC 11225. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622105. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610615; NSGC 11226. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622106. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610619; NSGC 11227. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 622107. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610620; NSGC 11228. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622108. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610622; NSGC 11229. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622109. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610623; NSGC 11230. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622110. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610632; NSGC 11231. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622111. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610634; NSGC 11232. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622112. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610641; NSGC 11233. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622113. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610644; NSGC 11234. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622114. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610648; NSGC 11235. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622115. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610649; NSGC 11236. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622116. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610651; NSGC 11237. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622117. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610653; NSGC 11238. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.

- PI 622118. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610654; NSGC 11239. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622119. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610657; NSGC 11240. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622120. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610659; NSGC 11241. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622121. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610662; NSGC 11242. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622122. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610663; NSGC 11243. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 622123. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610666; NSGC 11244. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622124. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610669; NSGC 11245. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622125. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610673; NSGC 11246. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622126. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610674; NSGC 11247. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622127. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610675; NSGC 11248. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622128. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610676; NSGC 11249. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622129. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610679; NSGC 11250. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622130. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610680; NSGC 11251. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 622131. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610681; NSGC 11252. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.

- PI 622132. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610685; NSGC 11253. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610686; NSGC 11254. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610688; NSGC 11255. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622135. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610689; NSGC 11256. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622136. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610690; NSGC 11257. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610694; NSGC 11258. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622138. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610696; NSGC 11259. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622139. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610700; NSGC 11260. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610703; NSGC 11261. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610708; NSGC 11262. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610710; NSGC 11263. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610728; NSGC 11264. Collected in Semnan, Iran. Latitude

36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622144. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610729; NSGC 11265. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622145. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610732; NSGC 11266. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622146. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610734; NSGC 11267. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622147. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610735; NSGC 11268. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622148. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610738; NSGC 11269. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622149. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610740; NSGC 11270. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622150. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610741; NSGC 11271. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622151. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610742; NSGC 11272. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622152. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610743; NSGC 11273. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622153. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610747; NSGC 11274. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

PI 622154. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8610752; NSGC 11275. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m.
Shahrood.

- PI 622155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610756; NSGC 11276. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610762; NSGC 11277. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610765; NSGC 11278. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610768; NSGC 11279. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610769; NSGC 11280. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610773; NSGC 11281. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610775; NSGC 11282. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610783; NSGC 11283. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 622163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610785; NSGC 11284. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622164. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610786; NSGC 11285. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610787; NSGC 11286. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622166. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610788; NSGC 11287. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.

- PI 622167. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610789; NSGC 11288. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622168. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610790; NSGC 11289. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622169. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610792; NSGC 11290. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622170. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610794; NSGC 11291. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622171. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610800; NSGC 11292. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622172. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610802; NSGC 11293. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622173. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610803; NSGC 11294. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622174. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610805; NSGC 11295. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622175. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610810; NSGC 11296. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622176. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610811; NSGC 11297. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610814; NSGC 11298. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622178. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610815; NSGC 11299. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622179. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610818; NSGC 11300. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622180. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610819; NSGC 11301. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.

- PI 622181. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610828; NSGC 11302. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622182. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610829; NSGC 11303. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622183. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610832; NSGC 11304. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622184. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610833; NSGC 11305. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622185. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610834; NSGC 11306. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622186. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610835; NSGC 11307. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622187. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610836; NSGC 11308. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622188. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610837; NSGC 11309. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622189. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610838; NSGC 11310. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622190. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610839; NSGC 11311. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622191. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610841; NSGC 11312. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622192. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610842; NSGC 11313. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622193. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610843; NSGC 11314. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622194. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610845; NSGC 11315. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.

- PI 622195. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610846; NSGC 11316. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622196. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610849; NSGC 11317. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622197. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610850; NSGC 11318. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622198. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610852; NSGC 11319. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622199. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610863; NSGC 11320. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622200. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610864; NSGC 11321. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622201. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610866; NSGC 11322. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622202. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610870; NSGC 11323. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622203. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610875; NSGC 11324. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622204. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610880; NSGC 11325. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622205. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610885; NSGC 11326. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622206. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610886; NSGC 11327. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622207. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610889; NSGC 11328. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 622208. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610890; NSGC 11329. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.

- PI 622209. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610896; NSGC 11330. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622210. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610898; NSGC 11331. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622211. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610899; NSGC 11332. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622212. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610901; NSGC 11333. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622213. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610903; NSGC 11334. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622214. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610905; NSGC 11335. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622215. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610907; NSGC 11336. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622216. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610908; NSGC 11337. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622217. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610912; NSGC 11338. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622218. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610914; NSGC 11339. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622219. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610915; NSGC 11340. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622220. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610916; NSGC 11341. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622221. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610921; NSGC 11342. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622222. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610923; NSGC 11343. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.

- PI 622223. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610924; NSGC 11344. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622224. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610925; NSGC 11345. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622225. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610927; NSGC 11346. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622226. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610929; NSGC 11347. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622227. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610930; NSGC 11348. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 622228. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610931; NSGC 11349. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622229. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610932; NSGC 11350. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622230. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610933; NSGC 11351. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622231. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610934; NSGC 11352. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622232. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610939; NSGC 11353. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622233. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610940; NSGC 11354. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622234. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610941; NSGC 11355. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622235. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610943; NSGC 11356. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622236. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610944; NSGC 11357. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.

- PI 622237. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610945; NSGC 11358. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622238. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610946; NSGC 11359. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622239. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610947; NSGC 11360. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622240. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610949; NSGC 11361. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622241. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610952; NSGC 11362. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622242. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610953; NSGC 11363. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622243. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610954; NSGC 11364. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622244. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610957; NSGC 11365. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622245. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610958; NSGC 11366. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622246. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610961; NSGC 11367. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622247. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610962; NSGC 11368. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622248. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610963; NSGC 11369. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622249. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610964; NSGC 11370. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622250. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610965; NSGC 11371. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.

- PI 622251. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610966; NSGC 11372. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622252. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610967; NSGC 11373. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622253. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610968; NSGC 11374. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622254. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610970; NSGC 11375. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622255. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610972; NSGC 11376. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622256. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610973; NSGC 11377. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622257. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610974; NSGC 11378. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 622258. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610977; NSGC 11379. Collected in Mazandaran, Iran.
Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m.
Babolsar.
- PI 622259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610978; NSGC 11380. Collected in Mazandaran, Iran.
Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m.
Babolsar.
- PI 622260. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610981; NSGC 11381. Collected in Mazandaran, Iran.
Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m.
Babolsar.
- PI 622261. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610983; NSGC 11382. Collected in Mazandaran, Iran.
Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m.
Babolsar.
- PI 622262. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610984; NSGC 11383. Collected in Mazandaran, Iran.
Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m.
Babolsar.
- PI 622263. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610985; NSGC 11384. Collected in Mazandaran, Iran.
Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m.
Babolsar.

- PI 622264. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610987; NSGC 11385. Collected in Mazandaran, Iran.
Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 622265. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610988; NSGC 11386. Collected in Mazandaran, Iran.
Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 622266. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610989; NSGC 11387. Collected in Mazandaran, Iran.
Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 622267. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610991; NSGC 11388. Collected in Mazandaran, Iran.
Latitude 36° 39' N. Longitude 51° 31' E. Elevation 10 m. Noshahr
- PI 622268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610993; NSGC 11389. Collected in Mazandaran, Iran.
Latitude 36° 49' N. Longitude 50° 53' E. Elevation -5 m.
Shahsavari.
- PI 622269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610994; NSGC 11390. Collected in Mazandaran, Iran.
Latitude 36° 49' N. Longitude 50° 53' E. Elevation -5 m.
Shahsavari.
- PI 622270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610995; NSGC 11391. Collected in Mazandaran, Iran.
Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 622271. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610996; NSGC 11392. Collected in Mazandaran, Iran.
Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 622272. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610997; NSGC 11393. Collected in Mazandaran, Iran.
Latitude 36° 28' N. Longitude 52° 21' E. Elevation 35 m. Amol.
- PI 622273. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611005; NSGC 11394. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622274. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611008; NSGC 11395. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622275. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611009; NSGC 11396. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622276. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611010; NSGC 11397. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622277. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611025; NSGC 11398. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622278. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611029; NSGC 11399. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622279. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611034; NSGC 11400. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622280. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611035; NSGC 11401. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622281. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611040; NSGC 11402. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622282. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611043; NSGC 11403. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622283. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611046; NSGC 11404. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622284. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611048; NSGC 11405. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622285. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611050; NSGC 11406. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622286. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611051; NSGC 11407. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622287. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611052; NSGC 11408. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622288. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611053; NSGC 11409. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622289. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611054; NSGC 11410. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622290. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611055; NSGC 11411. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622291. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611057; NSGC 11412. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622292. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611058; NSGC 11413. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622293. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611060; NSGC 11414. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622294. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611063; NSGC 11415. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622295. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611064; NSGC 11416. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622296. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611066; NSGC 11417. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622297. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611070; NSGC 11418. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622298. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611084; NSGC 11419. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622299. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611086; NSGC 11420. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622300. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611087; NSGC 11421. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622301. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611089; NSGC 11422. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622302. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611092; NSGC 11423. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622303. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611119; NSGC 11424. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622304. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611125; NSGC 11425. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611126; NSGC 11426. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611132; NSGC 11427. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611134; NSGC 11428. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622308. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611136; NSGC 11429. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622309. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611145; NSGC 11430. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622310. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611149; NSGC 11431. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622311. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611152; NSGC 11432. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622312. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611155; NSGC 11433. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622313. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611156; NSGC 11434. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622314. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611157; NSGC 11435. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622315. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611158; NSGC 11436. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622316. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611167; NSGC 11437. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622317. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611168; NSGC 11438. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622318. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611169; NSGC 11439. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622319. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611170; NSGC 11440. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622320. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611178; NSGC 11441. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622321. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611179; NSGC 11442. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622322. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611184; NSGC 11443. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622323. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611185; NSGC 11444. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622324. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611186; NSGC 11445. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622325. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611191; NSGC 11446. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622326. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611192; NSGC 11447. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622327. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611193; NSGC 11448. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622328. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611194; NSGC 11449. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622329. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611195; NSGC 11450. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622330. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611197; NSGC 11451. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622331. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611198; NSGC 11452. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622332. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611201; NSGC 11453. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622333. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611202; NSGC 11454. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622334. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611204; NSGC 11455. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611205; NSGC 11456. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622336. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611206; NSGC 11457. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622337. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611207; NSGC 11458. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611208; NSGC 11459. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622339. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611209; NSGC 11460. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622340. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611210; NSGC 11461. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622341. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611211; NSGC 11462. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611212; NSGC 11463. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622343. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611213; NSGC 11464. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622344. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611215; NSGC 11465. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622345. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611216; NSGC 11466. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622346. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611217; NSGC 11467. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622347. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611218; NSGC 11468. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622348. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611219; NSGC 11469. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611221; NSGC 11470. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622350. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611223; NSGC 11471. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622351. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611227; NSGC 11472. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622352. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611228; NSGC 11473. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622353. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611230; NSGC 11474. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622354. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611232; NSGC 11475. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611233; NSGC 11476. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611235; NSGC 11477. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622357. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611236; NSGC 11478. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622358. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611237; NSGC 11479. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611240; NSGC 11480. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611247; NSGC 11481. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622361. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611251; NSGC 11482. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622362. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611252; NSGC 11483. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622363. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611253; NSGC 11484. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622364. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611259; NSGC 11485. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622365. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611263; NSGC 11486. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622366. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611266; NSGC 11487. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622367. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611271; NSGC 11488. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622368. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611276; NSGC 11489. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622369. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611277; NSGC 11490. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622370. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611279; NSGC 11491. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622371. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611283; NSGC 11492. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622372. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611284; NSGC 11493. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622373. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611285; NSGC 11494. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622374. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611286; NSGC 11495. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622375. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611287; NSGC 11496. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622376. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611288; NSGC 11497. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622377. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611289; NSGC 11498. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622378. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611290; NSGC 11499. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622379. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611291; NSGC 11500. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622380. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611293; NSGC 11501. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622381. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611295; NSGC 11502. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622382. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611301; NSGC 11503. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611313; NSGC 11504. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622384. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611316; NSGC 11505. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611324; NSGC 11506. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611329; NSGC 11507. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622387. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611340; NSGC 11508. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622388. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611352; NSGC 11509. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622389. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8611354; NSGC 11510. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622390. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611356; NSGC 11511. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622391. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611357; NSGC 11512. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622392. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611358; NSGC 11513. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622393. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611367; NSGC 11514. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622394. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611370; NSGC 11515. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622395. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611371; NSGC 11516. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622396. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611373; NSGC 11517. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622397. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611374; NSGC 11518. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622398. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611376; NSGC 11519. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622399. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611377; NSGC 11520. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622400. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611378; NSGC 11521. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622401. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611379; NSGC 11522. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622402. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611380; NSGC 11523. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622403. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611381; NSGC 11524. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622404. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611382; NSGC 11525. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622405. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611387; NSGC 11526. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622406. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611399; NSGC 11527. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622407. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611401; NSGC 11528. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622408. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611402; NSGC 11529. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622409. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611405; NSGC 11530. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622410. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611407; NSGC 11531. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622411. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611408; NSGC 11532. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622412. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611416; NSGC 11533. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622413. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611417; NSGC 11534. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622414. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611418; NSGC 11535. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622415. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611419; NSGC 11536. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622416. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611420; NSGC 11537. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622417. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611421; NSGC 11538. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622418. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611422; NSGC 11539. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622419. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611423; NSGC 11540. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622420. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611424; NSGC 11541. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622421. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611425; NSGC 11542. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622422. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611426; NSGC 11543. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622423. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611433; NSGC 11544. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622424. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611447; NSGC 11545. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622425. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611458; NSGC 11546. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622426. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611476; NSGC 11547. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622427. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611478; NSGC 11548. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622428. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611481; NSGC 11549. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622429. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611482; NSGC 11550. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622430. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611484; NSGC 11551. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622431. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611486; NSGC 11552. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622432. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611490; NSGC 11553. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622433. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611491; NSGC 11554. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622434. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611492; NSGC 11555. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622435. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611494; NSGC 11556. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622436. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611498; NSGC 11557. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622437. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611499; NSGC 11558. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622438. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611502; NSGC 11559. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622439. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611503; NSGC 11560. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622440. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611504; NSGC 11561. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622441. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611505; NSGC 11562. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622442. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611506; NSGC 11563. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622443. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611509; NSGC 11564. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622444. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611511; NSGC 11565. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622445. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611516; NSGC 11566. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622446. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611522; NSGC 11567. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622447. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611523; NSGC 11568. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622448. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611524; NSGC 11569. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622449. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611526; NSGC 11570. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622450. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611527; NSGC 11571. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622451. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611528; NSGC 11572. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622452. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611534; NSGC 11573. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622453. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611535; NSGC 11574. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622454. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611540; NSGC 11575. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622455. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611543; NSGC 11576. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622456. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611545; NSGC 11577. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622457. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611549; NSGC 11578. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622458. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611550; NSGC 11579. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622459. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611551; NSGC 11580. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622460. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611552; NSGC 11581. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622461. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611553; NSGC 11582. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622462. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611554; NSGC 11583. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622463. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611555; NSGC 11584. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622464. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611556; NSGC 11585. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622465. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611558; NSGC 11586. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622466. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611562; NSGC 11587. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622467. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611572; NSGC 11588. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622468. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611573; NSGC 11589. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622469. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611574; NSGC 11590. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622470. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611575; NSGC 11591. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622471. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611576; NSGC 11592. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622472. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611577; NSGC 11593. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622473. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611578; NSGC 11594. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622474. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611580; NSGC 11595. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622475. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611585; NSGC 11596. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622476. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611591; NSGC 11597. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622477. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611592; NSGC 11598. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622478. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611596; NSGC 11599. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622479. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611599; NSGC 11600. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622480. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611600; NSGC 11601. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622481. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611602; NSGC 11602. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622482. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611604; NSGC 11603. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622483. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611606; NSGC 11604. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622484. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611619; NSGC 11605. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622485. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611620; NSGC 11606. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622486. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611621; NSGC 11607. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622487. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8611622; NSGC 11608. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622488. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611625; NSGC 11609. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622489. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611626; NSGC 11610. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622490. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8611628; NSGC 11611. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622491. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611629; NSGC 11612. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622492. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611630; NSGC 11613. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622493. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611632; NSGC 11614. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622494. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611633; NSGC 11615. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622495. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611634; NSGC 11616. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622496. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611635; NSGC 11617. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622497. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611636; NSGC 11618. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622498. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611639; NSGC 11619. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622499. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8611640; NSGC 11620. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622500. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8611641; NSGC 11621. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622501. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611644; NSGC 11622. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622502. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611646; NSGC 11623. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622503. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611648; NSGC 11624. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622504. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611649; NSGC 11625. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622505. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611650; NSGC 11626. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622506. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611656; NSGC 11627. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622507. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611657; NSGC 11628. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622508. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611658; NSGC 11629. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622509. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611659; NSGC 11630. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622510. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611660; NSGC 11631. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622511. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611661; NSGC 11632. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622512. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611662; NSGC 11633. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622513. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611663; NSGC 11634. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622514. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611664; NSGC 11635. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622515. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611666; NSGC 11636. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622516. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611669; NSGC 11637. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622517. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611670; NSGC 11638. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622518. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611672; NSGC 11639. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622519. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611676; NSGC 11640. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622520. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611677; NSGC 11641. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622521. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611678; NSGC 11642. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622522. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611682; NSGC 11643. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622523. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611684; NSGC 11644. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622524. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611686; NSGC 11645. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622525. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611703; NSGC 11646. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622526. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611705; NSGC 11647. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622527. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611714; NSGC 11648. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622528. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611716; NSGC 11649. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622529. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611719; NSGC 11650. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622530. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611726; NSGC 11651. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622531. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611728; NSGC 11652. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622532. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611736; NSGC 11653. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622533. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611738; NSGC 11654. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622534. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611739; NSGC 11655. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622535. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611747; NSGC 11656. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622536. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611752; NSGC 11657. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622537. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611753; NSGC 11658. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622538. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611756; NSGC 11659. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622539. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611758; NSGC 11660. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622540. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611767; NSGC 11661. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622541. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611768; NSGC 11662. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622542. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611770; NSGC 11663. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622543. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611772; NSGC 11664. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622544. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611774; NSGC 11665. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622545. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611808; NSGC 11666. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622546. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611812; NSGC 11667. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622547. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611825; NSGC 11668. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622548. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611827; NSGC 11669. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622549. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611828; NSGC 11670. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622550. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611831; NSGC 11671. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622551. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611843; NSGC 11672. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622552. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611865; NSGC 11673. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622553. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611876; NSGC 11674. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622554. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611877; NSGC 11675. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622555. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611878; NSGC 11676. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622556. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611879; NSGC 11677. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622557. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611882; NSGC 11678. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622558. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611883; NSGC 11679. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622559. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611898; NSGC 11680. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622560. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611900; NSGC 11681. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622561. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611902; NSGC 11682. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622562. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611905; NSGC 11683. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622563. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611907; NSGC 11684. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622564. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611911; NSGC 11685. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622565. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611923; NSGC 11686. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622566. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611924; NSGC 11687. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622567. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611925; NSGC 11688. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622568. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611926; NSGC 11689. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622569. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611931; NSGC 11690. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622570. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611932; NSGC 11691. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622571. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611933; NSGC 11692. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622572. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611938; NSGC 11693. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622573. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611940; NSGC 11694. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622574. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611942; NSGC 11695. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622575. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611948; NSGC 11696. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622576. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611949; NSGC 11697. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622577. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611951; NSGC 11698. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622578. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611959; NSGC 11699. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622579. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611961; NSGC 11700. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622580. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611963; NSGC 11701. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622581. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611965; NSGC 11702. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622582. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611967; NSGC 11703. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622583. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611973; NSGC 11704. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622584. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611979; NSGC 11705. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622585. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611985; NSGC 11706. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622586. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611990; NSGC 11707. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622587. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611993; NSGC 11708. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622588. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611994; NSGC 11709. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622589. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612001; NSGC 11710. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622590. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612003; NSGC 11711. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622591. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612008; NSGC 11712. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622592. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612011; NSGC 11713. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622593. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612016; NSGC 11714. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622594. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612021; NSGC 11715. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622595. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612027; NSGC 11716. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622596. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612028; NSGC 11717. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622597. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612029; NSGC 11718. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622598. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612030; NSGC 11719. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622599. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612031; NSGC 11720. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622600. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612033; NSGC 11721. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622601. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612038; NSGC 11722. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622602. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612040; NSGC 11723. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622603. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612041; NSGC 11724. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622604. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612043; NSGC 11725. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622605. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612050; NSGC 11726. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622606. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612051; NSGC 11727. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622607. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612058; NSGC 11728. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622608. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612061; NSGC 11729. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622609. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612063; NSGC 11730. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622610. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612067; NSGC 11731. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622611. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612070; NSGC 11732. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622612. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612076; NSGC 11733. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622613. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8612078; NSGC 11734. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622614. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612089; NSGC 11735. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622615. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612102; NSGC 11736. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622616. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612103; NSGC 11737. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622617. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612106; NSGC 11738. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622618. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612112; NSGC 11739. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622619. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612123; NSGC 11740. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622620. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612125; NSGC 11741. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622621. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612127; NSGC 11742. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622622. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8612130; NSGC 11743. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622623. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612141; NSGC 11744. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622624. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612148; NSGC 11745. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622625. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612152; NSGC 11746. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622626. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8612153; NSGC 11747. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622627. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612157; NSGC 11748. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622628. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612159; NSGC 11749. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622629. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612160; NSGC 11750. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622630. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612170; NSGC 11751. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622631. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612194; NSGC 11752. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622632. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612197; NSGC 11753. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622633. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612198; NSGC 11754. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622634. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612199; NSGC 11755. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622635. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612200; NSGC 11756. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622636. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612201; NSGC 11757. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622637. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612204; NSGC 11758. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622638. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612206; NSGC 11759. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622639. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612208; NSGC 11760. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622640. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612209; NSGC 11761. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622641. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612214; NSGC 11762. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622642. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612215; NSGC 11763. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622643. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612217; NSGC 11764. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622644. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612218; NSGC 11765. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622645. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612224; NSGC 11766. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622646. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612226; NSGC 11767. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622647. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612227; NSGC 11768. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622648. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612231; NSGC 11769. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622649. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612233; NSGC 11770. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622650. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612244; NSGC 11771. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622651. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612249; NSGC 11772. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622652. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612255; NSGC 11773. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622653. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612256; NSGC 11774. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622654. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612259; NSGC 11775. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622655. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612268; NSGC 11776. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622656. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612283; NSGC 11777. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622657. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612287; NSGC 11778. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622658. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612290; NSGC 11779. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622659. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612291; NSGC 11780. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622660. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612292; NSGC 11781. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622661. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612298; NSGC 11782. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622662. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612299; NSGC 11783. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622663. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612304; NSGC 11784. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622664. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612306; NSGC 11785. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622665. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612308; NSGC 11786. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622666. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612314; NSGC 11787. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622667. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612337; NSGC 11788. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622668. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612348; NSGC 11789. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622669. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612353; NSGC 11790. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622670. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612358; NSGC 11791. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622671. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612360; NSGC 11792. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622672. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612364; NSGC 11793. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622673. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612366; NSGC 11794. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622674. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612370; NSGC 11795. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622675. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612377; NSGC 11796. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622676. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612386; NSGC 11797. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622677. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612389; NSGC 11798. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622678. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612390; NSGC 11799. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622679. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612404; NSGC 11800. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622680. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612424; NSGC 11801. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622681. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612429; NSGC 11802. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622682. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612441; NSGC 11803. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622683. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612442; NSGC 11804. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622684. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612443; NSGC 11805. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622685. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612444; NSGC 11806. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622686. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612450; NSGC 11807. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622687. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612451; NSGC 11808. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622688. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612452; NSGC 11809. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622689. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612456; NSGC 11810. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622690. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612470; NSGC 11811. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622691. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612471; NSGC 11812. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622692. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612472; NSGC 11813. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622693. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612476; NSGC 11814. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622694. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612477; NSGC 11815. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622695. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612481; NSGC 11816. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622696. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612487; NSGC 11817. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622697. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612489; NSGC 11818. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622698. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612492; NSGC 11819. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622699. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612494; NSGC 11820. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622700. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612495; NSGC 11821. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622701. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612497; NSGC 11822. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622702. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612499; NSGC 11823. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622703. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612501; NSGC 11824. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622704. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612508; NSGC 11825. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622705. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612510; NSGC 11826. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622706. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612511; NSGC 11827. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622707. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612516; NSGC 11828. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622708. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612518; NSGC 11829. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622709. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612520; NSGC 11830. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622710. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612521; NSGC 11831. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622711. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612522; NSGC 11832. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622712. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612523; NSGC 11833. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622713. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612525; NSGC 11834. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622714. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612526; NSGC 11835. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622715. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612528; NSGC 11836. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622716. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612529; NSGC 11837. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622717. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612530; NSGC 11838. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622718. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612531; NSGC 11839. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622719. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612533; NSGC 11840. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622720. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612534; NSGC 11841. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622721. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612535; NSGC 11842. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622722. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612537; NSGC 11843. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622723. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612539; NSGC 11844. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622724. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612548; NSGC 11845. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622725. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612555; NSGC 11846. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622726. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612556; NSGC 11847. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622727. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612557; NSGC 11848. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622728. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612558; NSGC 11849. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622729. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612559; NSGC 11850. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622730. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612560; NSGC 11851. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622731. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612561; NSGC 11852. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622732. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612562; NSGC 11853. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622733. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612564; NSGC 11854. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622734. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612565; NSGC 11855. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622735. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612571; NSGC 11856. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622736. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612573; NSGC 11857. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622737. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612575; NSGC 11858. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622738. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612577; NSGC 11859. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622739. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612579; NSGC 11860. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622740. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612580; NSGC 11861. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622741. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612586; NSGC 11862. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622742. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612610; NSGC 11863. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622743. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612613; NSGC 11864. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622744. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612614; NSGC 11865. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622745. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612615; NSGC 11866. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622746. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612617; NSGC 11867. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622747. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612619; NSGC 11868. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622748. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612620; NSGC 11869. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622749. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612626; NSGC 11870. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622750. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612645; NSGC 11871. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622751. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612646; NSGC 11872. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622752. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612647; NSGC 11873. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622753. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612650; NSGC 11874. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622754. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612656; NSGC 11875. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622755. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612659; NSGC 11876. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622756. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612660; NSGC 11877. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622757. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612670; NSGC 11878. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622758. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612672; NSGC 11879. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622759. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612673; NSGC 11880. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622760. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612674; NSGC 11881. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622761. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612681; NSGC 11882. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622762. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612693; NSGC 11883. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622763. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612694; NSGC 11884. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622764. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612695; NSGC 11885. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622765. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612697; NSGC 11886. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622766. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612699; NSGC 11887. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622767. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612717; NSGC 11888. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622768. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612729; NSGC 11889. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622769. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612735; NSGC 11890. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622770. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612751; NSGC 11891. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622771. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612763; NSGC 11892. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622772. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612766; NSGC 11893. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622773. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612784; NSGC 11894. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622774. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612793; NSGC 11895. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622775. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612794; NSGC 11896. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622776. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612804; NSGC 11897. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622777. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612811; NSGC 11898. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622778. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612817; NSGC 11899. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622779. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612820; NSGC 11900. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622780. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612832; NSGC 11901. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622781. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612836; NSGC 11902. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622782. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612840; NSGC 11903. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622783. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612867; NSGC 11904. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622784. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612869; NSGC 11905. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622785. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612947; NSGC 11906. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622786. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612969; NSGC 11907. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622787. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612983; NSGC 11908. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622788. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612992; NSGC 11909. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622789. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612993; NSGC 11910. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622790. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613009; NSGC 11911. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622791. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613010; NSGC 11912. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622792. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613013; NSGC 11913. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622793. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613014; NSGC 11914. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622794. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613021; NSGC 11915. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 622795. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613029; NSGC 11916. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622796. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613052; NSGC 11917. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622797. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613067; NSGC 11918. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622798. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613081; NSGC 11919. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622799. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613083; NSGC 11920. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622800. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613084; NSGC 11921. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622801. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613087; NSGC 11922. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622802. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613088; NSGC 11923. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622803. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613090; NSGC 11924. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 622804. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613094; NSGC 11925. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622805. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613097; NSGC 11926. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622806. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613104; NSGC 11927. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622807. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613105; NSGC 11928. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622808. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613112; NSGC 11929. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 622809. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613115; NSGC 11930. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622810. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613121; NSGC 11931. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622811. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613124; NSGC 11932. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622812. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613125; NSGC 11933. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622813. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613128; NSGC 11934. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622814. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613142; NSGC 11935. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622815. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613150; NSGC 11936. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622816. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613158; NSGC 11937. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622817. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613160; NSGC 11938. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622818. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613170; NSGC 11939. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622819. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613173; NSGC 11940. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622820. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613174; NSGC 11941. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622821. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613177; NSGC 11942. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622822. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613178; NSGC 11943. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 622823. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613181; NSGC 11944. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622824. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613188; NSGC 11945. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622825. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613236; NSGC 11946. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622826. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613238; NSGC 11947. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622827. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613245; NSGC 11948. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622828. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613250; NSGC 11949. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622829. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613257; NSGC 11950. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622830. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613258; NSGC 11951. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622831. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613277; NSGC 11952. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622832. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613278; NSGC 11953. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622833. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613279; NSGC 11954. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622834. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613284; NSGC 11955. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622835. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613290; NSGC 11956. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622836. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613292; NSGC 11957. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 622837. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613298; NSGC 11958. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622838. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613323; NSGC 11959. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622839. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613328; NSGC 11960. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622840. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613350; NSGC 11961. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622841. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613361; NSGC 11962. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622842. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613370; NSGC 11963. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622843. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613371; NSGC 11964. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622844. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613373; NSGC 11965. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622845. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613377; NSGC 11966. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622846. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613378; NSGC 11967. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622847. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613388; NSGC 11968. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622848. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613389; NSGC 11969. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622849. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613390; NSGC 11970. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622850. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613391; NSGC 11971. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 622851. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613392; NSGC 11972. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622852. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613394; NSGC 11973. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622853. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613399; NSGC 11974. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622854. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613401; NSGC 11975. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622855. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613404; NSGC 11976. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622856. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613407; NSGC 11977. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622857. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613408; NSGC 11978. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622858. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613409; NSGC 11979. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622859. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613410; NSGC 11980. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622860. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613411; NSGC 11981. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622861. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613412; NSGC 11982. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622862. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613413; NSGC 11983. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 622863. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613432; NSGC 11984. Collected in Baluchestan Sistan, Iran. Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 622864. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613481; NSGC 11985. Collected in Baluchestan Sistan, Iran. Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.

- PI 622865. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613483; NSGC 11986. Collected in Baluchestan Sistan, Iran. Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 622866. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613527; NSGC 11987. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622867. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613530; NSGC 11988. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622868. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613536; NSGC 11989. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622869. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613539; NSGC 11990. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622870. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613542; NSGC 11991. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622871. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613548; NSGC 11992. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622872. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613549; NSGC 11993. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622873. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613550; NSGC 11994. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622874. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613551; NSGC 11995. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622875. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613554; NSGC 11996. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622876. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613557; NSGC 11997. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622877. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613565; NSGC 11998. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622878. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613566; NSGC 11999. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622879. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613569; NSGC 12000. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622880. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613572; NSGC 12001. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622881. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613574; NSGC 12002. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622882. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613575; NSGC 12003. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622883. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613581; NSGC 12004. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622884. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613583; NSGC 12005. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622885. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613585; NSGC 12006. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622886. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613594; NSGC 12007. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622887. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613611; NSGC 12008. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622888. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613616; NSGC 12009. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622889. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613628; NSGC 12010. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622890. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613634; NSGC 12011. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622891. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613639; NSGC 12012. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622892. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613648; NSGC 12013. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622893. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613649; NSGC 12014. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622894. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613659; NSGC 12015. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622895. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613663; NSGC 12016. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622896. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613664; NSGC 12017. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622897. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613678; NSGC 12018. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622898. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613679; NSGC 12019. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622899. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613687; NSGC 12020. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622900. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613688; NSGC 12021. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622901. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613690; NSGC 12022. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622902. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613691; NSGC 12023. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622903. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613693; NSGC 12024. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622904. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613695; NSGC 12025. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622905. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613706; NSGC 12026. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622906. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613734; NSGC 12027. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622907. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613735; NSGC 12028. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622908. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613736; NSGC 12029. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622909. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613748; NSGC 12030. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622910. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613754; NSGC 12031. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622911. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613771; NSGC 12032. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622912. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613789; NSGC 12033. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622913. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613795; NSGC 12034. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622914. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613798; NSGC 12035. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622915. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613801; NSGC 12036. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622916. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613802; NSGC 12037. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622917. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613804; NSGC 12038. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622918. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613810; NSGC 12039. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622919. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613811; NSGC 12040. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622920. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613814; NSGC 12041. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622921. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613844; NSGC 12042. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622922. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613845; NSGC 12043. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622923. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613847; NSGC 12044. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622924. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613849; NSGC 12045. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622925. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613850; NSGC 12046. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622926. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613853; NSGC 12047. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622927. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613855; NSGC 12048. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622928. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613859; NSGC 12049. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622929. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613866; NSGC 12050. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622930. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613869; NSGC 12051. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622931. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613873; NSGC 12052. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622932. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613877; NSGC 12053. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622933. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613881; NSGC 12054. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622934. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613882; NSGC 12055. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622935. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613884; NSGC 12056. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622936. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613895; NSGC 12057. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622937. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613904; NSGC 12058. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622938. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613905; NSGC 12059. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622939. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613914; NSGC 12060. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613915; NSGC 12061. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622941. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613916; NSGC 12062. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622942. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613918; NSGC 12063. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622943. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613920; NSGC 12064. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622944. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613921; NSGC 12065. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622945. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613922; NSGC 12066. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622946. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613923; NSGC 12067. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622947. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613924; NSGC 12068. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622948. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613927; NSGC 12069. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622949. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613928; NSGC 12070. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622950. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613929; NSGC 12071. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622951. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613930; NSGC 12072. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622952. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613934; NSGC 12073. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622953. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613936; NSGC 12074. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622954. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613937; NSGC 12075. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622955. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613940; NSGC 12076. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622956. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613941; NSGC 12077. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622957. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613942; NSGC 12078. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622958. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613943; NSGC 12079. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622959. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613947; NSGC 12080. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622960. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613949; NSGC 12081. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622961. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613950; NSGC 12082. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622962. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613952; NSGC 12083. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622963. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613954; NSGC 12084. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622964. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613958; NSGC 12085. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622965. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613960; NSGC 12086. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622966. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613961; NSGC 12087. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622967. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613967; NSGC 12088. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622968. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613976; NSGC 12089. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622969. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613977; NSGC 12090. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622970. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613982; NSGC 12091. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622971. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613987; NSGC 12092. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622972. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613988; NSGC 12093. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622973. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613989; NSGC 12094. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622974. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613990; NSGC 12095. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622975. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613992; NSGC 12096. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622976. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613993; NSGC 12097. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622977. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614000; NSGC 12098. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622978. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614003; NSGC 12099. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622979. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614004; NSGC 12100. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622980. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614010; NSGC 12101. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614025; NSGC 12102. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614026; NSGC 12103. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614031; NSGC 12104. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622984. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614038; NSGC 12105. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614042; NSGC 12106. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614043; NSGC 12107. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614044; NSGC 12108. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622988. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614045; NSGC 12109. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622989. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614049; NSGC 12110. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622990. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614060; NSGC 12111. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 622991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614064; NSGC 12112. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622992. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614066; NSGC 12113. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622993. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614067; NSGC 12114. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622994. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614068; NSGC 12115. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622995. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614069; NSGC 12116. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622996. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614071; NSGC 12117. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622997. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614072; NSGC 12118. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622998. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614073; NSGC 12119. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 622999. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614074; NSGC 12120. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623000. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614076; NSGC 12121. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623001. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614077; NSGC 12122. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623002. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614078; NSGC 12123. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623003. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614079; NSGC 12124. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623004. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614080; NSGC 12125. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 623005. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614084; NSGC 12126. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623006. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614085; NSGC 12127. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623007. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614086; NSGC 12128. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623008. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614087; NSGC 12129. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623009. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614088; NSGC 12130. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623010. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614090; NSGC 12131. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623011. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614091; NSGC 12132. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623012. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614092; NSGC 12133. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623013. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614097; NSGC 12134. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623014. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614102; NSGC 12135. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623015. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614103; NSGC 12136. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623016. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614104; NSGC 12137. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623017. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614105; NSGC 12138. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623018. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614106; NSGC 12139. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 623019. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614107; NSGC 12140. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623020. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614108; NSGC 12141. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623021. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614109; NSGC 12142. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623022. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614111; NSGC 12143. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623023. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614125; NSGC 12144. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623024. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614140; NSGC 12145. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623025. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614141; NSGC 12146. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623026. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614142; NSGC 12147. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623027. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614144; NSGC 12148. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623028. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614145; NSGC 12149. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623029. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614146; NSGC 12150. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623030. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614147; NSGC 12151. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623031. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614150; NSGC 12152. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623032. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614158; NSGC 12153. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 623033. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614160; NSGC 12154. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623034. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614161; NSGC 12155. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623035. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614162; NSGC 12156. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623036. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614166; NSGC 12157. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623037. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614167; NSGC 12158. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623038. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614177; NSGC 12159. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623039. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614181; NSGC 12160. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623040. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614191; NSGC 12161. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623041. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614194; NSGC 12162. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623042. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614195; NSGC 12163. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623043. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614201; NSGC 12164. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623044. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614206; NSGC 12165. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623045. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614210; NSGC 12166. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623046. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614213; NSGC 12167. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 623047. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614225; NSGC 12168. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623048. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614229; NSGC 12169. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623049. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614232; NSGC 12170. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623050. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614233; NSGC 12171. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623051. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614236; NSGC 12172. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623052. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614239; NSGC 12173. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623053. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614241; NSGC 12174. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623054. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614245; NSGC 12175. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623055. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614255; NSGC 12176. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623056. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614257; NSGC 12177. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623057. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614259; NSGC 12178. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623058. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614266; NSGC 12179. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623059. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614267; NSGC 12180. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623060. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614269; NSGC 12181. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 623061. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614270; NSGC 12182. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623062. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614271; NSGC 12183. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623063. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614273; NSGC 12184. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623064. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614285; NSGC 12185. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623065. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614303; NSGC 12186. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623066. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614314; NSGC 12187. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623067. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614317; NSGC 12188. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623068. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614328; NSGC 12189. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623069. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614329; NSGC 12190. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623070. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614355; NSGC 12191. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623071. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614369; NSGC 12192. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623072. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614409; NSGC 12193. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623073. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614419; NSGC 12194. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623074. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614433; NSGC 12195. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 623075. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614456; NSGC 12196. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623076. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614459; NSGC 12197. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623077. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614495; NSGC 12198. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623078. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614497; NSGC 12199. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623079. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614511; NSGC 12200. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623080. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614521; NSGC 12201. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623081. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614525; NSGC 12202. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623082. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614542; NSGC 12203. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623083. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614552; NSGC 12204. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623084. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600019; NSGC 12205. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623085. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600031; NSGC 12206. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623086. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600037; NSGC 12207. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623087. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600038; NSGC 12208. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623088. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600040; NSGC 12209. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz

- PI 623089. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600044; NSGC 12210. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 623090. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600045; NSGC 12211. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623091. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600048; NSGC 12212. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623092. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600050; NSGC 12213. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623093. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600055; NSGC 12214. Collected in Bakhtaran, Iran. Latitude 34° 15' N. Longitude 46° 14' E. Elevation 1561 m. Kerend.
- PI 623094. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600059; NSGC 12215. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623095. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600060; NSGC 12216. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 623096. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600063; NSGC 12217. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623097. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600064; NSGC 12218. Collected in Bakhtaran, Iran. Latitude 34° 22' N. Longitude 47° 29' E. Elevation 1300 m. Bisotoon.
- PI 623098. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600074; NSGC 12219. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623099. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600076; NSGC 12220. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623100. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600095; NSGC 12221. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623101. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600098; NSGC 12222. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623102. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600103; NSGC 12223. Collected in Bakhtaran, Iran. Latitude 34° 22' N. Longitude 47° 29' E. Elevation 1300 m. Bisotoon.

- PI 623103. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600107; NSGC 12224. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623104. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600108; NSGC 12225. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623105. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600114; NSGC 12226. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 623106. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600115; NSGC 12227. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 623107. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600149; NSGC 12228. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623108. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600169; NSGC 12229. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623109. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600170; NSGC 12230. Collected in Yazd, Iran. Latitude 31° 33' N. Longitude 53° 46' E. Elevation 2064 m. Dastjerd.
- PI 623110. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600188; NSGC 12231. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623111. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600194; NSGC 12232. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623112. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600219; NSGC 12233. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623113. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600220; NSGC 12234. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 623114. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600222; NSGC 12235. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623115. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600223; NSGC 12236. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 623116. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600228; NSGC 12237. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.

- PI 623117. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600233; NSGC 12238. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 623118. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600287; NSGC 12239. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 623119. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600296; NSGC 12240. Collected in Esfahan, Iran. Latitude
31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semiron.
- PI 623120. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600303; NSGC 12241. Collected in Khorasan, Iran. Latitude
37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623121. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600304; NSGC 12242. Collected in Khorasan, Iran. Latitude
32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623122. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600347; NSGC 12243. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623123. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600348; NSGC 12244. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623124. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600353; NSGC 12245. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623125. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600362; NSGC 12246. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623126. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600363; NSGC 12247. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623127. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600364; NSGC 12248. Collected in Fars, Iran. Latitude
28° 55' N. Longitude 53° 59' E. Elevation 1560 m. Fasa.
- PI 623128. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600370; NSGC 12249. Collected in West Azerbaijan, Iran.
Latitude 38° 33' N. Longitude 44° 58' E. Elevation 1276 m. Khoy.
- PI 623129. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600373; NSGC 12250. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623130. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600374; NSGC 12251. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.

- PI 623131. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600387; NSGC 12252. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 623132. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600397; NSGC 12253. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 623133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600398; NSGC 12254. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 623134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600403; NSGC 12255. Collected in East Azerbaijan, Iran.
Latitude 38° 25' N. Longitude 45° 50' E. Elevation 1425 m. Marand.
- PI 623135. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600422; NSGC 12256. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623136. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600439; NSGC 12257. Collected in West Azerbaijan, Iran.
Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m.
Mahabad.
- PI 623137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600448; NSGC 12258. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 623138. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600450; NSGC 12259. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 623139. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600462; NSGC 12260. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600465; NSGC 12261. Collected in Semnan, Iran. Latitude
35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 623141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600466; NSGC 12262. Collected in Semnan, Iran. Latitude
36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 623142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600475; NSGC 12263. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 623143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600495; NSGC 12264. Collected in Khorasan, Iran. Latitude
37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623144. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600500; NSGC 12265. Collected in Khorasan, Iran. Latitude
37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.

- PI 623145. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600512; NSGC 12266. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 623146. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600516; NSGC 12267. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623147. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600520; NSGC 12268. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623148. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600526; NSGC 12269. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623149. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600539; NSGC 12270. Collected in Mazandaran, Iran. Latitude 36° 42' N. Longitude 53° 36' E. Elevation 12 m. Benshahr.
- PI 623150. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600546; NSGC 12271. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623151. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600549; NSGC 12272. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 623152. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600560; NSGC 12273. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623153. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600567; NSGC 12274. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623154. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600578; NSGC 12275. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600587; NSGC 12276. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA860590; NSGC 12277. Collected in Khorasan, Iran. Latitude 37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.
- PI 623157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600595; NSGC 12278. Collected in Kordestan, Iran. Latitude 36° 57' N. Longitude 45° 23' E. Elevation 1343 m. Naghadeh.
- PI 623158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600597; NSGC 12279. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.

- PI 623159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600606; NSGC 12280. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 623160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600615; NSGC 12281. Collected in Lorestan, Iran. Latitude 33° 55' N. Longitude 48° 48' E. Elevation 1644 m. Borujerd.
- PI 623161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600624; NSGC 12282. Collected in West Azerbaijan, Iran. Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 623162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600626; NSGC 12283. Collected in West Azerbaijan, Iran. Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 623163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600627; NSGC 12284. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623164. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600629; NSGC 12285. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600633; NSGC 12286. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623166. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600641; NSGC 12287. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623167. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600644; NSGC 12288. Collected in Gilan, Iran. Latitude 37° 13' N. Longitude 49° 19' E. Elevation 42 m. Fooman.
- PI 623168. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600653; NSGC 12289. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623169. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600668; NSGC 12290. Collected in Gilan, Iran. Latitude 36° 48' N. Longitude 49° 24' E. Elevation 326 m. Roud-Bar.
- PI 623170. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600677; NSGC 12291. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623171. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600680; NSGC 12292. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623172. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600688; NSGC 12293. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 623173. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600713; NSGC 12294. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 623174. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600722; NSGC 12295. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 623175. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600723; NSGC 12296. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 623176. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600725; NSGC 12297. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600735; NSGC 12298. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 623178. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600742; NSGC 12299. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623179. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600743; NSGC 12300. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 623180. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600744; NSGC 12301. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623181. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600755; NSGC 12302. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623182. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600759; NSGC 12303. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623183. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600761; NSGC 12304. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623184. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600762; NSGC 12305. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623185. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600770; NSGC 12306. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623186. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600778; NSGC 12307. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 623187. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600781; NSGC 12308. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 623188. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600783; NSGC 12309. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623189. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600788; NSGC 12310. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 623190. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600792; NSGC 12311. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623191. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600793; NSGC 12312. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623192. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600796; NSGC 12313. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623193. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600804; NSGC 12314. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623194. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600814; NSGC 12315. Collected in Khorasan, Iran. Latitude 36° 32' N. Longitude 61° 7' E. Elevation 282 m. Sarakhs.
- PI 623195. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600815; NSGC 12316. Collected in Khorasan, Iran. Latitude 36° 32' N. Longitude 61° 7' E. Elevation 282 m. Sarakhs.
- PI 623196. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600816; NSGC 12317. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623197. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600817; NSGC 12318. Collected in Khorasan, Iran. Latitude 36° 32' N. Longitude 61° 7' E. Elevation 282 m. Sarakhs.
- PI 623198. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600818; NSGC 12319. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623199. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600819; NSGC 12320. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623200. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600821; NSGC 12321. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.

- PI 623201. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600823; NSGC 12322. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623202. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600824; NSGC 12323. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623203. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600826; NSGC 12324. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623204. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600834; NSGC 12325. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623205. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600835; NSGC 12326. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623206. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600836; NSGC 12327. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623207. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600840; NSGC 12328. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623208. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600841; NSGC 12329. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623209. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600842; NSGC 12330. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623210. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600843; NSGC 12331. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623211. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600844; NSGC 12332. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623212. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600846; NSGC 12333. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623213. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600854; NSGC 12334. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623214. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600866; NSGC 12335. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.

- PI 623215. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600868; NSGC 12336. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623216. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600885; NSGC 12337. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623217. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600886; NSGC 12338. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623218. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600888; NSGC 12339. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623219. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600900; NSGC 12340. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623220. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600902; NSGC 12341. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623221. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600903; NSGC 12342. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623222. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600905; NSGC 12343. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623223. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600906; NSGC 12344. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623224. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600908; NSGC 12345. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 623225. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600909; NSGC 12346. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 623226. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600910; NSGC 12347. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623227. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600912; NSGC 12348. Collected in Khorasan, Iran. Latitude 36° 32' N. Longitude 61° 7' E. Elevation 282 m. Sarakhs.
- PI 623228. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600913; NSGC 12349. Collected in Khorasan, Iran. Latitude 36° 32' N. Longitude 61° 7' E. Elevation 282 m. Sarakhs.

- PI 623229. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600916; NSGC 12350. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623230. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600922; NSGC 12351. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623231. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600923; NSGC 12352. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623232. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600925; NSGC 12353. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 623233. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600927; NSGC 12354. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shahrud.
- PI 623234. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600928; NSGC 12355. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shahrud.
- PI 623235. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600945; NSGC 12356. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623236. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600950; NSGC 12357. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shahrud.
- PI 623237. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600952; NSGC 12358. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shahrud.
- PI 623238. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600953; NSGC 12359. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shahrud.
- PI 623239. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600965; NSGC 12360. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 623240. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600973; NSGC 12361. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shahrud.
- PI 623241. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600974; NSGC 12362. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shahrud.
- PI 623242. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600981; NSGC 12363. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. tabas.

- PI 623243. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600988; NSGC 12364. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 623244. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600989; NSGC 12365. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 623245. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600992; NSGC 12366. Collected in Esfahan, Iran. Latitude
32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 623246. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600997; NSGC 12367. Collected in Semnan, Iran. Latitude
35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 623247. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600998; NSGC 12368. Collected in Semnan, Iran. Latitude
35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 623248. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600999; NSGC 12369. Collected in Khorasan, Iran. Latitude
34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.
- PI 623249. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602004; NSGC 12370. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623250. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602014; NSGC 12371. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623251. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602026; NSGC 12372. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623252. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602028; NSGC 12373. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623253. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602032; NSGC 12374. Collected in Kordestan, Iran. Latitude
36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 623254. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602033; NSGC 12375. Collected in Markazi, Iran. Latitude
35° 48' N. Longitude 50° 58' E. Elevation 1315 m. Karaj.
- PI 623255. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602045; NSGC 12376. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623256. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602055; NSGC 12377. Collected in Zanjan, Iran. Latitude
36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.

- PI 623257. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602065; NSGC 12378. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 623258. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602073; NSGC 12379. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602079; NSGC 12380. Collected in Khorasan, Iran. Latitude
37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623260. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602081; NSGC 12381. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623261. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602102; NSGC 12382. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623262. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602118; NSGC 12383. Collected in Khorasan, Iran. Latitude
37° 6' N. Longitude 57° 30' E. Elevation 1467 m. Esfaraien.
- PI 623263. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602162; NSGC 12384. Collected in Khorasan, Iran. Latitude
32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623264. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602176; NSGC 12385. Collected in Khorasan, Iran. Latitude
37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.
- PI 623265. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602184; NSGC 12386. Collected in Khorasan, Iran. Latitude
32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 623266. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602192; NSGC 12387. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 623267. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602218; NSGC 12388. Collected in Mazandaran, Iran.
Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.
- PI 623268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602227; NSGC 12389. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 623269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602230; NSGC 12390. Collected in Khorasan, Iran. Latitude
37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 623270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602231; NSGC 12391. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 623271. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602251; NSGC 12392. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623272. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602263; NSGC 12393. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623273. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602269; NSGC 12394. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 623274. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602279; NSGC 12395. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623275. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602281; NSGC 12396. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623276. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602282; NSGC 12397. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623277. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602283; NSGC 12398. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623278. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602291; NSGC 12399. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 623279. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602299; NSGC 12400. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623280. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602301; NSGC 12401. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623281. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602313; NSGC 12402. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 623282. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602315; NSGC 12403. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623283. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602317; NSGC 12404. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623284. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602320; NSGC 12405. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahi-Dasht.

- PI 623285. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602321; NSGC 12406. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahi-Dasht.
- PI 623286. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602330; NSGC 12407. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623287. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602343; NSGC 12408. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 623288. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602348; NSGC 12409. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 623289. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602352; NSGC 12410. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623290. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602363; NSGC 12411. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 623291. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602365; NSGC 12412. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.
- PI 623292. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602374; NSGC 12414. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623293. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602378; NSGC 12415. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623294. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602381; NSGC 12416. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623295. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602386; NSGC 12417. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidari.
- PI 623296. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602387; NSGC 12418. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidari.
- PI 623297. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602389; NSGC 12419. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623298. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602397; NSGC 12420. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.

- PI 623299. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602410; NSGC 12421. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623300. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602411; NSGC 12422. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623301. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602428; NSGC 12423. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 623302. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602446; NSGC 12424. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623303. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602451; NSGC 12425. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623304. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602455; NSGC 12426. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602456; NSGC 12427. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602457; NSGC 12428. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602465; NSGC 12429. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623308. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602466; NSGC 12430. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623309. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602468; NSGC 12431. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623310. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602471; NSGC 12432. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623311. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602472; NSGC 12433. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623312. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602473; NSGC 12434. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.

- PI 623313. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602487; NSGC 12435. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 623314. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602488; NSGC 12436. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623315. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602496; NSGC 12437. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623316. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602524; NSGC 12438. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623317. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602540; NSGC 12439. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623318. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602543; NSGC 12440. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 623319. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602546; NSGC 12441. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 623320. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602549; NSGC 12442. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623321. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602555; NSGC 12443. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 623322. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602563; NSGC 12444. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623323. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602570; NSGC 12445. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623324. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602571; NSGC 12446. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623325. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602572; NSGC 12447. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623326. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602586; NSGC 12448. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 623327. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602601; NSGC 12449. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623328. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602606; NSGC 12450. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623329. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602614; NSGC 12451. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623330. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602623; NSGC 12452. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 623331. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602634; NSGC 12453. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623332. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602635; NSGC 12454. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 623333. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602662; NSGC 12455. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 623334. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602665; NSGC 12456. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m.
Shahre-Kord.
- PI 623335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602676; NSGC 12457. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623336. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602677; NSGC 12458. Collected in West Azerbaijan, Iran.
Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m.
Hasht-Rood.
- PI 623337. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602685; NSGC 12459. Collected in Fars, Iran. Latitude 29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602686; NSGC 12460. Collected in Fars, Iran. Latitude 29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 623339. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602690; NSGC 12461. Collected in East Azerbaijan, Iran.
Latitude 37° 25' N. Longitude 46° 13' E. Elevation 1503 m.
Maragheh.

- PI 623340. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602692; NSGC 12462. Collected in Kerman, Iran. Latitude 29° 28' N. Longitude 55° 44' E. Elevation 1776 m. Sirjan.
- PI 623341. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602727; NSGC 12463. Collected in Mazandaran, Iran. Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.
- PI 623342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602819; NSGC 12464. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623343. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602877; NSGC 12465. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 623344. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602889; NSGC 12466. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623345. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602981; NSGC 12467. Collected in Kordestan, Iran. Latitude 35° 58' N. Longitude 45° 54' E. Elevation 1516 m. Baneh.
- PI 623346. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602989; NSGC 12468. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623347. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603011; NSGC 12469. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623348. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603024; NSGC 12470. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603031; NSGC 12471. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623350. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603035; NSGC 12472. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623351. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603037; NSGC 12473. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623352. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603039; NSGC 12474. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623353. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603040; NSGC 12475. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 623354. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603049; NSGC 12476. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603051; NSGC 12477. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603052; NSGC 12478. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623357. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603058; NSGC 12479. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623358. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603061; NSGC 12480. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603079; NSGC 12481. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603083; NSGC 12482. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623361. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603090; NSGC 12483. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623362. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603092; NSGC 12484. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623363. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612007; NSGC 12485. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623364. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603105; NSGC 12486. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 623365. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603109; NSGC 12487. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 623366. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603111; NSGC 12488. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 623367. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603112; NSGC 12489. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.

- PI 623368. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603114; NSGC 12490. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 623369. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603115; NSGC 12491. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623370. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603122; NSGC 12492. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 623371. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603123; NSGC 12493. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 623372. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603133; NSGC 12494. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 623373. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603159; NSGC 12495. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623374. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603160; NSGC 12496. Collected in Yazd, Iran. Latitude 31° 55' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623375. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603161; NSGC 12497. Collected in Kerman, Iran. Latitude 29° 0' N. Longitude 57° 0' E. Soofi-Abad.
- PI 623376. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603164; NSGC 12498. Collected in Kerman, Iran. Latitude 29° 0' N. Longitude 57° 0' E. Soofi-Abad.
- PI 623377. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603165; NSGC 12499. Collected in Kerman, Iran. Latitude 29° 0' N. Longitude 57° 0' E. Soofi-Abad.
- PI 623378. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603166; NSGC 12500. Collected in Kerman, Iran. Latitude 28° 40' 12" N. Longitude 57° 44' 12" E. Elevation 697 m. Jiroft.
- PI 623379. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603167; NSGC 12501. Collected in Kerman, Iran. Latitude 28° 40' 12" N. Longitude 57° 44' 12" E. Elevation 697 m. Jiroft.
- PI 623380. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603168; NSGC 12502. Collected in Kerman, Iran. Latitude 28° 40' 12" N. Longitude 57° 44' 12" E. Elevation 697 m. Jiroft.
- PI 623381. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603169; NSGC 12503. Collected in Kerman, Iran. Latitude 28° 40' 12" N. Longitude 57° 44' 12" E. Elevation 697 m. Jiroft.

- PI 623382. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603170; NSGC 12504. Collected in Kerman, Iran. Latitude 28° 40' 12" N. Longitude 57° 44' 12" E. Elevation 697 m. Jiroft.
- PI 623383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603192; NSGC 12505. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623384. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603193; NSGC 12506. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603198; NSGC 12507. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603199; NSGC 12508. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623387. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603201; NSGC 12509. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623388. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603202; NSGC 12510. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623389. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603206; NSGC 12511. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 623390. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603207; NSGC 12512. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 623391. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603208; NSGC 12513. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623392. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603209; NSGC 12514. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623393. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603214; NSGC 12515. Collected in Kerman, Iran. Latitude 38° 24' N. Longitude 47° 40' E. Elevation 1440 m. Meshgin-Shah.
- PI 623394. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603216; NSGC 12516. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 623395. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603263; NSGC 12517. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.

- PI 623396. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603265; NSGC 12518. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 623397. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603295; NSGC 12519. Collected in West Azerbaijan, Iran.
Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 623398. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603297; NSGC 12520. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623399. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603300; NSGC 12521. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623400. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603303; NSGC 12522. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623401. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603310; NSGC 12523. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623402. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603312; NSGC 12524. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623403. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603315; NSGC 12525. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623404. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603318; NSGC 12526. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623405. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603319; NSGC 12527. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623406. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603320; NSGC 12528. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623407. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603322; NSGC 12529. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623408. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603324; NSGC 12530. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623409. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603327; NSGC 12531. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 623410. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603328; NSGC 12532. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623411. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603929; NSGC 12533. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623412. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603931; NSGC 12534. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623413. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603932; NSGC 12535. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623414. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603948; NSGC 12536. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 623415. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603955; NSGC 12537. Collected in Yazd, Iran. Latitude 31° 55' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 623416. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604004; NSGC 12538. Collected in Baluchestan Sistan, Iran. Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 623417. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604017; NSGC 12539. Collected in Baluchestan Sistan, Iran. Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 623418. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604041; NSGC 12540. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 623419. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604054; NSGC 12541. Collected in Semnan, Iran. Latitude 35° 15' N. Longitude 52° 20' E. Elevation 1352 m. Garmsar.
- PI 623420. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604062; NSGC 12542. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623421. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604099; NSGC 12543. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 623422. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604118; NSGC 12544. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 623423. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604137; NSGC 12545. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 623424. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604271; NSGC 12546. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 623425. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604272; NSGC 12547. Collected in Markazi, Iran. Latitude 35° 35' N. Longitude 51° 25' E. Elevation 1054 m. Shahre-Rey.
- PI 623426. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604316; NSGC 12548. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623427. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604339; NSGC 12549. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623428. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604394; NSGC 12550. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 623429. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604400; NSGC 12551. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 623430. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604401; NSGC 12552. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 623431. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604404; NSGC 12553. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 623432. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604408; NSGC 12554. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 623433. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604409; NSGC 12555. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 623434. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604452; NSGC 12556. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 623435. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604464; NSGC 12557. Collected in Semnan, Iran. Latitude 35° 15' N. Longitude 52° 20' E. Elevation 1352 m. Garmsar.
- PI 623436. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604482; NSGC 12558. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 623437. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604597; NSGC 12559. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidari

- PI 623438. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604640; NSGC 12560. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623439. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604642; NSGC 12561. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 623440. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604691; NSGC 12562. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 623441. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604721; NSGC 12563. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 623442. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604722; NSGC 12564. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 623443. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604728; NSGC 12565. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 623444. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604754; NSGC 12566. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 623445. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604755; NSGC 12567. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 623446. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604757; NSGC 12568. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardebil.
- PI 623447. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604764; NSGC 12569. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 623448. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604768; NSGC 12571. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 623449. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604769; NSGC 12572. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 623450. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604833; NSGC 12573. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.

- PI 623451. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604858; NSGC 12575. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623452. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604895; NSGC 12576. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623453. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604903; NSGC 12577. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 623454. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604925; NSGC 12579. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidari.
- PI 623455. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606010; NSGC 12580. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623456. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606024; NSGC 12581. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623457. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606025; NSGC 12582. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 623458. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606026; NSGC 12583. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623459. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606031; NSGC 12584. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623460. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606036; NSGC 12585. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623461. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606065; NSGC 12586. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623462. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606068; NSGC 12587. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623463. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606069; NSGC 12588. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623464. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606070; NSGC 12589. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 623465. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606071; NSGC 12590. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623466. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606072; NSGC 12591. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623467. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606074; NSGC 12592. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623468. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606075; NSGC 12593. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623469. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606076; NSGC 12594. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623470. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606077; NSGC 12595. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623471. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606079; NSGC 12596. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623472. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606080; NSGC 12597. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623473. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606081; NSGC 12598. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623474. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606082; NSGC 12599. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623475. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606083; NSGC 12600. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623476. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606085; NSGC 12601. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623477. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606086; NSGC 12602. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623478. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606087; NSGC 12603. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.

- PI 623479. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606089; NSGC 12604. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623480. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606090; NSGC 12605. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623481. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606091; NSGC 12606. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623482. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606092; NSGC 12607. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623483. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606093; NSGC 12608. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623484. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606095; NSGC 12609. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623485. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606098; NSGC 12610. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623486. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606099; NSGC 12611. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623487. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606101; NSGC 12612. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623488. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606105; NSGC 12613. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623489. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606108; NSGC 12614. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623490. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606109; NSGC 12615. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623491. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606115; NSGC 12616. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 623492. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606117; NSGC 12617. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 623493. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606119; NSGC 12618. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623494. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606122; NSGC 12619. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623495. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606123; NSGC 12620. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623496. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606125; NSGC 12621. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623497. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606126; NSGC 12622. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623498. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606130; NSGC 12623. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623499. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606131; NSGC 12624. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623500. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606133; NSGC 12625. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623501. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606134; NSGC 12626. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623502. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606135; NSGC 12627. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623503. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606137; NSGC 12628. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623504. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606139; NSGC 12629. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623505. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606148; NSGC 12630. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623506. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606149; NSGC 12631. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 623507. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606150; NSGC 12632. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623508. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606151; NSGC 12633. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623509. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606158; NSGC 12634. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623510. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606161; NSGC 12635. Collected in West Azerbaijan, Iran. Latitude 38° N. Longitude 45° E.
- PI 623511. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606164; NSGC 12636. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623512. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606171; NSGC 12637. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623513. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606183; NSGC 12638. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623514. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606188; NSGC 12639. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623515. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606190; NSGC 12640. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623516. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606194; NSGC 12641. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623517. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606195; NSGC 12642. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623518. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606205; NSGC 12643. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623519. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606206; NSGC 12644. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623520. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606207; NSGC 12645. Collected in West Azerbaijan, Iran. Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623521. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606210; NSGC 12646. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623522. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606229; NSGC 12647. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623523. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606231; NSGC 12648. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623524. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606232; NSGC 12649. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623525. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606233; NSGC 12650. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623526. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606249; NSGC 12651. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623527. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606250; NSGC 12652. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623528. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606251; NSGC 12653. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623529. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606252; NSGC 12654. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623530. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606255; NSGC 12655. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623531. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606256; NSGC 12656. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623532. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606257; NSGC 12657. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623533. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606258; NSGC 12658. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623534. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606263; NSGC 12659. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623535. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606264; NSGC 12660. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623536. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606265; NSGC 12661. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623537. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606266; NSGC 12662. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623538. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606267; NSGC 12663. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623539. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606268; NSGC 12664. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623540. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606269; NSGC 12665. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623541. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606270; NSGC 12666. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623542. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606271; NSGC 12667. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623543. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606272; NSGC 12668. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623544. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606274; NSGC 12669. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623545. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606275; NSGC 12670. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623546. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606276; NSGC 12671. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623547. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606277; NSGC 12672. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623548. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606278; NSGC 12673. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623549. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606279; NSGC 12674. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623550. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606280; NSGC 12675. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623551. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606283; NSGC 12676. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623552. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606284; NSGC 12677. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623553. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606285; NSGC 12678. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623554. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606286; NSGC 12679. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623555. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606288; NSGC 12680. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623556. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606289; NSGC 12681. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623557. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606290; NSGC 12682. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623558. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606291; NSGC 12683. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623559. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606292; NSGC 12684. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623560. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606293; NSGC 12685. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623561. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606294; NSGC 12686. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623562. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606295; NSGC 12687. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623563. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606297; NSGC 12688. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623564. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606299; NSGC 12689. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623565. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606300; NSGC 12690. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623566. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606301; NSGC 12691. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623567. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606305; NSGC 12692. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623568. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606308; NSGC 12693. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623569. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606309; NSGC 12694. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623570. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606310; NSGC 12695. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623571. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606311; NSGC 12696. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623572. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606312; NSGC 12697. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623573. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606313; NSGC 12698. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623574. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606314; NSGC 12699. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623575. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606318; NSGC 12700. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623576. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606320; NSGC 12701. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623577. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606322; NSGC 12702. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623578. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606323; NSGC 12703. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623579. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606324; NSGC 12704. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623580. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606325; NSGC 12705. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623581. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606326; NSGC 12706. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623582. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606327; NSGC 12707. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623583. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606329; NSGC 12708. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623584. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606330; NSGC 12709. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623585. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606331; NSGC 12710. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623586. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606332; NSGC 12711. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623587. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606333; NSGC 12712. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623588. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606335; NSGC 12713. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623589. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606342; NSGC 12714. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623590. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606343; NSGC 12715. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623591. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606351; NSGC 12716. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623592. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606355; NSGC 12717. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623593. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606356; NSGC 12718. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623594. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606357; NSGC 12719. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623595. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606358; NSGC 12720. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623596. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606359; NSGC 12721. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623597. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606360; NSGC 12722. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623598. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606362; NSGC 12723. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623599. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606363; NSGC 12724. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623600. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606364; NSGC 12725. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623601. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606365; NSGC 12726. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623602. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606366; NSGC 12727. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623603. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606371; NSGC 12728. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623604. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606379; NSGC 12729. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623605. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606380; NSGC 12730. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623606. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606381; NSGC 12731. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623607. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606383; NSGC 12732. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623608. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606384; NSGC 12733. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623609. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606385; NSGC 12734. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623610. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606386; NSGC 12735. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623611. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606391; NSGC 12736. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623612. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606392; NSGC 12737. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623613. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606397; NSGC 12738. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623614. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606399; NSGC 12739. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623615. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606402; NSGC 12740. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623616. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606410; NSGC 12741. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623617. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606411; NSGC 12742. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623618. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606412; NSGC 12743. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623619. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606413; NSGC 12744. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623620. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606420; NSGC 12745. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623621. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606423; NSGC 12746. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623622. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606425; NSGC 12747. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623623. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606427; NSGC 12748. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623624. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606429; NSGC 12749. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623625. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606430; NSGC 12750. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623626. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606432; NSGC 12751. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623627. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606434; NSGC 12752. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623628. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606435; NSGC 12753. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623629. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8606437; NSGC 12754. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623630. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606439; NSGC 12755. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623631. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606442; NSGC 12756. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623632. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606445; NSGC 12757. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623633. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606449; NSGC 12758. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623634. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606452; NSGC 12759. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623635. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606455; NSGC 12760. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623636. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606456; NSGC 12761. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623637. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606459; NSGC 12762. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623638. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606462; NSGC 12763. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623639. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606464; NSGC 12764. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623640. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606465; NSGC 12765. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623641. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8606466; NSGC 12766. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623642. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606478; NSGC 12767. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623643. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606479; NSGC 12768. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623644. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606493; NSGC 12769. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623645. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606495; NSGC 12770. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623646. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606496; NSGC 12771. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623647. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606499; NSGC 12772. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623648. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606500; NSGC 12773. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623649. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606501; NSGC 12774. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623650. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606507; NSGC 12775. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623651. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606524; NSGC 12776. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623652. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606529; NSGC 12777. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623653. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606537; NSGC 12778. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623654. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606542; NSGC 12779. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623655. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606547; NSGC 12780. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623656. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8606551; NSGC 12781. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623657. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606569; NSGC 12782. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623658. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606570; NSGC 12783. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623659. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606572; NSGC 12784. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623660. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606575; NSGC 12785. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623661. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606576; NSGC 12786. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623662. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606581; NSGC 12787. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623663. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606582; NSGC 12788. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623664. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606583; NSGC 12789. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623665. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606594; NSGC 12790. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623666. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606595; NSGC 12791. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623667. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606596; NSGC 12792. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623668. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606609; NSGC 12793. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623669. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606617; NSGC 12794. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623670. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606621; NSGC 12795. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623671. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606622; NSGC 12796. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623672. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606623; NSGC 12797. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623673. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606625; NSGC 12798. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623674. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606630; NSGC 12799. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623675. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606633; NSGC 12800. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623676. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606636; NSGC 12801. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623677. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606638; NSGC 12802. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623678. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606640; NSGC 12803. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623679. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606641; NSGC 12804. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623680. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606644; NSGC 12805. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623681. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606646; NSGC 12806. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623682. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606647; NSGC 12807. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623683. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606648; NSGC 12808. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623684. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606649; NSGC 12809. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623685. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606650; NSGC 12810. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623686. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606651; NSGC 12811. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623687. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606652; NSGC 12812. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623688. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606654; NSGC 12813. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623689. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606655; NSGC 12814. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623690. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606656; NSGC 12815. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623691. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606658; NSGC 12816. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623692. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606660; NSGC 12817. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623693. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606661; NSGC 12818. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623694. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606662; NSGC 12819. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623695. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606663; NSGC 12820. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623696. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606664; NSGC 12821. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623697. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606665; NSGC 12822. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623698. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606671; NSGC 12823. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623699. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606672; NSGC 12824. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623700. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606673; NSGC 12825. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623701. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606686; NSGC 12826. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623702. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606687; NSGC 12827. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623703. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606704; NSGC 12828. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623704. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606705; NSGC 12829. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623705. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606706; NSGC 12830. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623706. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606707; NSGC 12831. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623707. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606709; NSGC 12832. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623708. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606712; NSGC 12833. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623709. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606720; NSGC 12834. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623710. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606722; NSGC 12835. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623711. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606727; NSGC 12836. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623712. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606739; NSGC 12837. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623713. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606740; NSGC 12838. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623714. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606741; NSGC 12839. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623715. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606742; NSGC 12840. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623716. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606743; NSGC 12841. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623717. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606744; NSGC 12842. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623718. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606745; NSGC 12843. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623719. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606746; NSGC 12844. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623720. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606753; NSGC 12845. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623721. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606760; NSGC 12846. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623722. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606761; NSGC 12847. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623723. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606763; NSGC 12848. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623724. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606767; NSGC 12849. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623725. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606771; NSGC 12850. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623726. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606772; NSGC 12851. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623727. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606773; NSGC 12852. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623728. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606784; NSGC 12853. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623729. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606785; NSGC 12854. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623730. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606786; NSGC 12855. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623731. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606788; NSGC 12856. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623732. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606796; NSGC 12857. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623733. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606799; NSGC 12858. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623734. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606817; NSGC 12859. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623735. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606821; NSGC 12860. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623736. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606824; NSGC 12861. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623737. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606831; NSGC 12862. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623738. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606834; NSGC 12863. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623739. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606839; NSGC 12864. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623740. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606845; NSGC 12865. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623741. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606847; NSGC 12866. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623742. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606852; NSGC 12867. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623743. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606854; NSGC 12868. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623744. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606857; NSGC 12869. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623745. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606859; NSGC 12870. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623746. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606869; NSGC 12871. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623747. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606873; NSGC 12872. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623748. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606875; NSGC 12873. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623749. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606876; NSGC 12874. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623750. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606879; NSGC 12875. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623751. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606881; NSGC 12876. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623752. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606882; NSGC 12877. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623753. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606886; NSGC 12878. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623754. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606887; NSGC 12879. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623755. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606888; NSGC 12880. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623756. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606889; NSGC 12881. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623757. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606890; NSGC 12882. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623758. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606892; NSGC 12883. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623759. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606894; NSGC 12884. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623760. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606895; NSGC 12885. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623761. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606896; NSGC 12886. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623762. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606897; NSGC 12887. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623763. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606898; NSGC 12888. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623764. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606903; NSGC 12889. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623765. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606905; NSGC 12890. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623766. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606906; NSGC 12891. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623767. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606907; NSGC 12892. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623768. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606913; NSGC 12893. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623769. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606925; NSGC 12895. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623770. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606926; NSGC 12896. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623771. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606930; NSGC 12897. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623772. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606933; NSGC 12898. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623773. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606934; NSGC 12899. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623774. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606936; NSGC 12900. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623775. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606940; NSGC 12901. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623776. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606941; NSGC 12902. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623777. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606942; NSGC 12903. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623778. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606945; NSGC 12904. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623779. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606946; NSGC 12905. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623780. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606948; NSGC 12906. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623781. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606949; NSGC 12907. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623782. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606950; NSGC 12908. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623783. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606951; NSGC 12909. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623784. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606952; NSGC 12910. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623785. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606955; NSGC 12911. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623786. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606957; NSGC 12912. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623787. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606958; NSGC 12913. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623788. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606959; NSGC 12914. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623789. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606960; NSGC 12915. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623790. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606962; NSGC 12916. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623791. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606964; NSGC 12917. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623792. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606979; NSGC 12918. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623793. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606980; NSGC 12919. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623794. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606990; NSGC 12920. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623795. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606991; NSGC 12921. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623796. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606992; NSGC 12922. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623797. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606993; NSGC 12923. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623798. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606994; NSGC 12924. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623799. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606995; NSGC 12925. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623800. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606996; NSGC 12926. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623801. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606997; NSGC 12927. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623802. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8606998; NSGC 12928. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623803. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607004; NSGC 12929. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623804. *Triticum turgidum* **subsp. durum** (Desf.) Husn.
Landrace. IWA8607019; NSGC 12930. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623805. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607031; NSGC 12931. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623806. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607059; NSGC 12932. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623807. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607076; NSGC 12933. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623808. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607084; NSGC 12934. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623809. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607091; NSGC 12935. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623810. *Triticum turgidum* **subsp. durum** (Desf.) Husn.
Landrace. IWA8607096; NSGC 12936. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623811. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607099; NSGC 12937. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623812. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607112; NSGC 12938. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623813. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607113; NSGC 12939. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623814. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607114; NSGC 12940. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623815. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607115; NSGC 12941. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623816. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607116; NSGC 12942. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623817. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607118; NSGC 12943. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623818. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607141; NSGC 12944. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623819. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607142; NSGC 12945. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623820. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607143; NSGC 12946. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623821. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607151; NSGC 12947. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623822. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607159; NSGC 12948. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623823. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607184; NSGC 12949. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623824. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607185; NSGC 12950. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623825. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607186; NSGC 12951. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623826. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607187; NSGC 12952. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623827. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607190; NSGC 12953. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623828. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607194; NSGC 12954. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623829. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607210; NSGC 12955. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623830. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607213; NSGC 12956. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623831. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607215; NSGC 12957. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623832. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607217; NSGC 12958. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623833. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607228; NSGC 12959. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623834. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607229; NSGC 12960. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623835. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607231; NSGC 12961. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623836. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607234; NSGC 12962. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623837. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607240; NSGC 12963. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623838. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607243; NSGC 12964. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623839. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607247; NSGC 12965. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623840. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607253; NSGC 12966. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623841. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607257; NSGC 12967. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623842. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607258; NSGC 12968. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623843. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607264; NSGC 12969. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623844. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607265; NSGC 12970. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623845. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607266; NSGC 12971. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623846. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607269; NSGC 12972. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623847. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607271; NSGC 12973. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623848. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607272; NSGC 12974. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623849. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607273; NSGC 12975. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623850. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607274; NSGC 12976. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623851. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607277; NSGC 12977. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623852. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607280; NSGC 12978. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623853. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607281; NSGC 12979. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623854. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607282; NSGC 12980. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623855. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607284; NSGC 12981. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623856. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607285; NSGC 12982. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623857. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607286; NSGC 12983. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623858. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607287; NSGC 12984. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623859. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607288; NSGC 12985. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623860. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607290; NSGC 12986. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623861. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607291; NSGC 12987. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623862. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607292; NSGC 12988. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623863. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607293; NSGC 12989. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623864. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607294; NSGC 12990. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623865. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607295; NSGC 12991. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623866. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607296; NSGC 12992. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623867. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607297; NSGC 12993. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623868. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607298; NSGC 12994. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623869. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607300; NSGC 12995. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623870. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607303; NSGC 12996. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623871. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607304; NSGC 12997. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623872. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607306; NSGC 12998. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623873. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607308; NSGC 12999. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623874. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607309; NSGC 13000. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623875. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607311; NSGC 13001. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623876. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607313; NSGC 13002. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623877. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607314; NSGC 13003. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623878. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607315; NSGC 13004. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623879. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607320; NSGC 13005. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623880. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607321; NSGC 13006. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623881. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607324; NSGC 13007. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623882. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607327; NSGC 13008. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623883. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607328; NSGC 13009. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623884. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8607329; NSGC 13010. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.

- PI 623885. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607330; NSGC 13011. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623886. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607331; NSGC 13012. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623887. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607332; NSGC 13013. Collected in West Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 45° 0' E.
- PI 623888. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607335; NSGC 13014. Collected in Iran. Latitude 32° 0'
N. Longitude 53° 0' E.
- PI 623889. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607340; NSGC 13015. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623890. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607349; NSGC 13016. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623891. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607350; NSGC 13017. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623892. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607352; NSGC 13018. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623893. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607353; NSGC 13019. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623894. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607355; NSGC 13020. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623895. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607356; NSGC 13021. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623896. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607357; NSGC 13022. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623897. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607359; NSGC 13023. Collected in West Azerbaijan, Iran.
Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m.
Kermanshah.
- PI 623898. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607362; NSGC 13024. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 623899. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607363; NSGC 13025. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623900. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607370; NSGC 13026. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623901. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607371; NSGC 13027. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623902. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607372; NSGC 13028. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623903. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607375; NSGC 13029. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623904. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607376; NSGC 13030. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 623905. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607380; NSGC 13031. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623906. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607381; NSGC 13032. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623907. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607382; NSGC 13033. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623908. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607383; NSGC 13034. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623909. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607384; NSGC 13035. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623910. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607385; NSGC 13036. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623911. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607386; NSGC 13037. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 623912. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607387; NSGC 13038. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 623913. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607388; NSGC 13039. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 623914. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607390; NSGC 13040. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623915. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607391; NSGC 13041. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623916. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607392; NSGC 13042. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623917. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607393; NSGC 13043. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623918. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607394; NSGC 13044. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623919. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607395; NSGC 13045. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623920. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607396; NSGC 13046. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623921. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607397; NSGC 13047. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623922. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607399; NSGC 13048. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623923. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607400; NSGC 13049. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623924. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607401; NSGC 13050. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 623925. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607404; NSGC 13051. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623926. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607406; NSGC 13052. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 623927. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8607407; NSGC 13053. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623928. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8607408; NSGC 13054. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623929. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607409; NSGC 13055. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623930. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607410; NSGC 13056. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623931. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607412; NSGC 13057. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623932. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607413; NSGC 13058. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623933. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607415; NSGC 13059. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623934. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607416; NSGC 13060. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623935. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607418; NSGC 13061. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623936. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607419; NSGC 13062. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623937. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607420; NSGC 13063. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623938. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607421; NSGC 13064. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623939. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607422; NSGC 13065. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607428; NSGC 13066. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 623941. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607430; NSGC 13067. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623942. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607431; NSGC 13068. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623943. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607433; NSGC 13069. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623944. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607434; NSGC 13070. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623945. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607436; NSGC 13071. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623946. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607438; NSGC 13072. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623947. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607440; NSGC 13073. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623948. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607441; NSGC 13074. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 623949. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607442; NSGC 13075. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623950. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607443; NSGC 13076. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623951. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607444; NSGC 13077. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623952. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607445; NSGC 13078. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623953. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607446; NSGC 13079. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623954. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607447; NSGC 13080. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 623955. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607448; NSGC 13081. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623956. *Triticum turgidum* L. subsp. *turgidum*
Landrace. IWA8607449; NSGC 13082. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623957. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607450; NSGC 13083. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623958. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607451; NSGC 13084. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623959. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607452; NSGC 13085. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623960. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607453; NSGC 13086. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623961. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607454; NSGC 13087. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623962. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607455; NSGC 13088. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623963. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607456; NSGC 13089. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623964. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607457; NSGC 13090. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623965. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607458; NSGC 13091. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623966. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607460; NSGC 13092. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623967. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607461; NSGC 13093. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623968. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607462; NSGC 13094. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 623969. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607463; NSGC 13095. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623970. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607464; NSGC 13096. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623971. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607465; NSGC 13097. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623972. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607466; NSGC 13098. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623973. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607468; NSGC 13099. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623974. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607469; NSGC 13100. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623975. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607471; NSGC 13101. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623976. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607473; NSGC 13102. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623977. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607483; NSGC 13103. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623978. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607485; NSGC 13104. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 623979. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607495; NSGC 13105. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 25' E. Elevation 1794 m. Toysircan.
- PI 623980. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607499; NSGC 13106. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysircan.
- PI 623981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607502; NSGC 13107. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607503; NSGC 13108. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 623983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607506; NSGC 13109. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623984. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607507; NSGC 13110. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607510; NSGC 13111. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607511; NSGC 13112. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607513; NSGC 13113. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623988. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607514; NSGC 13114. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623989. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607515; NSGC 13115. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623990. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607516; NSGC 13116. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607517; NSGC 13117. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623992. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607518; NSGC 13118. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623993. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607519; NSGC 13119. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623994. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607520; NSGC 13120. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623995. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607521; NSGC 13121. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623996. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607522; NSGC 13122. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 623997. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607524; NSGC 13123. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623998. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607526; NSGC 13124. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 623999. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607527; NSGC 13125. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624000. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607528; NSGC 13126. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624001. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607529; NSGC 13127. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624002. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607531; NSGC 13128. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624003. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607533; NSGC 13129. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624004. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607537; NSGC 13130. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624005. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607540; NSGC 13131. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624006. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607541; NSGC 13132. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624007. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607542; NSGC 13133. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624008. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607545; NSGC 13134. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624009. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607547; NSGC 13135. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624010. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607549; NSGC 13136. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624011. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607553; NSGC 13137. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624012. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607554; NSGC 13138. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624013. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607556; NSGC 13139. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624014. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607557; NSGC 13140. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624015. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607559; NSGC 13141. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624016. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607561; NSGC 13142. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624017. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607562; NSGC 13143. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624018. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607563; NSGC 13144. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624019. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607564; NSGC 13145. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624020. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607566; NSGC 13146. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624021. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607567; NSGC 13147. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624022. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607569; NSGC 13148. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624023. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607570; NSGC 13149. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624024. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607572; NSGC 13150. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 624025. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607573; NSGC 13151. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624026. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607575; NSGC 13152. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624027. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607576; NSGC 13153. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624028. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607578; NSGC 13154. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624029. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607579; NSGC 13155. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624030. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607581; NSGC 13156. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624031. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607582; NSGC 13157. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624032. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607583; NSGC 13158. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624033. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607585; NSGC 13159. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624034. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607586; NSGC 13160. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624035. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607587; NSGC 13161. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624036. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607588; NSGC 13162. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624037. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607589; NSGC 13163. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624038. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607592; NSGC 13164. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 624039. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607594; NSGC 13165. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624040. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607595; NSGC 13166. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624041. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607596; NSGC 13167. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624042. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607598; NSGC 13168. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624043. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607600; NSGC 13169. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624044. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607601; NSGC 13170. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624045. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607602; NSGC 13171. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624046. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607603; NSGC 13172. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624047. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607604; NSGC 13173. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624048. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607605; NSGC 13174. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624049. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607606; NSGC 13175. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624050. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607607; NSGC 13176. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624051. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607608; NSGC 13177. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624052. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607610; NSGC 13178. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624053. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607615; NSGC 13179. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624054. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607616; NSGC 13180. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624055. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607618; NSGC 13181. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624056. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607619; NSGC 13182. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624057. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8607620; NSGC 13183. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624058. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607621; NSGC 13184. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624059. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607623; NSGC 13185. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624060. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607624; NSGC 13186. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624061. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607626; NSGC 13187. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624062. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607627; NSGC 13188. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624063. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607628; NSGC 13189. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624064. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607629; NSGC 13190. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624065. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607630; NSGC 13191. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624066. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607631; NSGC 13192. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624067. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607632; NSGC 13193. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624068. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607634; NSGC 13194. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624069. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607636; NSGC 13195. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624070. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607639; NSGC 13196. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624071. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607643; NSGC 13197. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624072. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607644; NSGC 13198. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624073. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607645; NSGC 13199. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624074. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607646; NSGC 13200. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624075. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607647; NSGC 13201. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624076. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607649; NSGC 13202. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624077. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607650; NSGC 13203. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624078. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607651; NSGC 13204. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624079. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607652; NSGC 13205. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624080. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607653; NSGC 13206. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624081. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607656; NSGC 13207. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624082. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607657; NSGC 13208. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624083. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607658; NSGC 13209. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624084. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607659; NSGC 13210. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624085. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607660; NSGC 13211. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624086. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607662; NSGC 13212. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624087. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607664; NSGC 13213. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624088. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607665; NSGC 13214. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624089. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607666; NSGC 13215. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624090. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607667; NSGC 13216. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624091. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607668; NSGC 13217. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624092. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607671; NSGC 13218. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624093. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607672; NSGC 13219. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624094. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607673; NSGC 13220. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624095. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607674; NSGC 13221. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624096. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607678; NSGC 13222. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624097. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607680; NSGC 13223. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624098. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607681; NSGC 13224. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624099. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607682; NSGC 13225. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624100. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607684; NSGC 13226. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624101. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607685; NSGC 13227. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624102. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607686; NSGC 13228. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624103. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607687; NSGC 13229. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624104. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607688; NSGC 13230. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624105. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607689; NSGC 13231. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624106. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607691; NSGC 13232. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624107. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607692; NSGC 13233. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624108. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607693; NSGC 13234. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624109. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607694; NSGC 13235. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624110. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607695; NSGC 13236. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624111. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607696; NSGC 13237. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624112. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607698; NSGC 13238. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624113. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607699; NSGC 13239. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624114. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607700; NSGC 13240. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624115. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607701; NSGC 13241. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624116. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607702; NSGC 13242. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624117. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607704; NSGC 13243. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624118. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607705; NSGC 13244. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624119. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607706; NSGC 13245. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624120. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607707; NSGC 13246. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624121. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607710; NSGC 13247. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624122. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607711; NSGC 13248. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624123. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607712; NSGC 13249. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624124. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607715; NSGC 13250. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624125. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607716; NSGC 13251. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624126. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607718; NSGC 13252. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624127. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607721; NSGC 13253. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624128. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607726; NSGC 13254. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624129. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607727; NSGC 13255. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624130. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607729; NSGC 13256. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624131. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607730; NSGC 13257. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624132. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607731; NSGC 13258. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607733; NSGC 13259. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607734; NSGC 13260. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624135. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607735; NSGC 13261. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624136. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8607736; NSGC 13262. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607739; NSGC 13263. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624138. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607741; NSGC 13264. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624139. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607745; NSGC 13265. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607746; NSGC 13266. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607755; NSGC 13267. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607758; NSGC 13268. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607763; NSGC 13269. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624144. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607766; NSGC 13270. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624145. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607776; NSGC 13271. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624146. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607777; NSGC 13272. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624147. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607778; NSGC 13273. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624148. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607779; NSGC 13274. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624149. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607780; NSGC 13275. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624150. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607782; NSGC 13276. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 624151. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607783; NSGC 13277. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624152. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607785; NSGC 13278. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624153. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607786; NSGC 13279. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624154. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607790; NSGC 13280. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607792; NSGC 13281. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607793; NSGC 13282. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607799; NSGC 13283. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607803; NSGC 13284. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607804; NSGC 13285. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607805; NSGC 13286. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607809; NSGC 13287. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607818; NSGC 13288. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607820; NSGC 13289. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624164. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607821; NSGC 13290. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 624165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607823; NSGC 13291. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624166. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607824; NSGC 13292. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624167. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607827; NSGC 13293. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624168. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607831; NSGC 13294. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624169. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607832; NSGC 13295. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624170. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607833; NSGC 13296. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624171. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607834; NSGC 13297. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624172. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607836; NSGC 13298. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624173. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607837; NSGC 13299. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624174. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607838; NSGC 13300. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624175. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607840; NSGC 13301. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624176. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607841; NSGC 13302. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607842; NSGC 13303. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624178. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607843; NSGC 13304. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 624179. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607844; NSGC 13305. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624180. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607845; NSGC 13306. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624181. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607846; NSGC 13307. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624182. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607847; NSGC 13308. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624183. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607849; NSGC 13309. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624184. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607850; NSGC 13310. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624185. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607851; NSGC 13311. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624186. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607852; NSGC 13312. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624187. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607853; NSGC 13313. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624188. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607854; NSGC 13314. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624189. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607855; NSGC 13315. Collected in Hamadan, Iran. Latitude
34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624190. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607856; NSGC 13316. Collected in Hamadan, Iran. Latitude
34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624191. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8607860; NSGC 13317. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624192. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8607864; NSGC 13318. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 624193. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607865; NSGC 13319. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624194. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607866; NSGC 13320. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624195. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607867; NSGC 13321. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624196. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607868; NSGC 13322. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624197. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607869; NSGC 13323. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624198. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607871; NSGC 13324. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624199. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607872; NSGC 13325. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624200. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607874; NSGC 13326. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624201. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607876; NSGC 13327. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624202. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607877; NSGC 13328. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624203. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607881; NSGC 13329. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624204. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607882; NSGC 13330. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624205. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607883; NSGC 13331. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624206. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607884; NSGC 13332. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624207. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love Landrace. IWA8607885; NSGC 13333. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624208. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love Landrace. IWA8607886; NSGC 13334. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624209. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love Landrace. IWA8607887; NSGC 13335. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624210. *Triticum turgidum* subsp. *durum* (Desf.) Husn. Landrace. IWA8607889; NSGC 13336. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624211. *Triticum turgidum* subsp. *durum* (Desf.) Husn. Landrace. IWA8607890; NSGC 13337. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624212. *Triticum turgidum* subsp. *durum* (Desf.) Husn. Landrace. IWA8607891; NSGC 13338. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624213. *Triticum aestivum* L. subsp. *aestivum* Landrace. IWA8607892; NSGC 13339. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624214. *Triticum aestivum* L. subsp. *aestivum* Landrace. IWA8607894; NSGC 13340. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624215. *Triticum aestivum* L. subsp. *aestivum* Landrace. IWA8607897; NSGC 13341. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 624216. *Triticum aestivum* L. subsp. *aestivum* Landrace. IWA8607901; NSGC 13342. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624217. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love Landrace. IWA8607904; NSGC 13343. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624218. *Triticum turgidum* subsp. *durum* (Desf.) Husn. Landrace. IWA8607905; NSGC 13344. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624219. *Triticum turgidum* subsp. *durum* (Desf.) Husn. Landrace. IWA8607906; NSGC 13345. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624220. *Triticum aestivum* L. subsp. *aestivum* Landrace. IWA8607909; NSGC 13346. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 624221. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607910; NSGC 13347. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624222. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607911; NSGC 13348. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624223. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607912; NSGC 13349. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624224. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607917; NSGC 13350. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624225. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607918; NSGC 13351. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624226. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607919; NSGC 13352. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624227. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607920; NSGC 13353. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624228. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607922; NSGC 13354. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624229. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607923; NSGC 13355. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624230. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607927; NSGC 13356. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624231. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607933; NSGC 13357. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624232. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607934; NSGC 13358. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624233. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607937; NSGC 13359. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624234. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607938; NSGC 13360. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.

- PI 624235. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607940; NSGC 13361. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624236. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607942; NSGC 13362. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624237. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607943; NSGC 13363. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624238. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607944; NSGC 13364. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624239. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607948; NSGC 13365. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624240. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607949; NSGC 13366. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624241. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607950; NSGC 13367. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624242. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607951; NSGC 13368. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624243. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607952; NSGC 13369. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624244. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607953; NSGC 13370. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624245. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607954; NSGC 13371. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624246. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607955; NSGC 13372. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624247. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607956; NSGC 13373. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624248. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607957; NSGC 13374. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.

- PI 624249. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607958; NSGC 13375. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624250. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607959; NSGC 13376. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624251. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607960; NSGC 13377. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624252. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607961; NSGC 13378. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624253. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607962; NSGC 13379. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624254. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607963; NSGC 13380. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624255. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607964; NSGC 13381. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624256. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607967; NSGC 13382. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624257. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607971; NSGC 13383. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624258. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607973; NSGC 13384. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607976; NSGC 13385. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624260. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607978; NSGC 13386. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624261. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607979; NSGC 13387. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624262. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607981; NSGC 13388. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624263. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607982; NSGC 13389. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624264. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607983; NSGC 13390. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624265. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607984; NSGC 13391. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624266. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607985; NSGC 13392. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624267. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607986; NSGC 13393. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607988; NSGC 13394. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607989; NSGC 13395. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607990; NSGC 13396. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624271. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8607991; NSGC 13397. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624272. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607992; NSGC 13398. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624273. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607994; NSGC 13399. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624274. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8607995; NSGC 13400. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624275. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608002; NSGC 13401. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624276. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608004; NSGC 13402. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 624277. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608005; NSGC 13403. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624278. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608006; NSGC 13404. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624279. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608007; NSGC 13405. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624280. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608008; NSGC 13406. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624281. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608009; NSGC 13407. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624282. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608010; NSGC 13408. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624283. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608011; NSGC 13409. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624284. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608012; NSGC 13410. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624285. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608013; NSGC 13411. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624286. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608014; NSGC 13412. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624287. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608015; NSGC 13413. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624288. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608017; NSGC 13414. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 624289. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608029; NSGC 13415. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624290. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608030; NSGC 13416. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.

- PI 624291. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608032; NSGC 13417. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624292. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608045; NSGC 13418. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624293. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608046; NSGC 13419. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624294. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608047; NSGC 13420. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624295. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608049; NSGC 13421. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624296. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608051; NSGC 13422. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624297. *Triticum turgidum* **subsp. durum** (Desf.) Husn.
Landrace. IWA8608056; NSGC 13423. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624298. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608059; NSGC 13424. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624299. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608060; NSGC 13425. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624300. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608064; NSGC 13426. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624301. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608066; NSGC 13427. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624302. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608068; NSGC 13428. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624303. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608072; NSGC 13429. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624304. *Triticum aestivum* L. **subsp. aestivum**
Landrace. IWA8608073; NSGC 13430. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.

- PI 624305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608074; NSGC 13431. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608076; NSGC 13432. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608080; NSGC 13433. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624308. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608082; NSGC 13434. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624309. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608083; NSGC 13435. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624310. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608084; NSGC 13436. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624311. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608085; NSGC 13437. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624312. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608086; NSGC 13438. Collected in East Azerbaijan, Iran.
Latitude 38° 0' N. Longitude 46° 45' E.
- PI 624313. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608087; NSGC 13439. Collected in Kordestan, Iran. Latitude
35° 40' N. Longitude 47° 0' E.
- PI 624314. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608089; NSGC 13440. Collected in Kordestan, Iran. Latitude
35° 40' N. Longitude 47° 0' E.
- PI 624315. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608123; NSGC 13441. Collected in Kordestan, Iran. Latitude
35° 40' N. Longitude 47° 0' E.
- PI 624316. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608124; NSGC 13442. Collected in Kordestan, Iran. Latitude
35° 40' N. Longitude 47° 0' E.
- PI 624317. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608125; NSGC 13443. Collected in Kordestan, Iran. Latitude
35° 40' N. Longitude 47° 0' E.
- PI 624318. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608127; NSGC 13444. Collected in Kordestan, Iran. Latitude
35° 40' N. Longitude 47° 0' E.

- PI 624319. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608130; NSGC 13445. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624320. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608131; NSGC 13446. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624321. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608132; NSGC 13447. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624322. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608135; NSGC 13448. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624323. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608145; NSGC 13449. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624324. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608146; NSGC 13450. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624325. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608147; NSGC 13451. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624326. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608149; NSGC 13452. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624327. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608152; NSGC 13453. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624328. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608157; NSGC 13454. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624329. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608161; NSGC 13455. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624330. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608166; NSGC 13456. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624331. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608168; NSGC 13457. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624332. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608171; NSGC 13458. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.

- PI 624333. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608172; NSGC 13459. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624334. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608175; NSGC 13460. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608176; NSGC 13461. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624336. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608177; NSGC 13462. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624337. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608188; NSGC 13463. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608190; NSGC 13464. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624339. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608192; NSGC 13465. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624340. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608199; NSGC 13468. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624341. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608200; NSGC 13469. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608201; NSGC 13470. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624343. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608204; NSGC 13471. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624344. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608205; NSGC 13472. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624345. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608206; NSGC 13473. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624346. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608212; NSGC 13474. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.

- PI 624347. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608216; NSGC 13475. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624348. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608219; NSGC 13476. Collected in Kordestan, Iran. Latitude 35° 40' N. Longitude 47° 0' E.
- PI 624349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608220; NSGC 13477. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624350. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608222; NSGC 13478. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624351. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608223; NSGC 13479. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624352. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608224; NSGC 13480. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624353. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608225; NSGC 13481. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624354. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608227; NSGC 13482. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608228; NSGC 13483. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608229; NSGC 13484. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624357. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608230; NSGC 13485. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624358. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608232; NSGC 13486. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608233; NSGC 13487. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608234; NSGC 13488. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624361. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608236; NSGC 13489. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624362. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608237; NSGC 13490. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624363. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608238; NSGC 13491. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624364. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608239; NSGC 13492. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624365. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608240; NSGC 13493. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624366. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608242; NSGC 13494. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624367. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608244; NSGC 13495. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624368. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608245; NSGC 13496. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624369. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608248; NSGC 13497. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624370. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608249; NSGC 13498. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624371. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608250; NSGC 13499. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624372. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608252; NSGC 13500. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624373. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608253; NSGC 13501. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624374. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608255; NSGC 13502. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624375. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608257; NSGC 13503. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624376. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608258; NSGC 13504. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624377. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608260; NSGC 13505. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624378. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608261; NSGC 13506. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624379. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608263; NSGC 13507. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624380. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608265; NSGC 13508. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624381. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608266; NSGC 13509. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624382. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608268; NSGC 13510. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608269; NSGC 13511. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624384. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608270; NSGC 13512. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608271; NSGC 13513. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608274; NSGC 13514. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624387. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608278; NSGC 13515. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624388. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608279; NSGC 13516. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624389. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608280; NSGC 13517. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624390. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608281; NSGC 13518. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624391. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608282; NSGC 13519. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624392. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608283; NSGC 13520. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624393. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608284; NSGC 13521. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624394. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608285; NSGC 13522. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624395. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608286; NSGC 13523. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624396. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608290; NSGC 13524. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624397. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608291; NSGC 13525. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624398. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608293; NSGC 13526. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624399. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608294; NSGC 13527. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624400. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608295; NSGC 13528. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624401. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608297; NSGC 13529. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624402. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608298; NSGC 13530. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624403. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608299; NSGC 13531. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624404. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608300; NSGC 13532. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624405. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608301; NSGC 13533. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624406. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608302; NSGC 13534. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624407. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608303; NSGC 13535. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624408. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608304; NSGC 13536. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624409. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608307; NSGC 13537. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624410. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608308; NSGC 13538. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624411. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608309; NSGC 13539. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624412. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608310; NSGC 13540. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624413. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608311; NSGC 13541. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624414. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608314; NSGC 13542. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624415. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608315; NSGC 13543. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624416. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608316; NSGC 13544. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624417. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608317; NSGC 13545. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624418. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608318; NSGC 13546. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624419. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608321; NSGC 13547. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624420. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8608322; NSGC 13548. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624421. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8608323; NSGC 13549. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624422. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8608324; NSGC 13550. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624423. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608326; NSGC 13551. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624424. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608327; NSGC 13552. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624425. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608328; NSGC 13553. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624426. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608329; NSGC 13554. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624427. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608330; NSGC 13555. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624428. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608331; NSGC 13556. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624429. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8608332; NSGC 13557. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624430. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608333; NSGC 13558. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624431. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608334; NSGC 13559. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624432. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608340; NSGC 13560. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624433. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608341; NSGC 13561. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624434. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608342; NSGC 13562. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624435. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608343; NSGC 13563. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624436. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608347; NSGC 13564. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624437. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608351; NSGC 13565. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624438. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608354; NSGC 13566. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624439. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608355; NSGC 13567. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624440. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608356; NSGC 13568. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624441. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608358; NSGC 13569. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624442. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608360; NSGC 13570. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624443. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608363; NSGC 13571. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624444. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608365; NSGC 13572. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624445. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608366; NSGC 13573. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624446. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608368; NSGC 13574. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624447. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608369; NSGC 13575. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624448. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608370; NSGC 13576. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624449. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608372; NSGC 13577. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624450. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608375; NSGC 13578. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624451. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608376; NSGC 13579. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624452. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608379; NSGC 13580. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624453. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608380; NSGC 13581. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624454. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608381; NSGC 13582. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624455. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608382; NSGC 13583. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624456. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608383; NSGC 13584. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624457. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8608384; NSGC 13585. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624458. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608388; NSGC 13586. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624459. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608392; NSGC 13587. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624460. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608393; NSGC 13588. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624461. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608395; NSGC 13589. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624462. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608396; NSGC 13590. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624463. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608398; NSGC 13591. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624464. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608399; NSGC 13592. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624465. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608403; NSGC 13593. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624466. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608404; NSGC 13594. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624467. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608406; NSGC 13595. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624468. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608407; NSGC 13596. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624469. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608408; NSGC 13597. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624470. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608411; NSGC 13598. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624471. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608412; NSGC 13599. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624472. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608413; NSGC 13600. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624473. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608414; NSGC 13601. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624474. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608415; NSGC 13602. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624475. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608417; NSGC 13603. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624476. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608418; NSGC 13604. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624477. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608419; NSGC 13605. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624478. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608420; NSGC 13606. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624479. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608422; NSGC 13607. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624480. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608425; NSGC 13608. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624481. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608426; NSGC 13609. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624482. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608428; NSGC 13610. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624483. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608429; NSGC 13611. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624484. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608432; NSGC 13612. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624485. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608433; NSGC 13613. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624486. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608434; NSGC 13614. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624487. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608435; NSGC 13615. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624488. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608436; NSGC 13616. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624489. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608437; NSGC 13617. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624490. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608438; NSGC 13618. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624491. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608439; NSGC 13619. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624492. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608440; NSGC 13620. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624493. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608442; NSGC 13621. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624494. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608443; NSGC 13622. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624495. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608444; NSGC 13623. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624496. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608445; NSGC 13624. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624497. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608446; NSGC 13625. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624498. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608447; NSGC 13626. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624499. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608448; NSGC 13627. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624500. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608449; NSGC 13628. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624501. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608450; NSGC 13629. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624502. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608452; NSGC 13630. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624503. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608454; NSGC 13631. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624504. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608455; NSGC 13632. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624505. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608456; NSGC 13633. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624506. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608457; NSGC 13634. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624507. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608459; NSGC 13635. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624508. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608460; NSGC 13636. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624509. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608461; NSGC 13637. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624510. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608462; NSGC 13638. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624511. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608463; NSGC 13639. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624512. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608464; NSGC 13640. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624513. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608465; NSGC 13641. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624514. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608467; NSGC 13642. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624515. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608468; NSGC 13643. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624516. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608469; NSGC 13644. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624517. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608470; NSGC 13645. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624518. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608471; NSGC 13646. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624519. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608472; NSGC 13647. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624520. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608473; NSGC 13648. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624521. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608475; NSGC 13649. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624522. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608477; NSGC 13650. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624523. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608478; NSGC 13651. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624524. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608479; NSGC 13652. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624525. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608481; NSGC 13653. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624526. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608482; NSGC 13654. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624527. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608484; NSGC 13655. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624528. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608485; NSGC 13656. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624529. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608486; NSGC 13657. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624530. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608487; NSGC 13658. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624531. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608488; NSGC 13659. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624532. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608489; NSGC 13660. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624533. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608491; NSGC 13661. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624534. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608492; NSGC 13662. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624535. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608498; NSGC 13663. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624536. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608499; NSGC 13664. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624537. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608500; NSGC 13665. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624538. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608501; NSGC 13666. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624539. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608502; NSGC 13667. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624540. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608503; NSGC 13668. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624541. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608506; NSGC 13669. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624542. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608507; NSGC 13670. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624543. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608508; NSGC 13671. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624544. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608509; NSGC 13672. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624545. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608510; NSGC 13673. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624546. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608512; NSGC 13674. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624547. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608513; NSGC 13675. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624548. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608515; NSGC 13676. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624549. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608518; NSGC 13677. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624550. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608520; NSGC 13678. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624551. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608521; NSGC 13679. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624552. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608523; NSGC 13680. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624553. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608524; NSGC 13681. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624554. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608530; NSGC 13682. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624555. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608531; NSGC 13683. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624556. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608532; NSGC 13684. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624557. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608533; NSGC 13685. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624558. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608534; NSGC 13686. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624559. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608535; NSGC 13687. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624560. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608536; NSGC 13688. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624561. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608537; NSGC 13689. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624562. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608538; NSGC 13690. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624563. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608540; NSGC 13691. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624564. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608541; NSGC 13692. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624565. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608543; NSGC 13693. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624566. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608544; NSGC 13694. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624567. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608545; NSGC 13695. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624568. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608546; NSGC 13696. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624569. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608547; NSGC 13697. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624570. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608548; NSGC 13698. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 624571. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608549; NSGC 13699. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624572. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608550; NSGC 13700. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624573. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608551; NSGC 13701. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 624574. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608554; NSGC 13702. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624575. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608556; NSGC 13703. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624576. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608563; NSGC 13704. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624577. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608566; NSGC 13705. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624578. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608569; NSGC 13706. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624579. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608570; NSGC 13707. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624580. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608574; NSGC 13708. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624581. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608579; NSGC 13709. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624582. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608580; NSGC 13710. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624583. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608581; NSGC 13711. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624584. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608582; NSGC 13712. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.

- PI 624585. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608583; NSGC 13713. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624586. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608584; NSGC 13714. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624587. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608589; NSGC 13715. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624588. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608590; NSGC 13716. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624589. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608593; NSGC 13717. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624590. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608599; NSGC 13718. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624591. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608602; NSGC 13719. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624592. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608603; NSGC 13720. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624593. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608604; NSGC 13721. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624594. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608610; NSGC 13722. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624595. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608617; NSGC 13723. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624596. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608622; NSGC 13724. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624597. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608623; NSGC 13725. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624598. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608634; NSGC 13726. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.

- PI 624599. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608643; NSGC 13727. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624600. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608644; NSGC 13728. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624601. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608645; NSGC 13729. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624602. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608646; NSGC 13730. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624603. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608647; NSGC 13731. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624604. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608650; NSGC 13732. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624605. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608651; NSGC 13733. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624606. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608656; NSGC 13734. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624607. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608660; NSGC 13735. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624608. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608663; NSGC 13736. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624609. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608665; NSGC 13737. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624610. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608666; NSGC 13738. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624611. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608670; NSGC 13739. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624612. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608672; NSGC 13740. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.

- PI 624613. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608682; NSGC 13741. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624614. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608684; NSGC 13742. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624615. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608685; NSGC 13743. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624616. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608688; NSGC 13744. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624617. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608690; NSGC 13745. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624618. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608691; NSGC 13746. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624619. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608692; NSGC 13747. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624620. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608693; NSGC 13748. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624621. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608694; NSGC 13749. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624622. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608695; NSGC 13750. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624623. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608696; NSGC 13751. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624624. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608700; NSGC 13752. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624625. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608701; NSGC 13753. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624626. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608702; NSGC 13754. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.

- PI 624627. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608703; NSGC 13755. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624628. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608706; NSGC 13756. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624629. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608707; NSGC 13757. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624630. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608709; NSGC 13758. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624631. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608710; NSGC 13759. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624632. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608714; NSGC 13760. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624633. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608715; NSGC 13761. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624634. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608716; NSGC 13762. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624635. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608717; NSGC 13763. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624636. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608719; NSGC 13764. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624637. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608721; NSGC 13765. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624638. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608723; NSGC 13766. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624639. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608724; NSGC 13767. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624640. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608725; NSGC 13768. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.

- PI 624641. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608726; NSGC 13769. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624642. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608727; NSGC 13770. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624643. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608728; NSGC 13771. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624644. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608729; NSGC 13772. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624645. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608734; NSGC 13773. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624646. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608737; NSGC 13774. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624647. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608742; NSGC 13775. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624648. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608743; NSGC 13776. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624649. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608744; NSGC 13777. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624650. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608745; NSGC 13778. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624651. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608746; NSGC 13779. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624652. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608748; NSGC 13780. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624653. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608750; NSGC 13781. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624654. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608751; NSGC 13782. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.

- PI 624655. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608752; NSGC 13783. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624656. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608755; NSGC 13784. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624657. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608757; NSGC 13785. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624658. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608758; NSGC 13786. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624659. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608760; NSGC 13787. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624660. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608762; NSGC 13788. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624661. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608763; NSGC 13789. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624662. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608766; NSGC 13790. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624663. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608767; NSGC 13791. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624664. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608769; NSGC 13792. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624665. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608770; NSGC 13793. Collected in Kordestan, Iran. Latitude
35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 624666. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608771; NSGC 13794. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624667. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608772; NSGC 13795. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624668. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608773; NSGC 13796. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624669. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608774; NSGC 13797. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624670. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608775; NSGC 13798. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624671. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608778; NSGC 13799. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624672. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608779; NSGC 13800. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624673. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608780; NSGC 13801. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624674. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608782; NSGC 13802. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624675. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608783; NSGC 13803. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624676. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608785; NSGC 13804. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624677. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608788; NSGC 13805. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624678. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608789; NSGC 13806. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624679. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608794; NSGC 13807. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624680. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608795; NSGC 13808. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624681. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608797; NSGC 13809. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624682. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608798; NSGC 13810. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624683. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608799; NSGC 13811. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamadan.
- PI 624684. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608800; NSGC 13812. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624685. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608801; NSGC 13813. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624686. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608802; NSGC 13814. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624687. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608803; NSGC 13815. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624688. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608804; NSGC 13816. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624689. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608805; NSGC 13817. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624690. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608807; NSGC 13818. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624691. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8608808; NSGC 13819. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624692. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608810; NSGC 13820. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624693. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608811; NSGC 13821. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624694. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608812; NSGC 13822. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624695. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608813; NSGC 13823. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624696. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608814; NSGC 13824. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624697. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608815; NSGC 13825. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624698. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608818; NSGC 13826. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624699. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608819; NSGC 13827. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624700. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608821; NSGC 13828. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624701. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608822; NSGC 13829. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624702. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608823; NSGC 13830. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624703. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608824; NSGC 13831. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624704. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608825; NSGC 13832. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624705. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608826; NSGC 13833. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624706. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608827; NSGC 13834. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624707. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608829; NSGC 13835. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624708. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608830; NSGC 13836. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624709. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608831; NSGC 13837. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624710. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608833; NSGC 13838. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624711. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608834; NSGC 13839. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624712. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608837; NSGC 13840. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624713. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608838; NSGC 13841. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624714. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608839; NSGC 13842. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624715. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608840; NSGC 13843. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624716. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608844; NSGC 13844. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624717. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608845; NSGC 13845. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624718. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608846; NSGC 13846. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624719. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608847; NSGC 13847. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624720. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608848; NSGC 13848. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624721. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608849; NSGC 13849. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624722. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608850; NSGC 13850. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624723. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608851; NSGC 13851. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624724. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608853; NSGC 13852. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 624725. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608855; NSGC 13853. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624726. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8608857; NSGC 13854. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624727. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8608858; NSGC 13855. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624728. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608859; NSGC 13856. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624729. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608861; NSGC 13857. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624730. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608862; NSGC 13858. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624731. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608863; NSGC 13859. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624732. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608865; NSGC 13860. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624733. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608867; NSGC 13861. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624734. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608868; NSGC 13862. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 624735. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608869; NSGC 13863. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624736. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608870; NSGC 13864. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624737. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608871; NSGC 13865. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624738. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608872; NSGC 13866. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624739. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608873; NSGC 13867. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624740. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608874; NSGC 13868. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624741. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608876; NSGC 13869. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624742. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608877; NSGC 13870. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624743. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608878; NSGC 13871. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624744. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608880; NSGC 13872. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624745. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608881; NSGC 13873. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624746. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608882; NSGC 13874. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624747. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608885; NSGC 13875. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624748. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608886; NSGC 13876. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624749. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608887; NSGC 13877. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624750. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608888; NSGC 13878. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624751. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608890; NSGC 13879. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624752. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608892; NSGC 13880. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624753. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608894; NSGC 13881. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624754. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608895; NSGC 13882. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624755. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608897; NSGC 13883. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624756. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608898; NSGC 13884. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624757. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608899; NSGC 13885. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624758. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608900; NSGC 13886. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624759. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608902; NSGC 13887. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624760. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608904; NSGC 13888. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624761. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608905; NSGC 13889. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624762. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608908; NSGC 13890. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624763. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608909; NSGC 13891. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624764. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608910; NSGC 13892. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624765. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608911; NSGC 13893. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624766. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608914; NSGC 13894. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624767. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608915; NSGC 13895. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624768. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608916; NSGC 13896. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624769. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608918; NSGC 13897. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624770. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608919; NSGC 13898. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624771. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608920; NSGC 13899. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624772. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608921; NSGC 13900. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624773. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608923; NSGC 13901. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624774. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608924; NSGC 13902. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624775. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608925; NSGC 13903. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624776. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608928; NSGC 13904. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624777. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608930; NSGC 13905. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624778. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608931; NSGC 13906. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624779. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608934; NSGC 13907. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624780. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608935; NSGC 13908. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624781. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608937; NSGC 13909. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624782. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608938; NSGC 13910. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624783. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608939; NSGC 13911. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624784. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608940; NSGC 13912. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624785. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608942; NSGC 13913. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624786. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608943; NSGC 13914. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624787. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608944; NSGC 13915. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624788. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608945; NSGC 13916. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624789. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608946; NSGC 13917. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624790. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608947; NSGC 13918. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624791. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608948; NSGC 13919. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624792. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608949; NSGC 13920. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624793. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608950; NSGC 13921. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624794. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608951; NSGC 13922. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624795. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608952; NSGC 13923. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624796. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608953; NSGC 13924. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624797. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608954; NSGC 13925. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624798. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608955; NSGC 13926. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624799. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608956; NSGC 13927. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624800. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608957; NSGC 13928. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624801. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608959; NSGC 13929. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624802. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608960; NSGC 13930. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624803. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608961; NSGC 13931. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624804. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608963; NSGC 13932. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624805. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608964; NSGC 13933. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624806. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8608965; NSGC 13934. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624807. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608971; NSGC 13935. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624808. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8608972; NSGC 13936. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.

- PI 624809. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608973; NSGC 13937. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624810. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608974; NSGC 13938. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624811. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608975; NSGC 13939. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624812. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608976; NSGC 13940. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624813. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608978; NSGC 13941. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 624814. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608981; NSGC 13942. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624815. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608982; NSGC 13943. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624816. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608983; NSGC 13944. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624817. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608985; NSGC 13945. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624818. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608986; NSGC 13946. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624819. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608987; NSGC 13947. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624820. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8608989; NSGC 13948. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624821. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608990; NSGC 13949. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624822. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608991; NSGC 13950. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.

- PI 624823. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608992; NSGC 13951. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624824. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608993; NSGC 13952. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624825. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608994; NSGC 13953. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624826. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608995; NSGC 13954. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624827. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8608996; NSGC 13955. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624828. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8608998; NSGC 13956. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624829. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609000; NSGC 13957. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624830. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609001; NSGC 13958. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624831. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609002; NSGC 13959. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624832. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609003; NSGC 13960. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624833. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609006; NSGC 13961. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624834. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609007; NSGC 13962. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624835. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609008; NSGC 13963. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624836. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609009; NSGC 13964. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.

- PI 624837. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609011; NSGC 13965. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624838. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609012; NSGC 13966. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624839. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609013; NSGC 13967. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624840. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609014; NSGC 13968. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624841. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609015; NSGC 13969. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624842. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609016; NSGC 13970. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624843. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609017; NSGC 13971. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624844. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609018; NSGC 13972. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624845. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609019; NSGC 13973. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624846. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609020; NSGC 13974. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624847. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609021; NSGC 13975. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624848. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609022; NSGC 13976. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624849. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609023; NSGC 13977. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624850. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609024; NSGC 13978. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.

- PI 624851. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8609025; NSGC 13979. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624852. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8609026; NSGC 13980. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624853. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8609027; NSGC 13981. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624854. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8609028; NSGC 13982. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624855. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8609029; NSGC 13983. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624856. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609030; NSGC 13984. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624857. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609031; NSGC 13985. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624858. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609032; NSGC 13986. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624859. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609033; NSGC 13987. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624860. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609035; NSGC 13988. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624861. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609036; NSGC 13989. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624862. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609037; NSGC 13990. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624863. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609038; NSGC 13991. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624864. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609039; NSGC 13992. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.

- PI 624865. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609040; NSGC 13993. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624866. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609041; NSGC 13994. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624867. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609045; NSGC 13995. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624868. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609046; NSGC 13996. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 624869. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609047; NSGC 13997. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624870. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609048; NSGC 13998. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624871. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609049; NSGC 13999. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624872. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609050; NSGC 14000. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624873. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609051; NSGC 14001. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624874. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609053; NSGC 14002. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624875. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609055; NSGC 14003. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624876. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609056; NSGC 14004. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624877. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609059; NSGC 14005. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624878. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609060; NSGC 14006. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.

- PI 624879. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609061; NSGC 14007. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624880. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609062; NSGC 14008. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624881. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609063; NSGC 14009. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624882. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609064; NSGC 14010. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624883. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609067; NSGC 14011. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624884. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609068; NSGC 14012. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624885. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609069; NSGC 14013. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624886. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609070; NSGC 14014. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624887. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609071; NSGC 14015. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624888. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609072; NSGC 14016. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624889. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609073; NSGC 14017. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624890. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609076; NSGC 14018. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624891. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609077; NSGC 14019. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624892. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8609084; NSGC 14020. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.

- PI 624893. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love
Landrace. IWA8609085; NSGC 14021. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624894. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609086; NSGC 14022. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624895. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609088; NSGC 14023. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624896. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609090; NSGC 14024. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624897. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609091; NSGC 14025. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624898. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609092; NSGC 14026. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624899. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609093; NSGC 14027. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624900. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609094; NSGC 14028. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624901. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609095; NSGC 14029. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 624902. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609096; NSGC 14030. Collected in Kordestan, Iran. Latitude
36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 624903. *Triticum turgidum* subsp. *dicoccon* (Schrank) Thell.
Landrace. IWA8609100; NSGC 14031. Collected in Kordestan, Iran. Latitude
36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 624904. *Triticum turgidum* subsp. *dicoccon* (Schrank) Thell.
Landrace. IWA8609101; NSGC 14032. Collected in Kordestan, Iran. Latitude
36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 624905. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609102; NSGC 14033. Collected in Kordestan, Iran. Latitude
36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 624906. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609103; NSGC 14034. Collected in Kordestan, Iran. Latitude
36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.

- PI 624907. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609105; NSGC 14035. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 624908. *Triticum turgidum* subsp. *dicoccon* (Schrank) Thell.**
Landrace. IWA8609106; NSGC 14036. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 624909. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609109; NSGC 14037. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624910. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609110; NSGC 14038. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624911. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609111; NSGC 14039. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624912. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609117; NSGC 14040. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624913. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609118; NSGC 14041. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624914. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609119; NSGC 14042. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624915. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609123; NSGC 14043. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624916. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609125; NSGC 14044. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624917. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609127; NSGC 14045. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toyserkan.
- PI 624918. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609128; NSGC 14046. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toyserkan.
- PI 624919. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609130; NSGC 14047. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toyserkan.
- PI 624920. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609142; NSGC 14048. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.

- PI 624921. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609144; NSGC 14049. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624922. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609148; NSGC 14050. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624923. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609150; NSGC 14051. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624924. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609151; NSGC 14052. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 624925. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609153; NSGC 14053. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624926. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609155; NSGC 14054. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624927. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609156; NSGC 14055. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624928. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8609157; NSGC 14056. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624929. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609158; NSGC 14057. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624930. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609159; NSGC 14058. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624931. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609162; NSGC 14059. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 624932. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609170; NSGC 14060. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624933. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609172; NSGC 14061. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624934. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609175; NSGC 14062. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 624935. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609186; NSGC 14063. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624936. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609188; NSGC 14064. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624937. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609192; NSGC 14065. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624938. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609195; NSGC 14066. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624939. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609197; NSGC 14067. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609199; NSGC 14068. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624941. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609200; NSGC 14069. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624942. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609204; NSGC 14070. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624943. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609205; NSGC 14071. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624944. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609206; NSGC 14072. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624945. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609207; NSGC 14073. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624946. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609211; NSGC 14074. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624947. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609213; NSGC 14075. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624948. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609219; NSGC 14076. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 624949. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609220; NSGC 14077. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624950. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609223; NSGC 14078. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624951. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609224; NSGC 14079. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624952. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609225; NSGC 14080. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624953. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609226; NSGC 14081. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624954. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609227; NSGC 14082. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624955. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609229; NSGC 14083. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624956. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609233; NSGC 14084. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624957. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609236; NSGC 14085. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624958. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609237; NSGC 14086. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624959. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609244; NSGC 14087. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624960. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609245; NSGC 14088. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624961. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609249; NSGC 14089. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624962. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609250; NSGC 14090. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 624963. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609251; NSGC 14091. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624964. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609261; NSGC 14092. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624965. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609262; NSGC 14093. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624966. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609267; NSGC 14094. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624967. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609272; NSGC 14095. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624968. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609276; NSGC 14096. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624969. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609277; NSGC 14097. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624970. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609284; NSGC 14098. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624971. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609285; NSGC 14099. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624972. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609286; NSGC 14100. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624973. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609290; NSGC 14101. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624974. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609292; NSGC 14102. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624975. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609294; NSGC 14103. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624976. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609296; NSGC 14104. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.

- PI 624977. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609297; NSGC 14105. Collected in Tehran, Iran. Latitude 35° 40' N. Longitude 51° 26' E. Elevation 1209 m. Tehran.
- PI 624978. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609314; NSGC 14106. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624979. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609318; NSGC 14107. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624980. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609319; NSGC 14108. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609320; NSGC 14109. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609321; NSGC 14110. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609322; NSGC 14111. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624984. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609323; NSGC 14112. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609327; NSGC 14113. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609330; NSGC 14114. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609335; NSGC 14115. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624988. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609336; NSGC 14116. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624989. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609344; NSGC 14117. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624990. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609356; NSGC 14118. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 624991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609361; NSGC 14119. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624992. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609365; NSGC 14120. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624993. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609366; NSGC 14121. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624994. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609377; NSGC 14122. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624995. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609379; NSGC 14123. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624996. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609380; NSGC 14124. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624997. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609382; NSGC 14125. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624998. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609394; NSGC 14126. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 624999. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609402; NSGC 14127. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625000. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609405; NSGC 14128. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625001. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609408; NSGC 14129. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625002. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609411; NSGC 14130. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625003. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609412; NSGC 14131. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625004. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609413; NSGC 14132. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 625005. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609414; NSGC 14133. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625006. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609415; NSGC 14134. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625007. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609416; NSGC 14135. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625008. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609417; NSGC 14136. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625009. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609424; NSGC 14137. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625010. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609427; NSGC 14138. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625011. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609428; NSGC 14139. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625012. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609429; NSGC 14140. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625013. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609430; NSGC 14141. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625014. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609431; NSGC 14142. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625015. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609434; NSGC 14143. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625016. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609439; NSGC 14144. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625017. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609459; NSGC 14145. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625018. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609460; NSGC 14146. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 625019. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8609464; NSGC 14147. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625020. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609472; NSGC 14148. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625021. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609475; NSGC 14149. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625022. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609484; NSGC 14150. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625023. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609486; NSGC 14151. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625024. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609490; NSGC 14152. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625025. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609491; NSGC 14153. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625026. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609492; NSGC 14154. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625027. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609493; NSGC 14155. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625028. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609494; NSGC 14156. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625029. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609495; NSGC 14157. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625030. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609496; NSGC 14158. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625031. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609498; NSGC 14159. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625032. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8609499; NSGC 14160. Collected in Kordestan, Iran. Latitude
35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.

- PI 625033. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609500; NSGC 14161. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625034. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609508; NSGC 14162. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625035. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609509; NSGC 14163. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625036. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609510; NSGC 14164. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625037. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609515; NSGC 14165. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625038. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609516; NSGC 14166. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625039. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609520; NSGC 14167. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625040. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609521; NSGC 14168. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625041. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609524; NSGC 14169. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625042. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609525; NSGC 14170. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625043. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609530; NSGC 14171. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625044. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609531; NSGC 14172. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 625045. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609532; NSGC 14173. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625046. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609533; NSGC 14174. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.

- PI 625047. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609534; NSGC 14175. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625048. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609535; NSGC 14176. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625049. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609536; NSGC 14177. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625050. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609537; NSGC 14178. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625051. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609538; NSGC 14179. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625052. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609541; NSGC 14180. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625053. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609542; NSGC 14181. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625054. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609544; NSGC 14182. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625055. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609545; NSGC 14183. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625056. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609546; NSGC 14184. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625057. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609555; NSGC 14185. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625058. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609557; NSGC 14186. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625059. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609558; NSGC 14187. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625060. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609560; NSGC 14188. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.

- PI 625061. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609564; NSGC 14189. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625062. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609569; NSGC 14190. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625063. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609572; NSGC 14191. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625064. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609573; NSGC 14192. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625065. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609574; NSGC 14193. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625066. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609576; NSGC 14194. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625067. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609577; NSGC 14195. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625068. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609578; NSGC 14196. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625069. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609581; NSGC 14197. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625070. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609583; NSGC 14198. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625071. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609588; NSGC 14199. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625072. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609593; NSGC 14200. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625073. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609596; NSGC 14201. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625074. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609598; NSGC 14202. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.

- PI 625075. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609599; NSGC 14203. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625076. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609600; NSGC 14204. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625077. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609602; NSGC 14205. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625078. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609603; NSGC 14206. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625079. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609607; NSGC 14207. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625080. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609608; NSGC 14208. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625081. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609609; NSGC 14209. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625082. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609611; NSGC 14210. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625083. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609617; NSGC 14211. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625084. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609619; NSGC 14212. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625085. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609621; NSGC 14213. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625086. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609629; NSGC 14214. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625087. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609630; NSGC 14215. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625088. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609631; NSGC 14216. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.

- PI 625089. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609634; NSGC 14217. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 625090. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609636; NSGC 14218. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625091. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609638; NSGC 14219. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625092. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609642; NSGC 14220. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625093. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609643; NSGC 14221. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625094. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609645; NSGC 14222. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625095. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609646; NSGC 14223. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625096. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609647; NSGC 14224. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625097. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609649; NSGC 14225. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625098. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609650; NSGC 14226. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625099. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609651; NSGC 14227. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625100. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609652; NSGC 14228. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625101. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609654; NSGC 14229. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625102. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609655; NSGC 14230. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.

- PI 625103. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609657; NSGC 14231. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625104. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609658; NSGC 14232. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625105. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609660; NSGC 14233. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625106. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609662; NSGC 14234. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625107. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609664; NSGC 14235. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625108. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609665; NSGC 14236. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625109. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609667; NSGC 14237. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625110. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609669; NSGC 14238. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625111. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609671; NSGC 14239. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625112. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609672; NSGC 14240. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625113. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609675; NSGC 14241. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625114. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609677; NSGC 14242. Collected in Tehran, Iran. Latitude 35° 47' N. Longitude 52° 4' E. Elevation 2922 m. Damavand.
- PI 625115. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609678; NSGC 14243. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 625116. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609679; NSGC 14244. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.

- PI 625117. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609682; NSGC 14245. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 625118. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609699; NSGC 14246. Collected in Markazi, Iran. Latitude 33° 55' N. Longitude 50° 27' E. Elevation 1620 m. Mahallat.
- PI 625119. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609710; NSGC 14247. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625120. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609712; NSGC 14248. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625121. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609713; NSGC 14249. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625122. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609714; NSGC 14250. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625123. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609715; NSGC 14251. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625124. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609716; NSGC 14252. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625125. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609718; NSGC 14253. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625126. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609720; NSGC 14254. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625127. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609721; NSGC 14255. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625128. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609723; NSGC 14256. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625129. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609724; NSGC 14257. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625130. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609725; NSGC 14258. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.

- PI 625131. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609726; NSGC 14259. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625132. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609727; NSGC 14260. Collected in Markazi, Iran. Latitude 33° 59' N. Longitude 51° 29' E. Elevation 937 m. Kashan.
- PI 625133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609740; NSGC 14261. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609745; NSGC 14262. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625135. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609746; NSGC 14263. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625136. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609747; NSGC 14264. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609748; NSGC 14265. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625138. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609749; NSGC 14266. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625139. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609750; NSGC 14267. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609753; NSGC 14268. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609754; NSGC 14269. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609755; NSGC 14270. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609757; NSGC 14271. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625144. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609759; NSGC 14272. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 625145. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609761; NSGC 14273. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625146. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609763; NSGC 14274. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625147. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609770; NSGC 14275. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625148. *Triticum* sp.**
Landrace. IWA8609842; NSGC 14276. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625149. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609773; NSGC 14277. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625150. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609810; NSGC 14278. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625151. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609812; NSGC 14279. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625152. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609813; NSGC 14280. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625153. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609818; NSGC 14281. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625154. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609822; NSGC 14282. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609841; NSGC 14283. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609858; NSGC 14284. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609862; NSGC 14285. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609866; NSGC 14286. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 625159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609871; NSGC 14287. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609878; NSGC 14288. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609892; NSGC 14289. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609913; NSGC 14290. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609916; NSGC 14291. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625164. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8609932; NSGC 14292. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609945; NSGC 14293. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625166. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609946; NSGC 14294. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625167. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609949; NSGC 14295. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625168. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609964; NSGC 14296. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625169. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609973; NSGC 14297. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625170. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609977; NSGC 14298. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625171. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8609999; NSGC 14299. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625172. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610020; NSGC 14300. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 625173. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610023; NSGC 14301. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625174. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610058; NSGC 14303. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625175. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610103; NSGC 14304. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625176. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610124; NSGC 14305. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610135; NSGC 14306. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625178. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610138; NSGC 14307. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625179. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610140; NSGC 14308. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625180. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610159; NSGC 14309. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625181. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610185; NSGC 14310. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625182. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610187; NSGC 14311. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625183. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610220; NSGC 14312. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625184. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610254; NSGC 14313. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625185. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610269; NSGC 14314. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625186. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610271; NSGC 14315. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 625187. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8610296; NSGC 14316. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625188. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610299; NSGC 14317. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625189. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8610303; NSGC 14318. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625190. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610305; NSGC 14319. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625191. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610306; NSGC 14320. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 625192. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610360; NSGC 14321. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625193. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610361; NSGC 14322. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625194. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610364; NSGC 14323. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625195. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610365; NSGC 14324. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625196. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610367; NSGC 14325. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625197. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610368; NSGC 14326. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625198. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610369; NSGC 14327. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625199. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610370; NSGC 14328. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625200. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610374; NSGC 14329. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 625201. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610375; NSGC 14330. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625202. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610376; NSGC 14331. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625203. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610377; NSGC 14332. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625204. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610378; NSGC 14333. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625205. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610379; NSGC 14334. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625206. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610380; NSGC 14335. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625207. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610381; NSGC 14336. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625208. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610387; NSGC 14337. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625209. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610397; NSGC 14338. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625210. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610401; NSGC 14339. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625211. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610403; NSGC 14340. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625212. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610404; NSGC 14341. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625213. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610405; NSGC 14342. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625214. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8610406; NSGC 14343. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 625215. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610410; NSGC 14344. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625216. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610414; NSGC 14345. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625217. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610415; NSGC 14346. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625218. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610419; NSGC 14347. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625219. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610424; NSGC 14348. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625220. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610427; NSGC 14349. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625221. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610428; NSGC 14350. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625222. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610441; NSGC 14351. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625223. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610444; NSGC 14352. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625224. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610445; NSGC 14353. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625225. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610446; NSGC 14354. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625226. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610448; NSGC 14355. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625227. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610449; NSGC 14356. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625228. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610452; NSGC 14357. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 625229. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610453; NSGC 14358. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625230. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610454; NSGC 14359. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625231. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610455; NSGC 14360. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625232. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610456; NSGC 14361. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625233. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610460; NSGC 14362. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625234. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610468; NSGC 14363. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625235. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610470; NSGC 14364. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625236. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610477; NSGC 14365. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625237. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610478; NSGC 14366. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625238. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610480; NSGC 14367. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625239. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610482; NSGC 14368. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625240. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610483; NSGC 14369. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625241. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610487; NSGC 14370. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625242. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610489; NSGC 14371. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 625243. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610490; NSGC 14372. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625244. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610491; NSGC 14373. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625245. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610496; NSGC 14374. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625246. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610497; NSGC 14375. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625247. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610500; NSGC 14376. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625248. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610509; NSGC 14377. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 625249. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610511; NSGC 14378. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 625250. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610514; NSGC 14379. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 625251. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610519; NSGC 14380. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 625252. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610523; NSGC 14381. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 625253. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610524; NSGC 14382. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 625254. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610527; NSGC 14383. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 625255. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610528; NSGC 14384. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.
- PI 625256. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610529; NSGC 14385. Collected in Gilan, Iran. Latitude 37° 0' N. Longitude 49° 0' E.

- PI 625257. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610530; NSGC 14386. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625258. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610533; NSGC 14387. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610534; NSGC 14388. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625260. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610535; NSGC 14389. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625261. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610536; NSGC 14390. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625262. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610554; NSGC 14391. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625263. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610561; NSGC 14392. Collected in Mazandaran, Iran.
Latitude 36° 30' N. Longitude 53° 30' E.
- PI 625264. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610565; NSGC 14393. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625265. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610569; NSGC 14394. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625266. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610570; NSGC 14395. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625267. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610573; NSGC 14396. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610575; NSGC 14397. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610579; NSGC 14398. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610582; NSGC 14399. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.

- PI 625271. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610584; NSGC 14400. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625272. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610586; NSGC 14401. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625273. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8610588; NSGC 14402. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625274. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610594; NSGC 14403. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625275. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610601; NSGC 14404. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625276. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610602; NSGC 14405. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625277. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610606; NSGC 14406. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625278. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610607; NSGC 14407. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625279. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610608; NSGC 14408. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625280. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610611; NSGC 14409. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625281. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610616; NSGC 14410. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625282. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610618; NSGC 14411. Collected in Gilan, Iran. Latitude
37° 0' N. Longitude 49° 0' E.
- PI 625283. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610624; NSGC 14412. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan
- PI 625284. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8610626; NSGC 14413. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.

- PI 625285. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610627; NSGC 14414. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625286. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610628; NSGC 14415. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625287. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610630; NSGC 14416. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625288. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610636; NSGC 14417. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625289. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610637; NSGC 14418. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625290. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610638; NSGC 14419. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625291. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610640; NSGC 14420. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625292. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610642; NSGC 14421. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625293. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610643; NSGC 14422. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625294. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610650; NSGC 14423. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625295. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610652; NSGC 14424. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625296. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610664; NSGC 14425. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625297. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610665; NSGC 14426. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 625298. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610667; NSGC 14427. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.

- PI 625299. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610668; NSGC 14428. Collected in Mazandaran, Iran.
Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad.
- PI 625300. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610687; NSGC 14429. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625301. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610695; NSGC 14430. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625302. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610698; NSGC 14431. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625303. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610715; NSGC 14432. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625304. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610716; NSGC 14433. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610718; NSGC 14434. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610719; NSGC 14435. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610720; NSGC 14436. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625308. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610721; NSGC 14437. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625309. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610723; NSGC 14438. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625310. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610724; NSGC 14439. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625311. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610730; NSGC 14440. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625312. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610746; NSGC 14441. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.

- PI 625313. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610751; NSGC 14442. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625314. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610771; NSGC 14444. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625315. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610774; NSGC 14445. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shahrood.
- PI 625316. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610793; NSGC 14446. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625317. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610797; NSGC 14447. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625318. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610798; NSGC 14448. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625319. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610799; NSGC 14449. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625320. *Triticum* sp.**
Landrace. IWA8613338; NSGC 14450. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 625321. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610807; NSGC 14451. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625322. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610808; NSGC 14452. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625323. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610809; NSGC 14453. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625324. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610812; NSGC 14454. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625325. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610813; NSGC 14455. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625326. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610816; NSGC 14456. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.

- PI 625327. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610817; NSGC 14457. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625328. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610820; NSGC 14458. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625329. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610821; NSGC 14459. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625330. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610827; NSGC 14460. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625331. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610830; NSGC 14461. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625332. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610831; NSGC 14462. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625333. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610840; NSGC 14463. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625334. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610858; NSGC 14464. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610862; NSGC 14465. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625336. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610867; NSGC 14466. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625337. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610869; NSGC 14467. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610871; NSGC 14468. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625339. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610873; NSGC 14469. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625340. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610884; NSGC 14470. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.

- PI 625341. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610893; NSGC 14471. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 625342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610895; NSGC 14472. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625343. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610897; NSGC 14473. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625344. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610900; NSGC 14474. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625345. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610904; NSGC 14475. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625346. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610906; NSGC 14476. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625347. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610917; NSGC 14477. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625348. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610919; NSGC 14478. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610920; NSGC 14479. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625350. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610922; NSGC 14480. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625351. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610926; NSGC 14481. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625352. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610928; NSGC 14482. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 625353. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610935; NSGC 14483. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 625354. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610936; NSGC 14484. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.

- PI 625355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610937; NSGC 14485. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 625356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610942; NSGC 14486. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 625357. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610951; NSGC 14487. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 625358. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610955; NSGC 14488. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 625359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610960; NSGC 14489. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 625360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610975; NSGC 14490. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 625361. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8610979; NSGC 14491. Collected in Mazandaran, Iran.
Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m. Babolsar.
- PI 625362. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610990; NSGC 14492. Collected in Mazandaran, Iran.
Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 625363. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610998; NSGC 14493. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625364. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8610999; NSGC 14494. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625365. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611000; NSGC 14495. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625366. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611001; NSGC 14496. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625367. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611002; NSGC 14497. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625368. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611003; NSGC 14498. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625369. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611006; NSGC 14499. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625370. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611007; NSGC 14500. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625371. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611011; NSGC 14501. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625372. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611012; NSGC 14502. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625373. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611014; NSGC 14503. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625374. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611016; NSGC 14504. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625375. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611017; NSGC 14505. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625376. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611018; NSGC 14506. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625377. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611020; NSGC 14507. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625378. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611022; NSGC 14508. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625379. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611023; NSGC 14509. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625380. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611024; NSGC 14510. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625381. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611027; NSGC 14511. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625382. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611028; NSGC 14512. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611031; NSGC 14513. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625384. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611032; NSGC 14514. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611033; NSGC 14515. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611037; NSGC 14516. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625387. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611038; NSGC 14517. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625388. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611039; NSGC 14518. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625389. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611041; NSGC 14519. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625390. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611042; NSGC 14520. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625391. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611059; NSGC 14521. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625392. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611061; NSGC 14522. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625393. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611071; NSGC 14523. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625394. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611077; NSGC 14524. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625395. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611079; NSGC 14525. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625396. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611082; NSGC 14526. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625397. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611085; NSGC 14527. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625398. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611088; NSGC 14528. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625399. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611090; NSGC 14529. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625400. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611091; NSGC 14530. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625401. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8611094; NSGC 14531. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625402. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611096; NSGC 14532. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625403. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611097; NSGC 14533. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625404. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611098; NSGC 14534. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625405. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611099; NSGC 14535. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625406. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611100; NSGC 14536. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625407. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611101; NSGC 14537. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625408. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611102; NSGC 14538. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625409. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611104; NSGC 14539. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625410. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611105; NSGC 14540. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625411. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611106; NSGC 14541. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625412. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611108; NSGC 14542. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625413. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611109; NSGC 14543. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625414. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611111; NSGC 14544. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625415. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611112; NSGC 14545. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625416. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611113; NSGC 14546. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625417. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611114; NSGC 14547. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625418. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611115; NSGC 14548. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625419. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611116; NSGC 14549. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625420. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611118; NSGC 14550. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625421. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611122; NSGC 14551. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625422. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611124; NSGC 14552. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625423. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611128; NSGC 14553. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625424. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611129; NSGC 14554. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625425. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111130; NSGC 14555. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625426. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111131; NSGC 14556. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625427. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111133; NSGC 14557. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625428. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111135; NSGC 14558. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625429. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111141; NSGC 14560. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625430. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111142; NSGC 14561. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625431. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111143; NSGC 14562. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625432. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111150; NSGC 14563. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625433. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111151; NSGC 14564. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625434. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111153; NSGC 14565. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625435. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111160; NSGC 14566. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625436. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111161; NSGC 14567. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625437. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111162; NSGC 14568. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625438. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA86111165; NSGC 14569. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625439. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611166; NSGC 14570. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625440. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611171; NSGC 14571. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625441. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611172; NSGC 14572. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625442. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611173; NSGC 14573. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625443. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611175; NSGC 14574. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625444. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611177; NSGC 14575. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625445. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611180; NSGC 14576. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625446. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611181; NSGC 14577. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625447. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611220; NSGC 14578. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625448. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611222; NSGC 14579. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625449. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611226; NSGC 14580. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625450. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611239; NSGC 14581. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625451. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611241; NSGC 14582. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625452. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611245; NSGC 14583. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625453. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611257; NSGC 14584. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625454. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611264; NSGC 14585. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625455. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611274; NSGC 14586. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625456. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611278; NSGC 14587. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625457. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611282; NSGC 14588. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625458. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611292; NSGC 14589. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625459. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611294; NSGC 14590. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625460. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611297; NSGC 14591. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625461. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611298; NSGC 14592. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625462. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611299; NSGC 14593. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625463. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611300; NSGC 14594. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625464. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611302; NSGC 14595. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625465. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611303; NSGC 14596. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625466. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611305; NSGC 14597. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625467. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611307; NSGC 14598. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625468. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611308; NSGC 14599. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625469. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611309; NSGC 14600. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625470. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611325; NSGC 14601. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625471. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611326; NSGC 14602. Collected in Khorasan, Iran. Latitude 36° 17' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625472. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611327; NSGC 14603. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625473. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611328; NSGC 14604. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625474. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611333; NSGC 14605. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625475. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611334; NSGC 14606. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625476. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611347; NSGC 14607. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625477. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611348; NSGC 14608. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625478. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611349; NSGC 14609. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625479. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611351; NSGC 14610. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625480. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611353; NSGC 14611. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625481. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611364; NSGC 14612. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625482. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611365; NSGC 14613. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625483. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611368; NSGC 14614. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625484. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611372; NSGC 14615. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625485. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611391; NSGC 14616. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625486. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611394; NSGC 14617. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625487. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611395; NSGC 14618. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625488. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611396; NSGC 14619. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625489. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611397; NSGC 14620. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625490. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611400; NSGC 14621. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625491. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611429; NSGC 14622. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625492. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611430; NSGC 14623. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625493. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611431; NSGC 14624. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625494. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611432; NSGC 14625. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625495. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611434; NSGC 14626. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625496. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611435; NSGC 14627. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625497. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611437; NSGC 14628. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625498. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611438; NSGC 14629. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625499. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611439; NSGC 14630. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625500. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611445; NSGC 14631. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625501. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611446; NSGC 14632. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625502. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611448; NSGC 14633. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625503. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611449; NSGC 14634. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625504. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611450; NSGC 14635. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625505. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611452; NSGC 14636. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625506. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611454; NSGC 14637. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625507. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611455; NSGC 14638. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625508. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611456; NSGC 14639. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625509. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611470; NSGC 14640. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625510. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611471; NSGC 14641. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625511. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611474; NSGC 14642. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625512. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611487; NSGC 14643. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625513. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611495; NSGC 14644. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625514. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611496; NSGC 14645. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625515. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611510; NSGC 14646. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625516. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611512; NSGC 14647. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625517. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611513; NSGC 14648. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625518. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611518; NSGC 14649. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625519. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611530; NSGC 14650. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625520. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611531; NSGC 14651. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625521. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611532; NSGC 14652. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625522. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611536; NSGC 14653. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625523. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611541; NSGC 14654. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625524. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611542; NSGC 14655. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625525. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611544; NSGC 14656. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625526. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611557; NSGC 14657. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625527. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611559; NSGC 14658. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625528. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611564; NSGC 14659. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625529. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611566; NSGC 14660. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625530. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611567; NSGC 14661. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625531. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611581; NSGC 14662. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625532. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611582; NSGC 14663. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625533. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611583; NSGC 14664. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625534. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611586; NSGC 14665. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625535. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611588; NSGC 14666. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625536. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611593; NSGC 14667. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625537. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611594; NSGC 14668. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625538. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611595; NSGC 14669. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625539. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611597; NSGC 14670. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625540. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611598; NSGC 14671. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625541. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611605; NSGC 14672. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625542. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611614; NSGC 14673. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625543. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611615; NSGC 14674. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625544. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611623; NSGC 14675. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625545. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8611627; NSGC 14676. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625546. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611631; NSGC 14677. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625547. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611637; NSGC 14678. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625548. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611642; NSGC 14679. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625549. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611645; NSGC 14680. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625550. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611665; NSGC 14681. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625551. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611668; NSGC 14682. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625552. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611671; NSGC 14683. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625553. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611673; NSGC 14684. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625554. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611674; NSGC 14685. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625555. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611679; NSGC 14686. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625556. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611685; NSGC 14687. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625557. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611687; NSGC 14688. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625558. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611688; NSGC 14689. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625559. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611689; NSGC 14690. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625560. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611691; NSGC 14691. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625561. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611692; NSGC 14692. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625562. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611695; NSGC 14693. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625563. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611698; NSGC 14694. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625564. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611699; NSGC 14695. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625565. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611700; NSGC 14696. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625566. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611702; NSGC 14697. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625567. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611711; NSGC 14698. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625568. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611717; NSGC 14699. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625569. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611718; NSGC 14700. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625570. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611721; NSGC 14701. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625571. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611725; NSGC 14702. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625572. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611737; NSGC 14703. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625573. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611745; NSGC 14704. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625574. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611746; NSGC 14705. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625575. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611749; NSGC 14706. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625576. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611750; NSGC 14707. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625577. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611759; NSGC 14708. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625578. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611760; NSGC 14709. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625579. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611761; NSGC 14710. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625580. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611762; NSGC 14711. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625581. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611763; NSGC 14712. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625582. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611773; NSGC 14713. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625583. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611786; NSGC 14714. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625584. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611788; NSGC 14715. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625585. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611789; NSGC 14716. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625586. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611790; NSGC 14717. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625587. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611792; NSGC 14718. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625588. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611794; NSGC 14719. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625589. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611795; NSGC 14720. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625590. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611796; NSGC 14721. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625591. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611809; NSGC 14722. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625592. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611810; NSGC 14723. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625593. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611811; NSGC 14724. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625594. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611816; NSGC 14725. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625595. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611819; NSGC 14726. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625596. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611821; NSGC 14727. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625597. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611824; NSGC 14728. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625598. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611826; NSGC 14729. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625599. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611829; NSGC 14730. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625600. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611830; NSGC 14731. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625601. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611834; NSGC 14732. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625602. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611836; NSGC 14733. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625603. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611837; NSGC 14734. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625604. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611839; NSGC 14735. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625605. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611840; NSGC 14736. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625606. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611846; NSGC 14737. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625607. *Triticum aestivum* L. subsp. *aestivum***

Landrace. IWA8611847; NSGC 14738. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625608. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611849; NSGC 14739. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625609. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611850; NSGC 14740. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625610. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611856; NSGC 14741. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625611. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611857; NSGC 14742. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. mashhad.

PI 625612. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611858; NSGC 14743. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625613. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611859; NSGC 14744. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625614. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611861; NSGC 14745. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625615. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611862; NSGC 14746. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625616. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611863; NSGC 14747. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625617. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611867; NSGC 14748. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625618. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611868; NSGC 14749. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625619. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611869; NSGC 14750. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625620. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8611870; NSGC 14751. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625621. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611875; NSGC 14752. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625622. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611880; NSGC 14753. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625623. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611889; NSGC 14754. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625624. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611892; NSGC 14755. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625625. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611893; NSGC 14756. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625626. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611896; NSGC 14757. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625627. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611912; NSGC 14758. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625628. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611917; NSGC 14759. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625629. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611930; NSGC 14760. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625630. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611935; NSGC 14761. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625631. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611936; NSGC 14762. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625632. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611937; NSGC 14763. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625633. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611941; NSGC 14764. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625634. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611944; NSGC 14765. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625635. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611946; NSGC 14766. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625636. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611947; NSGC 14767. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625637. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611956; NSGC 14768. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625638. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611957; NSGC 14769. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625639. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611958; NSGC 14770. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625640. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611960; NSGC 14771. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625641. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611962; NSGC 14772. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625642. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611964; NSGC 14773. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625643. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611966; NSGC 14774. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625644. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611971; NSGC 14775. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625645. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611975; NSGC 14776. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625646. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611978; NSGC 14777. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625647. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611982; NSGC 14778. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625648. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611991; NSGC 14779. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625649. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8611998; NSGC 14780. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625650. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612002; NSGC 14781. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625651. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612006; NSGC 14782. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625652. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612010; NSGC 14783. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625653. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612013; NSGC 14784. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625654. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612015; NSGC 14785. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625655. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612022; NSGC 14786. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625656. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612023; NSGC 14787. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625657. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612024; NSGC 14788. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625658. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612025; NSGC 14789. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625659. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612035; NSGC 14790. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625660. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612037; NSGC 14791. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625661. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612039; NSGC 14792. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625662. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612042; NSGC 14793. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625663. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612052; NSGC 14794. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625664. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612053; NSGC 14795. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625665. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612054; NSGC 14796. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625666. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612055; NSGC 14797. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625667. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612060; NSGC 14798. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625668. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612062; NSGC 14799. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625669. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612064; NSGC 14800. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625670. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612065; NSGC 14801. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625671. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612066; NSGC 14802. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625672. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612072; NSGC 14803. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625673. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612075; NSGC 14804. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625674. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612077; NSGC 14805. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625675. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612079; NSGC 14806. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625676. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612082; NSGC 14807. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625677. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612087; NSGC 14808. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625678. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612088; NSGC 14809. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625679. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612091; NSGC 14810. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625680. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612092; NSGC 14811. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625681. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612093; NSGC 14812. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625682. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612094; NSGC 14813. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625683. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612095; NSGC 14814. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625684. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612096; NSGC 14815. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625685. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612097; NSGC 14816. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625686. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612098; NSGC 14817. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625687. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612101; NSGC 14818. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625688. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612105; NSGC 14819. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625689. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612108; NSGC 14820. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625690. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612109; NSGC 14821. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625691. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612110; NSGC 14822. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625692. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612116; NSGC 14823. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625693. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612117; NSGC 14824. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625694. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612118; NSGC 14825. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625695. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612119; NSGC 14826. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625696. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612121; NSGC 14827. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625697. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612122; NSGC 14828. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625698. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612134; NSGC 14829. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625699. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612138; NSGC 14830. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625700. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612139; NSGC 14831. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625701. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612140; NSGC 14832. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625702. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612144; NSGC 14833. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625703. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612145; NSGC 14834. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625704. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612155; NSGC 14835. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625705. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612156; NSGC 14836. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625706. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612161; NSGC 14837. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625707. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612162; NSGC 14838. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625708. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612163; NSGC 14839. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625709. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612164; NSGC 14840. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625710. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612165; NSGC 14841. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625711. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612167; NSGC 14842. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625712. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612168; NSGC 14843. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625713. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612171; NSGC 14844. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625714. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612172; NSGC 14845. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625715. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612173; NSGC 14846. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625716. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612174; NSGC 14847. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625717. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612175; NSGC 14848. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625718. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612177; NSGC 14849. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625719. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612178; NSGC 14850. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625720. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612180; NSGC 14851. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625721. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612181; NSGC 14852. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625722. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612182; NSGC 14853. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625723. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612183; NSGC 14854. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625724. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612184; NSGC 14855. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625725. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612186; NSGC 14856. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625726. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612187; NSGC 14857. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625727. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612190; NSGC 14858. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625728. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612191; NSGC 14859. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625729. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612192; NSGC 14860. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625730. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612196; NSGC 14861. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625731. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612207; NSGC 14862. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625732. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612212; NSGC 14863. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625733. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612213; NSGC 14864. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625734. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612216; NSGC 14865. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625735. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612219; NSGC 14866. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625736. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612220; NSGC 14867. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625737. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612222; NSGC 14868. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625738. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612223; NSGC 14869. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625739. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612225; NSGC 14870. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625740. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612229; NSGC 14871. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625741. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612232; NSGC 14872. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625742. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612234; NSGC 14873. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625743. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612241; NSGC 14874. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625744. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612242; NSGC 14875. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625745. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612243; NSGC 14876. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625746. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612253; NSGC 14877. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625747. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612254; NSGC 14878. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625748. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612261; NSGC 14879. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625749. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612262; NSGC 14880. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625750. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612264; NSGC 14881. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625751. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612266; NSGC 14882. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625752. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612267; NSGC 14883. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625753. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612269; NSGC 14884. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625754. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612270; NSGC 14885. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625755. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612274; NSGC 14886. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625756. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612277; NSGC 14887. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625757. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612278; NSGC 14888. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625758. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612279; NSGC 14889. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625759. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612281; NSGC 14890. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625760. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612282; NSGC 14891. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625761. *Triticum aestivum* L. subsp. *aestivum***

Landrace. IWA8612285; NSGC 14892. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625762. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612315; NSGC 14893. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625763. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612331; NSGC 14894. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625764. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612333; NSGC 14895. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625765. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612334; NSGC 14896. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625766. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612335; NSGC 14897. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625767. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612336; NSGC 14898. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625768. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612338; NSGC 14899. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625769. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612344; NSGC 14900. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625770. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612347; NSGC 14901. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625771. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612350; NSGC 14902. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625772. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612351; NSGC 14903. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625773. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612352; NSGC 14904. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

PI 625774. *Triticum aestivum* L. subsp. *aestivum*

Landrace. IWA8612355; NSGC 14905. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625775. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612356; NSGC 14906. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625776. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612359; NSGC 14907. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625777. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612361; NSGC 14908. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625778. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612362; NSGC 14909. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625779. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612371; NSGC 14910. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625780. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612373; NSGC 14911. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625781. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612376; NSGC 14912. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625782. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612378; NSGC 14913. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625783. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612379; NSGC 14914. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625784. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612380; NSGC 14915. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625785. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612381; NSGC 14916. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625786. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612384; NSGC 14917. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625787. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612388; NSGC 14918. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625788. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612398; NSGC 14919. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625789. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612400; NSGC 14920. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625790. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612401; NSGC 14921. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625791. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612413; NSGC 14922. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625792. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612414; NSGC 14923. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625793. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612415; NSGC 14924. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625794. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612416; NSGC 14925. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625795. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612417; NSGC 14926. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625796. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612418; NSGC 14927. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625797. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612419; NSGC 14928. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625798. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612420; NSGC 14929. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625799. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612421; NSGC 14930. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625800. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612422; NSGC 14931. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625801. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612423; NSGC 14932. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625802. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612425; NSGC 14933. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625803. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612426; NSGC 14934. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625804. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612427; NSGC 14935. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625805. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612428; NSGC 14936. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625806. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612431; NSGC 14937. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625807. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612433; NSGC 14938. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625808. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612436; NSGC 14939. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625809. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612437; NSGC 14940. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625810. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612438; NSGC 14941. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625811. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612439; NSGC 14942. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625812. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612440; NSGC 14943. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625813. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612448; NSGC 14944. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625814. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612449; NSGC 14945. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625815. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612457; NSGC 14947. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625816. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612458; NSGC 14948. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625817. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612459; NSGC 14949. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625818. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612460; NSGC 14950. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625819. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612461; NSGC 14951. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625820. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612462; NSGC 14952. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625821. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612463; NSGC 14953. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625822. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612464; NSGC 14954. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625823. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612465; NSGC 14955. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625824. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612466; NSGC 14956. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625825. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612467; NSGC 14957. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625826. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612469; NSGC 14958. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625827. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612473; NSGC 14959. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625828. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612474; NSGC 14960. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625829. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612475; NSGC 14961. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625830. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612478; NSGC 14962. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625831. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612479; NSGC 14963. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625832. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612480; NSGC 14964. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625833. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612490; NSGC 14965. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625834. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612500; NSGC 14966. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625835. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612505; NSGC 14967. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625836. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612506; NSGC 14968. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625837. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612509; NSGC 14969. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625838. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612517; NSGC 14970. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625839. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612071; NSGC 14971. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625840. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612536; NSGC 14972. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625841. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612540; NSGC 14973. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625842. *Triticum* sp.**
Landrace. IWA8612543; NSGC 14974. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625843. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612544; NSGC 14975. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625844. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612550; NSGC 14978. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625845. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612551; NSGC 14979. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625846. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612552; NSGC 14980. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625847. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612563; NSGC 14981. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625848. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612567; NSGC 14982. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625849. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612568; NSGC 14983. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625850. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612569; NSGC 14984. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625851. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612576; NSGC 14985. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625852. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612588; NSGC 14986. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625853. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612591; NSGC 14987. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625854. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612594; NSGC 14988. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625855. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612595; NSGC 14989. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625856. *Triticum* sp.**
Landrace. IWA8612280; NSGC 14990. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625857. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612597; NSGC 14991. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625858. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612601; NSGC 14992. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625859. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612602; NSGC 14993. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625860. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612603; NSGC 14994. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625861. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612604; NSGC 14995. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625862. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612605; NSGC 14996. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625863. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612606; NSGC 14997. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625864. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612616; NSGC 14998. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625865. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612618; NSGC 14999. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625866. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612627; NSGC 15000. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625867. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612628; NSGC 15001. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625868. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612629; NSGC 15002. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625869. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612630; NSGC 15003. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625870. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612632; NSGC 15004. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625871. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612638; NSGC 15005. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625872. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612639; NSGC 15006. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625873. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612640; NSGC 15007. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625874. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612641; NSGC 15008. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625875. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612643; NSGC 15009. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625876. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612644; NSGC 15010. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625877. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612653; NSGC 15011. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625878. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612654; NSGC 15012. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625879. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612655; NSGC 15013. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625880. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612661; NSGC 15015. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625881. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612662; NSGC 15016. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625882. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612663; NSGC 15017. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625883. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612669; NSGC 15018. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625884. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612675; NSGC 15019. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625885. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612679; NSGC 15020. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625886. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612682; NSGC 15021. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625887. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612684; NSGC 15022. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625888. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612685; NSGC 15023. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625889. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612688; NSGC 15024. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625890. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612690; NSGC 15025. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625891. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612692; NSGC 15026. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625892. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612696; NSGC 15027. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625893. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612700; NSGC 15028. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625894. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612701; NSGC 15029. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625895. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612703; NSGC 15030. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625896. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612716; NSGC 15031. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625897. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612726; NSGC 15032. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625898. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612728; NSGC 15033. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625899. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612743; NSGC 15034. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625900. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612745; NSGC 15035. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625901. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612747; NSGC 15036. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625902. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612749; NSGC 15037. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625903. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612755; NSGC 15038. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625904. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612759; NSGC 15039. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625905. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612764; NSGC 15040. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625906. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612768; NSGC 15041. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625907. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612769; NSGC 15042. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625908. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612774; NSGC 15043. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625909. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612777; NSGC 15044. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625910. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612778; NSGC 15045. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625911. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612781; NSGC 15046. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625912. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612782; NSGC 15047. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625913. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612783; NSGC 15048. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625914. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612789; NSGC 15049. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625915. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612790; NSGC 15050. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625916. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612792; NSGC 15051. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625917. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612799; NSGC 15052. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625918. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612800; NSGC 15053. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625919. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612801; NSGC 15054. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625920. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612810; NSGC 15055. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625921. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612814; NSGC 15056. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625922. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612822; NSGC 15057. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625923. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612824; NSGC 15058. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625924. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612826; NSGC 15059. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625925. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612829; NSGC 15060. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625926. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612830; NSGC 15061. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625927. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612833; NSGC 15062. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625928. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612839; NSGC 15065. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625929. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612841; NSGC 15066. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625930. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612851; NSGC 15069. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625931. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612856; NSGC 15070. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625932. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612873; NSGC 15072. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625933. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612883; NSGC 15073. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625934. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612898; NSGC 15075. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625935. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612907; NSGC 15076. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625936. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612910; NSGC 15077. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625937. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612911; NSGC 15078. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625938. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612913; NSGC 15079. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625939. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612916; NSGC 15080. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612918; NSGC 15081. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625941. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612919; NSGC 15082. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625942. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612920; NSGC 15083. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625943. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612921; NSGC 15084. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625944. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612923; NSGC 15085. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625945. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8612925; NSGC 15086. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625946. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612926; NSGC 15087. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625947. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612931; NSGC 15089. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625948. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612937; NSGC 15091. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625949. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612940; NSGC 15093. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625950. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612949; NSGC 15095. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625951. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612952; NSGC 15096. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625952. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612954; NSGC 15097. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625953. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612955; NSGC 15098. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625954. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612956; NSGC 15099. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625955. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612958; NSGC 15100. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625956. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612959; NSGC 15101. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625957. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612960; NSGC 15102. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625958. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612961; NSGC 15103. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625959. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612963; NSGC 15104. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625960. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612972; NSGC 15105. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625961. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612976; NSGC 15106. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625962. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612977; NSGC 15107. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625963. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612981; NSGC 15108. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625964. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612982; NSGC 15109. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625965. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612984; NSGC 15110. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625966. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612985; NSGC 15111. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625967. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612986; NSGC 15112. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625968. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612988; NSGC 15113. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625969. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612989; NSGC 15114. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625970. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612990; NSGC 15115. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625971. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612991; NSGC 15116. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625972. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612994; NSGC 15117. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625973. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612995; NSGC 15118. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625974. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612996; NSGC 15119. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625975. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612997; NSGC 15120. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625976. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612998; NSGC 15121. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625977. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8612999; NSGC 15122. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625978. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613004; NSGC 15123. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625979. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613005; NSGC 15124. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625980. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613006; NSGC 15125. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613007; NSGC 15126. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613008; NSGC 15127. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613011; NSGC 15128. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625984. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613012; NSGC 15129. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613017; NSGC 15130. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613022; NSGC 15131. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613024; NSGC 15132. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625988. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613025; NSGC 15133. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625989. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613026; NSGC 15134. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625990. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613027; NSGC 15135. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613028; NSGC 15136. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625992. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613031; NSGC 15137. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625993. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613032; NSGC 15138. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625994. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613034; NSGC 15139. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625995. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613036; NSGC 15140. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625996. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613040; NSGC 15141. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625997. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613041; NSGC 15142. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 625998. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613042; NSGC 15143. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 625999. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613043; NSGC 15144. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626000. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613044; NSGC 15145. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626001. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613048; NSGC 15146. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626002. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613051; NSGC 15147. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626003. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613053; NSGC 15148. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626004. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613054; NSGC 15149. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626005. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613055; NSGC 15150. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626006. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613057; NSGC 15151. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626007. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613058; NSGC 15152. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626008. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613059; NSGC 15153. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626009. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613060; NSGC 15154. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626010. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613062; NSGC 15155. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626011. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613063; NSGC 15156. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626012. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613065; NSGC 15157. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 626013. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613066; NSGC 15158. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626014. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613069; NSGC 15159. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626015. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613070; NSGC 15160. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626016. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613071; NSGC 15161. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626017. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613078; NSGC 15162. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626018. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613079; NSGC 15163. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626019. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613080; NSGC 15164. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626020. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613086; NSGC 15165. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626021. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613091; NSGC 15166. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626022. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613092; NSGC 15167. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626023. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613093; NSGC 15168. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626024. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613095; NSGC 15169. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626025. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613096; NSGC 15170. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626026. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613102; NSGC 15171. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626027. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613103; NSGC 15172. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626028. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613106; NSGC 15173. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626029. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613107; NSGC 15174. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626030. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613108; NSGC 15175. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626031. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613109; NSGC 15176. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626032. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613110; NSGC 15177. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626033. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613111; NSGC 15178. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626034. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613113; NSGC 15179. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626035. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613116; NSGC 15180. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626036. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613117; NSGC 15181. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626037. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613119; NSGC 15182. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626038. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613120; NSGC 15183. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626039. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613122; NSGC 15184. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626040. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613126; NSGC 15185. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626041. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613127; NSGC 15186. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626042. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613130; NSGC 15187. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626043. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613133; NSGC 15188. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626044. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613135; NSGC 15189. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626045. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613136; NSGC 15190. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626046. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613137; NSGC 15191. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626047. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613138; NSGC 15192. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626048. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613140; NSGC 15193. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626049. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613143; NSGC 15194. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626050. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613144; NSGC 15195. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626051. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613145; NSGC 15196. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626052. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613146; NSGC 15197. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626053. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613147; NSGC 15198. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626054. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613148; NSGC 15199. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626055. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613149; NSGC 15200. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626056. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613151; NSGC 15201. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626057. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613152; NSGC 15202. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626058. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613153; NSGC 15203. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626059. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613154; NSGC 15204. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626060. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613156; NSGC 15205. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626061. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613159; NSGC 15206. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626062. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613161; NSGC 15207. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626063. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613162; NSGC 15208. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626064. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613163; NSGC 15209. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626065. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613164; NSGC 15210. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626066. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613165; NSGC 15211. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626067. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613166; NSGC 15212. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626068. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613167; NSGC 15213. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626069. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613171; NSGC 15214. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626070. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613172; NSGC 15215. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626071. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613175; NSGC 15216. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626072. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613176; NSGC 15217. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626073. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613182; NSGC 15218. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626074. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613183; NSGC 15219. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626075. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613184; NSGC 15220. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626076. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613185; NSGC 15221. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626077. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613186; NSGC 15222. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626078. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613187; NSGC 15223. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626079. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613189; NSGC 15224. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626080. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613192; NSGC 15225. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626081. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613193; NSGC 15226. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626082. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613194; NSGC 15227. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626083. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613195; NSGC 15228. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626084. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613196; NSGC 15229. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626085. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613197; NSGC 15230. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626086. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613198; NSGC 15231. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626087. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613199; NSGC 15232. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626088. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613200; NSGC 15233. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626089. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613201; NSGC 15234. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626090. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613204; NSGC 15235. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626091. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613205; NSGC 15236. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626092. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613206; NSGC 15237. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626093. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613207; NSGC 15238. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626094. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613208; NSGC 15239. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626095. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613209; NSGC 15240. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626096. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613211; NSGC 15241. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626097. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613214; NSGC 15242. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626098. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613215; NSGC 15243. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626099. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613216; NSGC 15244. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626100. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613217; NSGC 15245. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626101. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613218; NSGC 15246. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626102. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613220; NSGC 15247. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626103. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613221; NSGC 15248. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626104. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613223; NSGC 15249. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626105. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613224; NSGC 15250. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626106. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613226; NSGC 15251. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626107. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613227; NSGC 15252. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626108. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613228; NSGC 15253. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626109. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613229; NSGC 15254. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626110. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613230; NSGC 15255. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626111. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613231; NSGC 15256. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626112. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613232; NSGC 15257. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626113. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613233; NSGC 15258. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626114. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613234; NSGC 15259. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626115. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613239; NSGC 15260. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626116. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613246; NSGC 15261. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626117. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613247; NSGC 15262. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626118. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613249; NSGC 15263. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626119. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613251; NSGC 15264. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626120. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613252; NSGC 15265. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626121. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613254; NSGC 15266. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626122. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613259; NSGC 15267. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626123. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613260; NSGC 15268. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626124. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613262; NSGC 15269. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626125. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613263; NSGC 15270. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626126. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613264; NSGC 15271. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626127. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613266; NSGC 15272. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626128. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613267; NSGC 15273. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626129. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613268; NSGC 15274. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626130. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613269; NSGC 15275. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626131. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613270; NSGC 15276. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626132. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613271; NSGC 15277. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613272; NSGC 15278. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613273; NSGC 15279. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626135. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613274; NSGC 15280. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626136. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613275; NSGC 15281. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613276; NSGC 15282. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626138. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613280; NSGC 15283. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626139. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613282; NSGC 15284. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613286; NSGC 15285. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613287; NSGC 15286. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613288; NSGC 15287. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613291; NSGC 15288. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626144. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613293; NSGC 15289. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626145. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613294; NSGC 15290. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626146. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613296; NSGC 15291. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626147. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613297; NSGC 15292. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626148. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613299; NSGC 15293. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626149. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613301; NSGC 15294. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626150. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613302; NSGC 15295. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626151. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613303; NSGC 15296. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626152. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613305; NSGC 15297. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626153. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613306; NSGC 15298. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626154. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613309; NSGC 15299. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613310; NSGC 15300. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613311; NSGC 15301. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613312; NSGC 15302. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613313; NSGC 15303. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613314; NSGC 15304. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613315; NSGC 15305. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613316; NSGC 15306. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613318; NSGC 15307. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613319; NSGC 15308. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626164. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613320; NSGC 15309. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613321; NSGC 15310. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626166. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613322; NSGC 15311. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626167. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613324; NSGC 15312. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626168. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613325; NSGC 15313. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626169. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613326; NSGC 15314. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626170. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613329; NSGC 15315. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626171. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613330; NSGC 15316. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626172. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613331; NSGC 15317. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626173. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613332; NSGC 15318. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626174. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613339; NSGC 15319. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626175. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613340; NSGC 15320. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626176. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613343; NSGC 15321. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613344; NSGC 15322. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626178. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613346; NSGC 15323. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626179. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613349; NSGC 15325. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626180. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613351; NSGC 15326. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626181. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613352; NSGC 15327. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626182. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613353; NSGC 15328. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626183. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613354; NSGC 15329. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626184. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613355; NSGC 15330. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626185. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613356; NSGC 15331. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626186. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613357; NSGC 15332. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626187. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613358; NSGC 15333. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626188. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613359; NSGC 15334. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626189. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613360; NSGC 15335. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626190. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613363; NSGC 15336. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626191. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613364; NSGC 15337. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626192. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613366; NSGC 15338. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626193. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613367; NSGC 15339. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626194. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613368; NSGC 15340. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626195. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613369; NSGC 15341. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626196. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613374; NSGC 15342. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626197. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613375; NSGC 15343. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626198. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613379; NSGC 15344. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626199. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613380; NSGC 15345. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626200. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613386; NSGC 15346. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626201. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613387; NSGC 15347. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626202. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613396; NSGC 15348. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626203. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613398; NSGC 15349. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626204. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613400; NSGC 15350. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626205. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613403; NSGC 15351. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626206. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613405; NSGC 15352. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626207. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613414; NSGC 15353. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626208. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613415; NSGC 15354. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 626209. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613416; NSGC 15355. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626210. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613417; NSGC 15356. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626211. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613418; NSGC 15357. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626212. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613419; NSGC 15358. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626213. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613420; NSGC 15359. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626214. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613421; NSGC 15360. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626215. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613423; NSGC 15361. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626216. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613424; NSGC 15362. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626217. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613425; NSGC 15363. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626218. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613426; NSGC 15364. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626219. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613427; NSGC 15365. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626220. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613428; NSGC 15366. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626221. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613429; NSGC 15367. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626222. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613433; NSGC 15368. Collected in Baluchestan Sistan, Iran. Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.

- PI 626223. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613434; NSGC 15369. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626224. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613435; NSGC 15370. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626225. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613436; NSGC 15371. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626226. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613437; NSGC 15372. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626227. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613438; NSGC 15373. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626228. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613439; NSGC 15374. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626229. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613440; NSGC 15375. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626230. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613441; NSGC 15376. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626231. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613442; NSGC 15377. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626232. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613443; NSGC 15378. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626233. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613444; NSGC 15379. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626234. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613445; NSGC 15380. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626235. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613446; NSGC 15381. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626236. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613447; NSGC 15382. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.

- PI 626237. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613448; NSGC 15383. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626238. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613449; NSGC 15384. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626239. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613450; NSGC 15385. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626240. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613451; NSGC 15386. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626241. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613452; NSGC 15387. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626242. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613453; NSGC 15388. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626243. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613454; NSGC 15389. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626244. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613455; NSGC 15390. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626245. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613456; NSGC 15391. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626246. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613457; NSGC 15392. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626247. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613458; NSGC 15393. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626248. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613459; NSGC 15394. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626249. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613460; NSGC 15395. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626250. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613461; NSGC 15396. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.

- PI 626251. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613462; NSGC 15397. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626252. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613463; NSGC 15398. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626253. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613464; NSGC 15399. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626254. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613466; NSGC 15400. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626255. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613467; NSGC 15401. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626256. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613469; NSGC 15402. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626257. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613471; NSGC 15403. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626258. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613472; NSGC 15404. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613473; NSGC 15405. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626260. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613474; NSGC 15406. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626261. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613477; NSGC 15407. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626262. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613478; NSGC 15408. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626263. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613480; NSGC 15409. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626264. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613482; NSGC 15410. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.

- PI 626265. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613484; NSGC 15411. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626266. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613485; NSGC 15412. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626267. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613486; NSGC 15413. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613488; NSGC 15414. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613489; NSGC 15415. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613490; NSGC 15416. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626271. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613491; NSGC 15417. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626272. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613492; NSGC 15418. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626273. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613493; NSGC 15419. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626274. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613495; NSGC 15420. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626275. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613496; NSGC 15421. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626276. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613498; NSGC 15422. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626277. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613499; NSGC 15423. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626278. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613500; NSGC 15424. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.

- PI 626279. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613501; NSGC 15425. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626280. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613502; NSGC 15426. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626281. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613503; NSGC 15427. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626282. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613504; NSGC 15428. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626283. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613506; NSGC 15429. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626284. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613508; NSGC 15430. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626285. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613509; NSGC 15431. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626286. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613510; NSGC 15432. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626287. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613511; NSGC 15433. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626288. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613512; NSGC 15434. Collected in Baluchestan Sistan, Iran.
Latitude 29° 32' N. Longitude 60° 54' E. Elevation 1342 m. Zahedan.
- PI 626289. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613514; NSGC 15435. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626290. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613515; NSGC 15436. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626291. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613516; NSGC 15437. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626292. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613517; NSGC 15438. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626293. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613518; NSGC 15439. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626294. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613519; NSGC 15440. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626295. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613521; NSGC 15441. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626296. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613522; NSGC 15442. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626297. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613526; NSGC 15443. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626298. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613529; NSGC 15444. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626299. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613531; NSGC 15445. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626300. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613532; NSGC 15446. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626301. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613533; NSGC 15447. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626302. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613534; NSGC 15448. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626303. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613535; NSGC 15449. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626304. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613538; NSGC 15450. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613540; NSGC 15451. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613543; NSGC 15453. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613544; NSGC 15454. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626308. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613545; NSGC 15455. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626309. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613547; NSGC 15456. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626310. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613552; NSGC 15457. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626311. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613555; NSGC 15458. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626312. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613556; NSGC 15459. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626313. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613558; NSGC 15460. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626314. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613559; NSGC 15461. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626315. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613560; NSGC 15462. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626316. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613561; NSGC 15463. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626317. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613562; NSGC 15464. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626318. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613563; NSGC 15465. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626319. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613564; NSGC 15466. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626320. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613567; NSGC 15467. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626321. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613568; NSGC 15468. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626322. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613571; NSGC 15469. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626323. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613573; NSGC 15470. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626324. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613578; NSGC 15471. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626325. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613582; NSGC 15472. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626326. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613588; NSGC 15473. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626327. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613589; NSGC 15474. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626328. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613591; NSGC 15475. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626329. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613592; NSGC 15476. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626330. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613596; NSGC 15477. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626331. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613600; NSGC 15478. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626332. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613601; NSGC 15479. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626333. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613605; NSGC 15480. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626334. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613606; NSGC 15481. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613612; NSGC 15482. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626336. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613613; NSGC 15483. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626337. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613614; NSGC 15484. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613617; NSGC 15485. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626339. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613620; NSGC 15486. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626340. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613623; NSGC 15487. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626341. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613625; NSGC 15488. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613626; NSGC 15489. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626343. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613629; NSGC 15490. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626344. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613630; NSGC 15491. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626345. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613632; NSGC 15492. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626346. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613637; NSGC 15493. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626347. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613638; NSGC 15494. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626348. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613640; NSGC 15495. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613641; NSGC 15496. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626350. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613642; NSGC 15497. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626351. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613643; NSGC 15498. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626352. *Triticum* sp.**
Landrace. IWA8613644; NSGC 15499. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626353. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613645; NSGC 15500. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626354. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613646; NSGC 15501. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613647; NSGC 15502. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613655; NSGC 15503. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626357. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613656; NSGC 15504. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626358. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613658; NSGC 15505. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613660; NSGC 15506. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613661; NSGC 15507. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626361. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613662; NSGC 15508. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626362. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613665; NSGC 15509. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626363. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613671; NSGC 15510. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626364. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613672; NSGC 15511. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626365. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613673; NSGC 15512. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626366. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613676; NSGC 15513. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626367. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613677; NSGC 15514. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626368. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613680; NSGC 15515. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626369. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613681; NSGC 15516. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626370. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613682; NSGC 15517. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626371. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613683; NSGC 15518. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626372. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613689; NSGC 15519. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626373. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613692; NSGC 15520. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626374. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613696; NSGC 15521. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626375. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613699; NSGC 15522. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626376. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613701; NSGC 15523. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626377. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613702; NSGC 15524. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626378. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613703; NSGC 15525. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626379. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613705; NSGC 15526. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626380. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613707; NSGC 15527. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626381. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613708; NSGC 15528. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626382. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613710; NSGC 15529. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613713; NSGC 15530. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626384. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613715; NSGC 15531. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613716; NSGC 15532. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613719; NSGC 15533. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626387. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613720; NSGC 15534. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626388. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613722; NSGC 15535. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626389. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613724; NSGC 15536. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626390. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613731; NSGC 15537. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626391. *Triticum turgidum* subsp. *dicoccon* (Schrank) Thell.
Landrace. IWA8613737; NSGC 15538. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626392. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613747; NSGC 15539. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626393. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613764; NSGC 15540. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626394. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613768; NSGC 15541. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626395. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613772; NSGC 15542. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626396. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613781; NSGC 15543. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626397. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613783; NSGC 15544. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626398. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613792; NSGC 15546. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626399. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613797; NSGC 15547. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626400. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613803; NSGC 15548. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626401. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613805; NSGC 15549. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626402. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613806; NSGC 15550. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626403. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613807; NSGC 15551. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626404. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8613808; NSGC 15552. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626405. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613809; NSGC 15553. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626406. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613822; NSGC 15554. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626407. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613843; NSGC 15556. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626408. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613846; NSGC 15557. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626409. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613848; NSGC 15558. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626410. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613851; NSGC 15559. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626411. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613854; NSGC 15560. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626412. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613858; NSGC 15561. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626413. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613862; NSGC 15562. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626414. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613863; NSGC 15563. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626415. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613864; NSGC 15564. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626416. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613867; NSGC 15565. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626417. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613868; NSGC 15566. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626418. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613870; NSGC 15567. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626419. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613871; NSGC 15568. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626420. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613872; NSGC 15569. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626421. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613874; NSGC 15570. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626422. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613878; NSGC 15571. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626423. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613880; NSGC 15572. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626424. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613883; NSGC 15573. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626425. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613885; NSGC 15574. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626426. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613886; NSGC 15575. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626427. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613887; NSGC 15576. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626428. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613903; NSGC 15578. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626429. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613906; NSGC 15579. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626430. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613908; NSGC 15580. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626431. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613910; NSGC 15581. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626432. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613911; NSGC 15582. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626433. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613912; NSGC 15583. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626434. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613913; NSGC 15584. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626435. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613932; NSGC 15585. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626436. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613933; NSGC 15586. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626437. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613945; NSGC 15587. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626438. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613946; NSGC 15588. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626439. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613948; NSGC 15589. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626440. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613953; NSGC 15590. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626441. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613955; NSGC 15591. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626442. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8613959; NSGC 15592. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626443. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613962; NSGC 15593. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626444. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613963; NSGC 15594. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626445. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613964; NSGC 15595. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626446. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613965; NSGC 15596. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626447. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613970; NSGC 15597. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626448. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613973; NSGC 15598. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626449. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613974; NSGC 15599. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626450. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613975; NSGC 15600. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626451. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613978; NSGC 15601. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626452. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613979; NSGC 15602. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626453. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613980; NSGC 15603. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626454. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613981; NSGC 15604. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626455. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613984; NSGC 15605. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626456. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613985; NSGC 15606. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626457. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613986; NSGC 15607. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626458. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613991; NSGC 15608. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626459. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613994; NSGC 15609. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626460. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8613998; NSGC 15610. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626461. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614001; NSGC 15611. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626462. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614002; NSGC 15612. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626463. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614005; NSGC 15613. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626464. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614008; NSGC 15614. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626465. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614009; NSGC 15615. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626466. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614014; NSGC 15616. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626467. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614015; NSGC 15617. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626468. *Triticum turgidum* subsp. *dicoccon* (Schrank) Thell.**
Landrace. IWA8614021; NSGC 15618. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626469. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614022; NSGC 15619. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626470. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614023; NSGC 15620. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626471. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614033; NSGC 15621. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626472. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614041; NSGC 15622. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626473. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614054; NSGC 15623. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626474. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614055; NSGC 15624. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626475. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614056; NSGC 15625. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626476. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614058; NSGC 15626. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626477. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614061; NSGC 15627. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626478. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614062; NSGC 15628. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626479. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614063; NSGC 15629. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626480. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614065; NSGC 15630. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626481. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614070; NSGC 15631. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626482. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614075; NSGC 15632. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626483. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614082; NSGC 15633. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626484. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614083; NSGC 15634. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626485. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614095; NSGC 15635. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626486. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614096; NSGC 15636. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626487. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614098; NSGC 15637. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626488. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614101; NSGC 15638. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626489. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614110; NSGC 15639. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626490. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614112; NSGC 15640. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626491. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614113; NSGC 15641. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626492. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614119; NSGC 15642. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626493. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614120; NSGC 15643. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626494. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614122; NSGC 15644. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626495. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614123; NSGC 15645. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626496. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614124; NSGC 15646. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626497. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614131; NSGC 15647. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626498. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614132; NSGC 15648. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626499. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614133; NSGC 15649. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626500. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614134; NSGC 15650. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626501. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614136; NSGC 15651. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626502. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8614137; NSGC 15652. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626503. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614139; NSGC 15653. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626504. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614149; NSGC 15654. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626505. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614151; NSGC 15655. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626506. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614152; NSGC 15656. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626507. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614153; NSGC 15657. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626508. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614154; NSGC 15658. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626509. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614155; NSGC 15659. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626510. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614156; NSGC 15660. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626511. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614157; NSGC 15661. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626512. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614159; NSGC 15662. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626513. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614163; NSGC 15663. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626514. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614164; NSGC 15664. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626515. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614168; NSGC 15665. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626516. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614169; NSGC 15666. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626517. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614170; NSGC 15667. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626518. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614171; NSGC 15668. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626519. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614172; NSGC 15669. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626520. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614173; NSGC 15670. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626521. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614174; NSGC 15671. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626522. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614175; NSGC 15672. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626523. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614176; NSGC 15673. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626524. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614182; NSGC 15674. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626525. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614183; NSGC 15675. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626526. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614186; NSGC 15676. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626527. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614188; NSGC 15677. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626528. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614189; NSGC 15678. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626529. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614193; NSGC 15680. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626530. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614198; NSGC 15682. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626531. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614203; NSGC 15683. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626532. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614204; NSGC 15684. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626533. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614207; NSGC 15685. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626534. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614208; NSGC 15686. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626535. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614216; NSGC 15687. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626536. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614218; NSGC 15688. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626537. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614220; NSGC 15689. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626538. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614237; NSGC 15690. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626539. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614240; NSGC 15692. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626540. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614242; NSGC 15693. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626541. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614244; NSGC 15694. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626542. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614252; NSGC 15696. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626543. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614253; NSGC 15697. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626544. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614254; NSGC 15698. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626545. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614261; NSGC 15699. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626546. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614262; NSGC 15700. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626547. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614264; NSGC 15701. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626548. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614274; NSGC 15702. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626549. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614276; NSGC 15703. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626550. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614278; NSGC 15704. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626551. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614279; NSGC 15705. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626552. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614281; NSGC 15706. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626553. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614282; NSGC 15707. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626554. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614283; NSGC 15708. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626555. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614284; NSGC 15709. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626556. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614286; NSGC 15710. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626557. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614288; NSGC 15711. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626558. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614289; NSGC 15712. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626559. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614290; NSGC 15713. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626560. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614291; NSGC 15714. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626561. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614292; NSGC 15715. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626562. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614301; NSGC 15716. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626563. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614307; NSGC 15717. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626564. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614308; NSGC 15718. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626565. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614310; NSGC 15719. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626566. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614311; NSGC 15720. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626567. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614312; NSGC 15721. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626568. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614313; NSGC 15722. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626569. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614315; NSGC 15723. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626570. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614324; NSGC 15724. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626571. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614325; NSGC 15725. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626572. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614327; NSGC 15726. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 626573. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614330; NSGC 15727. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626574. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614332; NSGC 15728. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626575. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614341; NSGC 15729. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626576. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614361; NSGC 15730. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626577. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614363; NSGC 15731. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626578. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614365; NSGC 15732. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626579. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614366; NSGC 15733. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626580. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614367; NSGC 15734. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626581. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614371; NSGC 15735. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626582. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614372; NSGC 15736. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626583. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614374; NSGC 15737. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626584. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614375; NSGC 15738. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626585. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614376; NSGC 15739. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626586. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614377; NSGC 15740. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 626587. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614378; NSGC 15741. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626588. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614379; NSGC 15742. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626589. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614380; NSGC 15743. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626590. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614381; NSGC 15744. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626591. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614382; NSGC 15745. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626592. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614383; NSGC 15746. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626593. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614384; NSGC 15747. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626594. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614395; NSGC 15748. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626595. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614396; NSGC 15749. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626596. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614397; NSGC 15750. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626597. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614398; NSGC 15751. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626598. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614399; NSGC 15752. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626599. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614408; NSGC 15753. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626600. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614410; NSGC 15754. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 626601. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614413; NSGC 15755. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626602. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614415; NSGC 15756. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626603. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614416; NSGC 15757. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626604. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614422; NSGC 15758. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626605. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614425; NSGC 15759. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626606. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614429; NSGC 15760. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626607. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614431; NSGC 15761. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626608. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614432; NSGC 15762. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626609. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614434; NSGC 15763. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626610. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614435; NSGC 15764. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626611. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614436; NSGC 15765. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626612. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614439; NSGC 15768. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626613. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614440; NSGC 15769. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626614. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614441; NSGC 15770. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 626615. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614442; NSGC 15771. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626616. *Triticum* sp.**
Landrace. IWA8614443; NSGC 15772. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626617. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614453; NSGC 15773. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626618. *Triticum* sp.**
Landrace. IWA8614454; NSGC 15774. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626619. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614460; NSGC 15775. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626620. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614461; NSGC 15776. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626621. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614462; NSGC 15777. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626622. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614463; NSGC 15778. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626623. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614464; NSGC 15779. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626624. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614465; NSGC 15780. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626625. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614466; NSGC 15781. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626626. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614467; NSGC 15782. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626627. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614469; NSGC 15783. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626628. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614470; NSGC 15784. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 626629. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614473; NSGC 15785. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626630. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614474; NSGC 15786. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626631. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614475; NSGC 15787. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626632. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614478; NSGC 15788. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626633. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614482; NSGC 15789. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626634. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614483; NSGC 15790. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626635. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614490; NSGC 15791. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626636. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614502; NSGC 15792. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626637. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614503; NSGC 15793. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626638. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614504; NSGC 15794. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626639. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614512; NSGC 15795. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626640. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614515; NSGC 15796. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626641. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614518; NSGC 15797. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626642. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614519; NSGC 15798. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 626643. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614520; NSGC 15799. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626644. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614522; NSGC 15800. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626645. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614523; NSGC 15801. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626646. *Triticum* sp.**
Landrace. IWA8614524; NSGC 15802. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626647. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614526; NSGC 15803. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626648. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614536; NSGC 15804. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626649. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614539; NSGC 15805. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626650. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614540; NSGC 15806. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626651. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614551; NSGC 15807. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626652. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614557; NSGC 15808. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626653. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614559; NSGC 15809. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626654. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614560; NSGC 15810. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626655. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614562; NSGC 15811. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626656. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614564; NSGC 15812. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 626657. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614565; NSGC 15813. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626658. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614566; NSGC 15814. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626659. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8614567; NSGC 15815. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626660. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600002; NSGC 15816. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 626661. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600003; NSGC 15817. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 626662. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600004; NSGC 15818. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 626663. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600005; NSGC 15819. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 626664. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600006; NSGC 15820. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 626665. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600007; NSGC 15821. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 626666. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600008; NSGC 15822. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 626667. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600009; NSGC 15823. Collected in Markazi, Iran. Latitude 33° 38' N. Longitude 50° 4' E. Elevation 1865 m. Khomein.
- PI 626668. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600010; NSGC 15824. Collected in Markazi, Iran. Latitude 33° 38' N. Longitude 50° 4' E. Elevation 1865 m. Khomein.
- PI 626669. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600012; NSGC 15825. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 626670. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600013; NSGC 15826. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 626671. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600014; NSGC 15827. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 626672. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600015; NSGC 15828. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 626673. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600020; NSGC 15829. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahi-Dasht.
- PI 626674. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600023; NSGC 15830. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 626675. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600025; NSGC 15831. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 626676. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600027; NSGC 15832. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 626677. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600028; NSGC 15833. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 626678. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600032; NSGC 15834. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 626679. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600041; NSGC 15835. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 626680. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600042; NSGC 15836. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 626681. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600047; NSGC 15837. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 626682. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600049; NSGC 15838. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626683. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600052; NSGC 15839. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626684. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600053; NSGC 15840. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 626685. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600056; NSGC 15841. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 626686. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600057; NSGC 15842. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 626687. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600066; NSGC 15843. Collected in Kordestan, Iran. Latitude 35° 58' N. Longitude 45° 54' E. Elevation 1516 m. Baneh.
- PI 626688. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600067; NSGC 15844. Collected in Zanzan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 626689. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600068; NSGC 15845. Collected in Zanzan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 626690. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600069; NSGC 15846. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 626691. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600070; NSGC 15847. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 626692. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600071; NSGC 15848. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 626693. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600072; NSGC 15849. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 626694. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600073; NSGC 15850. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 626695. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600075; NSGC 15851. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 626696. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600077; NSGC 15852. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 626697. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600078; NSGC 15853. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 626698. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600079; NSGC 15854. Collected in Zanzan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.

- PI 626699. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600080; NSGC 15855. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 626700. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600081; NSGC 15856. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 626701. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600082; NSGC 15857. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 626702. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600083; NSGC 15858. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 626703. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600085; NSGC 15859. Collected in Bakhtaran, Iran. Latitude 34° 15' N. Longitude 46° 14' E. Elevation 1561 m. Kerend.
- PI 626704. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600087; NSGC 15860. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 626705. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600089; NSGC 15861. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 626706. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600090; NSGC 15862. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 626707. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600092; NSGC 15863. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 626708. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600093; NSGC 15864. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 626709. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600094; NSGC 15865. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 626710. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600096; NSGC 15866. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 626711. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600097; NSGC 15867. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626712. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600099; NSGC 15868. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 626713. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600100; NSGC 15869. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 626714. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600102; NSGC 15870. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kerman-Shah.
- PI 626715. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600105; NSGC 15871. Collected in Bakhtaran, Iran. Latitude 34° 30' 12" N. Longitude 47° 58' 6" E. Elevation 1458 m. Kangavar.
- PI 626716. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600106; NSGC 15872. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 626717. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600109; NSGC 15873. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 626718. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600110; NSGC 15874. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 626719. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600111; NSGC 15875. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 626720. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600117; NSGC 15876. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626721. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600118; NSGC 15877. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626722. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600119; NSGC 15878. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626723. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600120; NSGC 15879. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626724. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600121; NSGC 15880. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626725. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600122; NSGC 15881. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626726. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600124; NSGC 15882. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 626727. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600126; NSGC 15883. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626728. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600128; NSGC 15884. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626729. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600129; NSGC 15885. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626730. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600130; NSGC 15886. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626731. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600131; NSGC 15887. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626732. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600132; NSGC 15888. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626733. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600133; NSGC 15889. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 626734. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600134; NSGC 15890. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 626735. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600135; NSGC 15891. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 626736. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600138; NSGC 15892. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626737. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600139; NSGC 15893. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626738. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600140; NSGC 15894. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626739. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600143; NSGC 15895. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626740. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600144; NSGC 15896. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 626741. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600145; NSGC 15897. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626742. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600147; NSGC 15898. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626743. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600148; NSGC 15899. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 626744. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600150; NSGC 15900. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 626745. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600151; NSGC 15901. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626746. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600152; NSGC 15902. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626747. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600154; NSGC 15903. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 626748. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600156; NSGC 15904. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626749. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600157; NSGC 15905. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626750. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600158; NSGC 15906. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 626751. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600160; NSGC 15907. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 626752. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600161; NSGC 15908. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 626753. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600163; NSGC 15909. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 626754. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600165; NSGC 15910. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.

- PI 626755. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600167; NSGC 15911. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626756. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600172; NSGC 15912. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626757. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600173; NSGC 15913. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626758. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600174; NSGC 15914. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626759. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600178; NSGC 15915. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626760. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600180; NSGC 15916. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626761. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600181; NSGC 15917. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626762. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600183; NSGC 15918. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626763. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600185; NSGC 15919. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 626764. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600186; NSGC 15920. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626765. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600187; NSGC 15921. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626766. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600189; NSGC 15922. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626767. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600192; NSGC 15923. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m.
Borujen.
- PI 626768. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600193; NSGC 15924. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.

- PI 626769. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600195; NSGC 15925. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626770. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600196; NSGC 15926. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626771. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600198; NSGC 15927. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626772. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600199; NSGC 15928. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 626773. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600200; NSGC 15929. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 626774. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600201; NSGC 15930. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626775. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600203; NSGC 15931. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626776. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600205; NSGC 15932. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626777. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600206; NSGC 15933. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626778. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600207; NSGC 15934. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626779. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600209; NSGC 15935. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626780. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600210; NSGC 15936. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626781. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600211; NSGC 15937. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 626782. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600212; NSGC 15938. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.

- PI 626783. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600213; NSGC 15939. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626784. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600214; NSGC 15940. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 626785. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600215; NSGC 15941. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626786. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600218; NSGC 15942. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626787. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600224; NSGC 15943. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 626788. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600226; NSGC 15944. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626789. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600229; NSGC 15945. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626790. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600231; NSGC 15947. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626791. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600232; NSGC 15948. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626792. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600234; NSGC 15949. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626793. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600235; NSGC 15950. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626794. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600236; NSGC 15951. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626795. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600237; NSGC 15952. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626796. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600238; NSGC 15953. Collected in Esfahan, Iran. Latitude 31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.

- PI 626797. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600240; NSGC 15954. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626798. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600241; NSGC 15955. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626799. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600242; NSGC 15956. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626800. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600243; NSGC 15957. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626801. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600244; NSGC 15958. Collected in Esfahan, Iran. Latitude 31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626802. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600245; NSGC 15959. Collected in Esfahan, Iran. Latitude 31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626803. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600246; NSGC 15960. Collected in Esfahan, Iran. Latitude 31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626804. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600247; NSGC 15961. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626805. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600248; NSGC 15962. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626806. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600249; NSGC 15963. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626807. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600251; NSGC 15964. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626808. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600252; NSGC 15965. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626809. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600253; NSGC 15966. Collected in Esfahan, Iran. Latitude 31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626810. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600256; NSGC 15967. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.

- PI 626811. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600257; NSGC 15968. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626812. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600259; NSGC 15969. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626813. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600260; NSGC 15970. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626814. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600261; NSGC 15971. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626815. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600262; NSGC 15972. Collected in Khorasan, Iran. Latitude 37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.
- PI 626816. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600263; NSGC 15973. Collected in Khorasan, Iran. Latitude 37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.
- PI 626817. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600265; NSGC 15974. Collected in Khorasan, Iran. Latitude 37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.
- PI 626818. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600266; NSGC 15975. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626819. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600267; NSGC 15976. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626820. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600268; NSGC 15977. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626821. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600270; NSGC 15978. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626822. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600271; NSGC 15979. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626823. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600273; NSGC 15980. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626824. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600274; NSGC 15981. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.

- PI 626825. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600276; NSGC 15982. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626826. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600277; NSGC 15983. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626827. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600279; NSGC 15984. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626828. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600280; NSGC 15985. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626829. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600281; NSGC 15986. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626830. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600282; NSGC 15987. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626831. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600283; NSGC 15988. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626832. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600284; NSGC 15989. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626833. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600285; NSGC 15990. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626834. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600286; NSGC 15991. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626835. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600289; NSGC 15992. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626836. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600291; NSGC 15993. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 626837. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600292; NSGC 15994. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626838. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600293; NSGC 15995. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.

- PI 626839. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600294; NSGC 15996. Collected in Esfahan, Iran. Latitude 31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626840. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600295; NSGC 15997. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626841. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600297; NSGC 15998. Collected in Esfahan, Iran. Latitude 31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626842. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600299; NSGC 15999. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 626843. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600301; NSGC 16000. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626844. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600305; NSGC 16001. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626845. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600306; NSGC 16002. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626846. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600308; NSGC 16003. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626847. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600310; NSGC 16004. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626848. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600311; NSGC 16005. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626849. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600312; NSGC 16006. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626850. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600313; NSGC 16007. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 626851. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600314; NSGC 16008. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626852. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600315; NSGC 16009. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.

- PI 626853. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600316; NSGC 16010. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626854. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600318; NSGC 16011. Collected in Esfahan, Iran. Latitude
31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626855. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600319; NSGC 16012. Collected in Markazi, Iran. Latitude
35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 626856. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600320; NSGC 16013. Collected in Markazi, Iran. Latitude
35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 626857. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600321; NSGC 16014. Collected in Khorasan, Iran. Latitude
33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 626858. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600322; NSGC 16015. Collected in Esfahan, Iran. Latitude
32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626859. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600324; NSGC 16016. Collected in Esfahan, Iran. Latitude
31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 626860. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600325; NSGC 16017. Collected in Yazd, Iran. Latitude
31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626861. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600326; NSGC 16018. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 626862. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600327; NSGC 16019. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626863. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600328; NSGC 16020. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626864. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600329; NSGC 16021. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626865. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600330; NSGC 16022. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 626866. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600332; NSGC 16023. Collected in Esfahan, Iran. Latitude
32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.

- PI 626867. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600334; NSGC 16024. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626868. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600336; NSGC 16025. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626869. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600337; NSGC 16026. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 626870. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600340; NSGC 16027. Collected in Mazandaran, Iran. Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.
- PI 626871. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600341; NSGC 16028. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.
- PI 626872. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600342; NSGC 16029. Collected in Fars, Iran. Latitude 29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 626873. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600343; NSGC 16030. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 626874. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600352; NSGC 16031. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626875. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600354; NSGC 16032. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 626876. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600356; NSGC 16033. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shah-Roud.
- PI 626877. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600358; NSGC 16034. Collected in Semnan, Iran. Latitude 36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shah-Roud.
- PI 626878. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600359; NSGC 16035. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 626879. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600360; NSGC 16036. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 626880. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600361; NSGC 16037. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.

- PI 626881. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600366; NSGC 16038. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626882. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600367; NSGC 16039. Collected in Fars, Iran. Latitude
29° 12' N. Longitude 54° 19' 30" E. Elevation 1603 m. Niriz.
- PI 626883. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600368; NSGC 16040. Collected in Fars, Iran. Latitude
29° 12' N. Longitude 54° 19' 30" E. Elevation 1603 m. Niriz.
- PI 626884. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600369; NSGC 16041. Collected in Fars, Iran. Latitude
29° 12' N. Longitude 54° 19' 30" E. Elevation 1603 m. Niriz.
- PI 626885. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600371; NSGC 16042. Collected in Fars, Iran. Latitude
28° 55' N. Longitude 53° 59' E. Elevation 1560 m. Fasa.
- PI 626886. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600372; NSGC 16043. Collected in Fars, Iran. Latitude
29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 626887. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600375; NSGC 16044. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m.
Ardabil.
- PI 626888. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600377; NSGC 16045. Collected in Fars, Iran. Latitude
28° 45' N. Longitude 54° 33' E. Elevation 1181 m. Darab.
- PI 626889. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600380; NSGC 16046. Collected in West Azerbaijan, Iran.
Latitude 39° 17' N. Longitude 44° 33' E. Elevation 1192 m. Makoo
- PI 626890. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600381; NSGC 16047. Collected in West Azerbaijan, Iran.
Latitude 39° 17' N. Longitude 44° 33' E. Elevation 1192 m. Makoo
- PI 626891. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600382; NSGC 16048. Collected in Semnan, Iran. Latitude
36° 25' 12" N. Longitude 55° 1' 12" E. Elevation 1316 m. Shah-Roud.
- PI 626892. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600383; NSGC 16049. Collected in West Azerbaijan, Iran.
Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 626893. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600386; NSGC 16050. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 626894. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600388; NSGC 16051. Collected in West Azerbaijan, Iran.
Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 626895. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600389; NSGC 16052. Collected in East Azerbaijan, Iran.
Latitude 37° 25' N. Longitude 46° 13' E. Elevation 1503 m. Maragheh.
- PI 626896. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600390; NSGC 16053. Collected in Kerman, Iran. Latitude
30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626897. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600391; NSGC 16054. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 626898. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600393; NSGC 16055. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626899. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600394; NSGC 16056. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626900. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600395; NSGC 16057. Collected in Semnan, Iran. Latitude
36° 29' N. Longitude 55° 4' E. Elevation 1369 m. Bastam.
- PI 626901. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600399; NSGC 16058. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626902. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600401; NSGC 16059. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626903. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600402; NSGC 16060. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626904. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600405; NSGC 16061. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 626905. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600406; NSGC 16062. Collected in Kerman, Iran. Latitude
29° 7' N. Longitude 58° 20' E. Elevation 1132 m. Bam.
- PI 626906. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600407; NSGC 16063. Collected in Kerman, Iran. Latitude
30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626907. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600408; NSGC 16064. Collected in Kerman, Iran. Latitude
29° 7' N. Longitude 58° 20' E. Elevation 1132 m. Bam.

- PI 626908. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600409; NSGC 16065. Collected in Kerman, Iran. Latitude 29° 28' N. Longitude 55° 44' E. Elevation 1776 m. Sirjan.
- PI 626909. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600410; NSGC 16066. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626910. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600411; NSGC 16067. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 626911. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600413; NSGC 16068. Collected in West Azerbaijan, Iran. Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 626912. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600414; NSGC 16069. Collected in West Azerbaijan, Iran. Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 626913. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600415; NSGC 16070. Collected in West Azerbaijan, Iran. Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 626914. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600416; NSGC 16071. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626915. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600418; NSGC 16072. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626916. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600419; NSGC 16073. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 626917. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600421; NSGC 16074. Collected in Fars, Iran. Latitude 29° 38' N. Longitude 52° 34' E. Elevation 1862 m. Shiraz.
- PI 626918. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600423; NSGC 16075. Collected in West Azerbaijan, Iran. Latitude 38° 33' N. Longitude 44° 58' E. Elevation 1276 m. Khoy.
- PI 626919. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600424; NSGC 16076. Collected in West Azerbaijan, Iran. Latitude 38° 33' N. Longitude 44° 58' E. Elevation 1276 m. Khoy.
- PI 626920. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600425; NSGC 16077. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626921. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600426; NSGC 16078. Collected in East Azerbaijan, Iran. Latitude 39° 0' N. Longitude 48° 5' E. Elevation 1183 m. Moghan (Garmi).

- PI 626922. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600427; NSGC 16079. Collected in East Azerbaijan, Iran.
Latitude 39° 0' N. Longitude 48° 5' E. Elevation 1183 m. Moghan (Garmi).
- PI 626923. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600429; NSGC 16080. Collected in Gilan, Iran. Latitude
38° 24' N. Longitude 48° 52' E. Elevation -28 m. Astara.
- PI 626924. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600430; NSGC 16081. Collected in Gilan, Iran. Latitude
38° 24' N. Longitude 48° 52' E. Elevation -28 m. Astara.
- PI 626925. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600432; NSGC 16082. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626926. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600433; NSGC 16083. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626927. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600435; NSGC 16084. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626928. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600437; NSGC 16085. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626929. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600438; NSGC 16086. Collected in West Azerbaijan, Iran.
Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 626930. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600440; NSGC 16087. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 626931. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600441; NSGC 16088. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 626932. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600442; NSGC 16089. Collected in Hormozgan, Iran. Latitude
27° 12' N. Longitude 56° 15' E. Elevation 31 m. Bandar-Abbas.
- PI 626933. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600444; NSGC 16090. Collected in Hormozgan, Iran. Latitude
27° 12' N. Longitude 56° 15' E. Elevation 31 m. Bandar-Abbas.
- PI 626934. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600446; NSGC 16091. Collected in Kordestan, Iran. Latitude
36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 626935. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600447; NSGC 16092. Collected in Khorasan, Iran. Latitude
37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.

- PI 626936. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600451; NSGC 16093. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626937. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600454; NSGC 16094. Collected in West Azerbaijan, Iran.
Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 626938. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600455; NSGC 16095. Collected in West Azerbaijan, Iran.
Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 626939. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600456; NSGC 16096. Collected in West Azerbaijan, Iran.
Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 626940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600457; NSGC 16097. Collected in Semnan, Iran. Latitude
36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 626941. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600458; NSGC 16098. Collected in Semnan, Iran. Latitude
36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 626942. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600459; NSGC 16099. Collected in Semnan, Iran. Latitude
36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 626943. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600461; NSGC 16100. Collected in Kerman, Iran. Latitude
31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 626944. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600463; NSGC 16101. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626945. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600464; NSGC 16102. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 626946. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600467; NSGC 16103. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 626947. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600468; NSGC 16104. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 626948. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600469; NSGC 16105. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 626949. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600470; NSGC 16106. Collected in Mazandaran, Iran.
Latitude 36° 39' N. Longitude 51° 31' E. Elevation 10 m. Noshahr.

- PI 626950. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600471; NSGC 16107. Collected in Mazandaran, Iran.
Latitude 36° 39' N. Longitude 51° 31' E. Elevation 10 m. Noshahr.
- PI 626951. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600472; NSGC 16108. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626952. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600474; NSGC 16109. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626953. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600476; NSGC 16110. Collected in Mazandaran, Iran.
Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 626954. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600478; NSGC 16111. Collected in Esfahan, Iran. Latitude
32° 23' N. Longitude 51° 23' E. Elevation 1683 m. Lenjan.
- PI 626955. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600479; NSGC 16112. Collected in Esfahan, Iran. Latitude
32° 23' N. Longitude 51° 23' E. Elevation 1683 m. Lenjan.
- PI 626956. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600482; NSGC 16113. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626957. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600483; NSGC 16114. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626958. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600484; NSGC 16115. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626959. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600486; NSGC 16116. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626960. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600488; NSGC 16117. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626961. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600489; NSGC 16118. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 626962. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600492; NSGC 16119. Collected in Esfahan, Iran. Latitude
32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 626963. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600493; NSGC 16120. Collected in Esfahan, Iran. Latitude
32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.

- PI 626964. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600496; NSGC 16121. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626965. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600497; NSGC 16122. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626966. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600498; NSGC 16123. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626967. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600502; NSGC 16124. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626968. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600503; NSGC 16125. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 626969. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600504; NSGC 16126. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 626970. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600505; NSGC 16127. Collected in Esfahan, Iran. Latitude 32° 23' N. Longitude 51° 23' E. Elevation 1683 m. Lenjan.
- PI 626971. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600506; NSGC 16128. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626972. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600507; NSGC 16129. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626973. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600508; NSGC 16130. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626974. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600509; NSGC 16131. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626975. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600510; NSGC 16132. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 626976. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600511; NSGC 16133. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626977. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600514; NSGC 16134. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 626978. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600515; NSGC 16135. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 626979. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600518; NSGC 16136. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626980. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600519; NSGC 16137. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600521; NSGC 16138. Collected in Esfahan, Iran. Latitude 32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 626982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600522; NSGC 16139. Collected in Esfahan, Iran. Latitude 32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 626983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600524; NSGC 16140. Collected in Esfahan, Iran. Latitude 32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 626984. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600527; NSGC 16141. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 626985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600528; NSGC 16142. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 626986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600529; NSGC 16143. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 626987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600531; NSGC 16144. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626988. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600532; NSGC 16145. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626989. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600533; NSGC 16146. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626990. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600534; NSGC 16147. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 626991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600535; NSGC 16148. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.

- PI 626992. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600536; NSGC 16149. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 626993. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600538; NSGC 16150. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 626994. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600540; NSGC 16151. Collected in Mazandaran, Iran. Latitude 36° 42' N. Longitude 53° 36' E. Elevation 12 m. Benschahr.
- PI 626995. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600541; NSGC 16152. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 626996. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600542; NSGC 16153. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 626997. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600543; NSGC 16154. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 626998. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600544; NSGC 16155. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 626999. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600545; NSGC 16156. Collected in Kordestan, Iran. Latitude 36° 57' N. Longitude 45° 23' E. Elevation 1343 m. Naghadeh.
- PI 627000. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600548; NSGC 16157. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidarie.
- PI 627001. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600550; NSGC 16158. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627002. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600555; NSGC 16159. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 627003. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600556; NSGC 16160. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627004. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600558; NSGC 16161. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627005. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600559; NSGC 16162. Collected in Mazandaran, Iran. Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.

- PI 627006. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600561; NSGC 16163. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627007. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600564; NSGC 16164. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627008. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600566; NSGC 16165. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627009. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600571; NSGC 16166. Collected in Esfahan, Iran. Latitude 33° 12' N. Longitude 50° 18' E. Elevation 3122 m. Khonsar.
- PI 627010. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600572; NSGC 16167. Collected in Esfahan, Iran. Latitude 33° 12' N. Longitude 50° 18' E. Elevation 3122 m. Khonsar.
- PI 627011. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600573; NSGC 16168. Collected in Esfahan, Iran. Latitude 33° 12' N. Longitude 50° 18' E. Elevation 3122 m. Khonsar.
- PI 627012. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600575; NSGC 16169. Collected in Esfahan, Iran. Latitude 33° 12' N. Longitude 50° 18' E. Elevation 3122 m. Khonsar.
- PI 627013. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600576; NSGC 16170. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627014. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600577; NSGC 16171. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627015. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600579; NSGC 16172. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627016. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600580; NSGC 16173. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627017. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600581; NSGC 16174. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627018. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600582; NSGC 16175. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627019. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600583; NSGC 16176. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 627020. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600584; NSGC 16177. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627021. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600585; NSGC 16178. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627022. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600586; NSGC 16179. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627023. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600588; NSGC 16180. Collected in Khorasan, Iran. Latitude 37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.
- PI 627024. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600592; NSGC 16181. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627025. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600593; NSGC 16182. Collected in Esfahan, Iran. Latitude 32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 627026. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600600; NSGC 16183. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627027. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600601; NSGC 16184. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627028. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600602; NSGC 16185. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627029. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600604; NSGC 16186. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627030. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600605; NSGC 16187. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627031. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600607; NSGC 16188. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627032. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600608; NSGC 16189. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627033. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600609; NSGC 16190. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.

- PI 627034. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600610; NSGC 16191. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627035. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600611; NSGC 16192. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627036. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600612; NSGC 16193. Collected in Lorestan, Iran. Latitude 33° 55' N. Longitude 48° 48' E. Elevation 1644 m. Borujerd.
- PI 627037. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600613; NSGC 16194. Collected in Lorestan, Iran. Latitude 33° 55' N. Longitude 48° 48' E. Elevation 1644 m. Borujerd.
- PI 627038. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600614; NSGC 16195. Collected in Lorestan, Iran. Latitude 33° 55' N. Longitude 48° 48' E. Elevation 1644 m. Borujerd.
- PI 627039. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600616; NSGC 16196. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.
- PI 627040. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600618; NSGC 16197. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.
- PI 627041. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600619; NSGC 16198. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.
- PI 627042. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600620; NSGC 16199. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.
- PI 627043. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600621; NSGC 16200. Collected in West Azerbaijan, Iran. Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627044. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600622; NSGC 16201. Collected in West Azerbaijan, Iran. Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627045. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600625; NSGC 16202. Collected in West Azerbaijan, Iran. Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 627046. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600628; NSGC 16203. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627047. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600630; NSGC 16204. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.

- PI 627048. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600632; NSGC 16205. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627049. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600634; NSGC 16206. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627050. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600636; NSGC 16207. Collected in West Azerbaijan, Iran. Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627051. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600637; NSGC 16208. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.
- PI 627052. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600639; NSGC 16209. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 50° 17' E. Elevation 2028 m. Golpaigan.
- PI 627053. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600640; NSGC 16210. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627054. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600642; NSGC 16211. Collected in Gilan, Iran. Latitude 36° 48' N. Longitude 49° 24' E. Elevation 326 m. Roud-Bar.
- PI 627055. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600643; NSGC 16212. Collected in Gilan, Iran. Latitude 36° 48' N. Longitude 49° 24' E. Elevation 326 m. Roud-Bar.
- PI 627056. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600645; NSGC 16213. Collected in Gilan, Iran. Latitude 37° 13' N. Longitude 49° 19' E. Elevation 42 m. Fooman.
- PI 627057. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600647; NSGC 16214. Collected in Gilan, Iran. Latitude 37° 13' N. Longitude 49° 19' E. Elevation 42 m. Fooman.
- PI 627058. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600648; NSGC 16215. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627059. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600649; NSGC 16216. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627060. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600650; NSGC 16217. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627061. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600652; NSGC 16218. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 627062. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600654; NSGC 16219. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627063. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600656; NSGC 16220. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627064. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600658; NSGC 16221. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627065. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600659; NSGC 16222. Collected in Kerman, Iran. Latitude 30° 25' N. Longitude 56° 0' E. Elevation 1518 m. Rafsanjan.
- PI 627066. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600661; NSGC 16223. Collected in Kerman, Iran. Latitude 30° 25' N. Longitude 56° 0' E. Elevation 1518 m. Rafsanjan.
- PI 627067. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600663; NSGC 16224. Collected in Gilan, Iran. Latitude 37° 13' N. Longitude 49° 19' E. Elevation 42 m. Fooman.
- PI 627068. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600664; NSGC 16225. Collected in Gilan, Iran. Latitude 37° 13' N. Longitude 49° 19' E. Elevation 42 m. Fooman.
- PI 627069. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600665; NSGC 16226. Collected in Gilan, Iran. Latitude 37° 13' N. Longitude 49° 19' E. Elevation 42 m. Fooman.
- PI 627070. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8600666; NSGC 16227. Collected in Gilan, Iran. Latitude 36° 48' N. Longitude 49° 24' E. Elevation 326 m. Roud-Bar.
- PI 627071. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600667; NSGC 16228. Collected in Gilan, Iran. Latitude 36° 48' N. Longitude 49° 24' E. Elevation 326 m. Roud-Bar.
- PI 627072. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600669; NSGC 16229. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 627073. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600670; NSGC 16230. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627074. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600671; NSGC 16231. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627075. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600672; NSGC 16232. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.

- PI 627076. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600673; NSGC 16233. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627077. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600676; NSGC 16234. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627078. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600678; NSGC 16235. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627079. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600679; NSGC 16236. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627080. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600683; NSGC 16237. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627081. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600686; NSGC 16238. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627082. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600687; NSGC 16239. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627083. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600689; NSGC 16240. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627084. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600690; NSGC 16241. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627085. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600691; NSGC 16242. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627086. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600693; NSGC 16243. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627087. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600695; NSGC 16244. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627088. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600696; NSGC 16245. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627089. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600697; NSGC 16246. Collected in Semnan, Iran. Latitude 36° 29' N. Longitude 55° 4' E. Elevation 1369 m. Bastam.

- PI 627090. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600698; NSGC 16247. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 627091. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600699; NSGC 16248. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627092. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600700; NSGC 16249. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627093. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600702; NSGC 16250. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627094. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600703; NSGC 16251. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627095. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600704; NSGC 16252. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627096. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600706; NSGC 16253. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627097. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600707; NSGC 16254. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627098. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600708; NSGC 16255. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627099. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600710; NSGC 16256. Collected in Lorestan, Iran. Latitude 33° 29' N. Longitude 48° 21' E. Elevation 1648 m. Khorram-Abad.
- PI 627100. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600711; NSGC 16257. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627101. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600712; NSGC 16258. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627102. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600715; NSGC 16259. Collected in Gilan, Iran. Latitude 36° 48' N. Longitude 49° 24' E. Elevation 326 m. Roud-Bar.
- PI 627103. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600716; NSGC 16260. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.

- PI 627104. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600717; NSGC 16261. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627105. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600720; NSGC 16262. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627106. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600721; NSGC 16263. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627107. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600724; NSGC 16264. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627108. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600726; NSGC 16265. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627109. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600729; NSGC 16266. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627110. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600730; NSGC 16267. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627111. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600731; NSGC 16268. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627112. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600732; NSGC 16269. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 627113. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600736; NSGC 16270. Collected in Mazandaran, Iran. Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.
- PI 627114. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600737; NSGC 16271. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627115. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600738; NSGC 16272. Collected in Mazandaran, Iran. Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.
- PI 627116. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600739; NSGC 16273. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627117. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600740; NSGC 16274. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.

- PI 627118. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600741; NSGC 16275. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627119. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600745; NSGC 16276. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627120. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600746; NSGC 16277. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627121. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600747; NSGC 16278. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627122. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600748; NSGC 16279. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627123. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600749; NSGC 16280. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627124. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600751; NSGC 16281. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 627125. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600753; NSGC 16282. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 627126. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600754; NSGC 16283. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627127. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600756; NSGC 16284. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627128. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600757; NSGC 16285. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627129. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600758; NSGC 16286. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627130. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600760; NSGC 16287. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627131. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600763; NSGC 16288. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 627132. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600764; NSGC 16289. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600765; NSGC 16290. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600767; NSGC 16291. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627135. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600769; NSGC 16292. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627136. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600771; NSGC 16293. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600773; NSGC 16294. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627138. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600776; NSGC 16295. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627139. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600784; NSGC 16296. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 627140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600786; NSGC 16297. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 627141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600789; NSGC 16298. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 627142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600791; NSGC 16299. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 627143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600794; NSGC 16300. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627144. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600795; NSGC 16301. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627145. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600797; NSGC 16302. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 627146. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600799; NSGC 16303. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 627147. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600801; NSGC 16304. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627148. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600803; NSGC 16305. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627149. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600807; NSGC 16306. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627150. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600808; NSGC 16307. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627151. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600809; NSGC 16308. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627152. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600810; NSGC 16309. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627153. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600811; NSGC 16310. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627154. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600812; NSGC 16311. Collected in Khorasan, Iran. Latitude 36° 32' N. Longitude 61° 7' E. Elevation 282 m. Sarakhs.
- PI 627155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600813; NSGC 16312. Collected in Khorasan, Iran. Latitude 36° 32' N. Longitude 61° 7' E. Elevation 282 m. Sarakhs.
- PI 627156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600825; NSGC 16313. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600827; NSGC 16314. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600829; NSGC 16315. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600830; NSGC 16316. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.

- PI 627160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600831; NSGC 16317. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600832; NSGC 16318. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600833; NSGC 16319. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600837; NSGC 16320. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627164. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600839; NSGC 16321. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600845; NSGC 16322. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627166. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600847; NSGC 16323. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627167. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600849; NSGC 16324. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627168. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600850; NSGC 16325. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627169. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600856; NSGC 16326. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627170. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600858; NSGC 16327. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627171. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600859; NSGC 16328. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627172. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600860; NSGC 16329. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627173. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600862; NSGC 16330. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.

- PI 627174. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600864; NSGC 16331. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627175. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600865; NSGC 16332. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627176. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600867; NSGC 16333. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600869; NSGC 16334. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627178. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600870; NSGC 16335. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627179. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600871; NSGC 16336. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627180. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600872; NSGC 16337. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627181. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600874; NSGC 16338. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627182. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600875; NSGC 16339. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627183. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600876; NSGC 16340. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627184. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600877; NSGC 16341. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627185. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600878; NSGC 16342. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627186. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600879; NSGC 16343. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627187. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600880; NSGC 16344. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.

- PI 627188. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600881; NSGC 16345. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627189. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600882; NSGC 16346. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627190. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600883; NSGC 16347. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627191. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600884; NSGC 16348. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627192. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600887; NSGC 16349. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627193. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600889; NSGC 16350. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627194. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600891; NSGC 16351. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627195. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600892; NSGC 16352. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627196. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600893; NSGC 16353. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627197. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600896; NSGC 16354. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627198. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600898; NSGC 16355. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627199. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600901; NSGC 16356. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627200. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600904; NSGC 16357. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 627201. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600907; NSGC 16358. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 627202. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600914; NSGC 16359. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627203. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600917; NSGC 16360. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627204. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600918; NSGC 16361. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627205. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600920; NSGC 16362. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan
- PI 627206. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600924; NSGC 16363. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627207. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600926; NSGC 16364. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627208. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600929; NSGC 16365. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627209. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600930; NSGC 16366. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627210. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600932; NSGC 16367. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627211. *Triticum turgidum* subsp. *turanicum* (Jakubz.) A. Love & D. Love**
Landrace. IWA8600933; NSGC 16368. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627212. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600934; NSGC 16369. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627213. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600935; NSGC 16370. Collected in Khorasan, Iran. Latitude 34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.
- PI 627214. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600936; NSGC 16371. Collected in Khorasan, Iran. Latitude 34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.
- PI 627215. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600937; NSGC 16372. Collected in Khorasan, Iran. Latitude 37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.

- PI 627216. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600938; NSGC 16373. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627217. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600939; NSGC 16374. Collected in Khorasan, Iran. Latitude 34° 20' N. Longitude 58° 42' E. Elevation 1155 m. Gonabad.
- PI 627218. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600940; NSGC 16375. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 51° 10' E. Elevation 2077 m. Meimeh.
- PI 627219. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600941; NSGC 16376. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 51° 10' E. Elevation 2077 m. Meimeh.
- PI 627220. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600942; NSGC 16377. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 51° 10' E. Elevation 2077 m. Meimeh.
- PI 627221. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600943; NSGC 16378. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627222. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600944; NSGC 16379. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627223. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600946; NSGC 16380. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627224. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600947; NSGC 16381. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627225. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600954; NSGC 16382. Collected in Khorasan, Iran. Latitude 34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.
- PI 627226. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600956; NSGC 16383. Collected in Khorasan, Iran. Latitude 34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.
- PI 627227. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600957; NSGC 16384. Collected in Khorasan, Iran. Latitude 34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.
- PI 627228. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600958; NSGC 16385. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627229. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600959; NSGC 16386. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 627230. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600960; NSGC 16387. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627231. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600961; NSGC 16388. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 51° 10' E. Elevation 2077 m. Meimeh.
- PI 627232. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600962; NSGC 16389. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 51° 10' E. Elevation 2077 m. Meimeh.
- PI 627233. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600963; NSGC 16390. Collected in Esfahan, Iran. Latitude 33° 27' N. Longitude 51° 10' E. Elevation 2077 m. Meimeh.
- PI 627234. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600964; NSGC 16391. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627235. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600966; NSGC 16392. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627236. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600968; NSGC 16393. Collected in Khorasan, Iran. Latitude 34° 20' N. Longitude 58° 42' E. Elevation 1155 m. Gonabad.
- PI 627237. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600969; NSGC 16394. Collected in Khorasan, Iran. Latitude 34° 20' N. Longitude 58° 42' E. Elevation 1155 m. Gonabad.
- PI 627238. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600970; NSGC 16395. Collected in Esfahan, Iran. Latitude 32° 23' N. Longitude 51° 23' E. Elevation 1683 m. Lenjan.
- PI 627239. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600971; NSGC 16396. Collected in Esfahan, Iran. Latitude 32° 23' N. Longitude 51° 23' E. Elevation 1683 m. Lenjan.
- PI 627240. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600972; NSGC 16397. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627241. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600976; NSGC 16398. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627242. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600977; NSGC 16399. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627243. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600978; NSGC 16400. Collected in Bakhtaran, Iran. Latitude 34° 30' 12" N. Longitude 47° 58' 6" E. Elevation 1458 m. Kangavar.

- PI 627244. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600979; NSGC 16401. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627245. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600980; NSGC 16402. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627246. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600982; NSGC 16403. Collected in Khorasan, Iran. Latitude 34° 20' N. Longitude 58° 42' E. Elevation 1155 m. Gonabad.
- PI 627247. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600983; NSGC 16404. Collected in Khorasan, Iran. Latitude 34° 20' N. Longitude 58° 42' E. Elevation 1155 m. Gonabad.
- PI 627248. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600984; NSGC 16405. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627249. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600985; NSGC 16406. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627250. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600987; NSGC 16407. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627251. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600994; NSGC 16408. Collected in Esfahan, Iran. Latitude 32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 627252. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600995; NSGC 16409. Collected in Esfahan, Iran. Latitude 32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 627253. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8600996; NSGC 16410. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627254. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8601000; NSGC 16411. Collected in Mazandaran, Iran. Latitude 37° 15' N. Longitude 55° 9' E. Elevation 52 m. Gonbad-Kavoo.
- PI 627255. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602001; NSGC 16412. Collected in Mazandaran, Iran. Latitude 36° 42' N. Longitude 53° 36' E. Elevation 12 m. Benshahr.
- PI 627256. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602002; NSGC 16413. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 627257. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602006; NSGC 16414. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 627258. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602008; NSGC 16415. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602009; NSGC 16416. Collected in Markazi, Iran. Latitude 34° 34' 48" N. Longitude 49° 48' E. Elevation 2013 m. Farahan.
- PI 627260. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602010; NSGC 16417. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627261. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602011; NSGC 16418. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627262. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602017; NSGC 16419. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627263. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602018; NSGC 16420. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627264. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602019; NSGC 16421. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627265. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602020; NSGC 16422. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627266. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602023; NSGC 16423. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627267. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602024; NSGC 16424. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602030; NSGC 16425. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 627269. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602035; NSGC 16426. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 627270. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602038; NSGC 16427. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627271. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602041; NSGC 16428. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.

- PI 627272. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602042; NSGC 16429. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 627273. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602043; NSGC 16430. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627274. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602046; NSGC 16431. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627275. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602047; NSGC 16432. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627276. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602052; NSGC 16433. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627277. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602053; NSGC 16434. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627278. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602056; NSGC 16435. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627279. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602057; NSGC 16436. Collected in Kordestan, Iran. Latitude 35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 627280. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602058; NSGC 16437. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627281. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602059; NSGC 16438. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 627282. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602060; NSGC 16439. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627283. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602061; NSGC 16440. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627284. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602062; NSGC 16441. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627285. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602063; NSGC 16442. Collected in Bakhtaran, Iran. Latitude 34° 40' N. Longitude 46° 30' E. Elevation 1731 m. Shaneh.

- PI 627286. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602064; NSGC 16443. Collected in Khorasan, Iran. Latitude 34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.
- PI 627287. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602066; NSGC 16444. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627288. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602068; NSGC 16445. Collected in Fars, Iran. Latitude 30° 16' N. Longitude 51° 59' E. Elevation 3286 m. Ardakan.
- PI 627289. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602069; NSGC 16446. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627290. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602070; NSGC 16447. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627291. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602080; NSGC 16448. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 627292. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602087; NSGC 16449. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627293. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602088; NSGC 16450. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627294. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602089; NSGC 16451. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627295. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602093; NSGC 16452. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627296. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602094; NSGC 16453. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627297. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602096; NSGC 16454. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627298. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602097; NSGC 16455. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627299. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602098; NSGC 16456. Collected in Yazd, Iran. Latitude 31° 33' N. Longitude 53° 46' 48" E. Elevation 2064 m. Dastgerd.

- PI 627300. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602101; NSGC 16457. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627301. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602104; NSGC 16458. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627302. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602105; NSGC 16459. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627303. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602106; NSGC 16460. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627304. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602107; NSGC 16461. Collected in Esfahan, Iran. Latitude
32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627305. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602109; NSGC 16462. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627306. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602110; NSGC 16463. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627307. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602113; NSGC 16464. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627308. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602114; NSGC 16465. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627309. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602116; NSGC 16466. Collected in Khorasan, Iran. Latitude
32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627310. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602121; NSGC 16467. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 627311. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602122; NSGC 16468. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 627312. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602123; NSGC 16469. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 627313. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602124; NSGC 16470. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.

- PI 627314. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602125; NSGC 16471. Collected in West Azerbaijan, Iran.
Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627315. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602126; NSGC 16472. Collected in Khorasan, Iran. Latitude
35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 627316. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602128; NSGC 16473. Collected in Khorasan, Iran. Latitude
34° 20' N. Longitude 58° 42' E. Elevation 1155 m. Gonabad.
- PI 627317. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602130; NSGC 16474. Collected in Khorasan, Iran. Latitude
32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627318. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602134; NSGC 16475. Collected in Khorasan, Iran. Latitude
32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627319. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602136; NSGC 16476. Collected in Khorasan, Iran. Latitude
37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627320. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602138; NSGC 16477. Collected in Khorasan, Iran. Latitude
37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627321. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602140; NSGC 16478. Collected in Esfahan, Iran. Latitude
31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 627322. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602145; NSGC 16479. Collected in Esfahan, Iran. Latitude
32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627323. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602147; NSGC 16480. Collected in Khorasan, Iran. Latitude
32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627324. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602148; NSGC 16481. Collected in Khorasan, Iran. Latitude
33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627325. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602149; NSGC 16482. Collected in Esfahan, Iran. Latitude
33° 21' N. Longitude 52° 23' E. Elevation 1385 m. Ardestan.
- PI 627326. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602150; NSGC 16483. Collected in Esfahan, Iran. Latitude
32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627327. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602152; NSGC 16484. Collected in Esfahan, Iran. Latitude
32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.

- PI 627328. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602154; NSGC 16485. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627329. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602155; NSGC 16486. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627330. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602157; NSGC 16487. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627331. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602158; NSGC 16488. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627332. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602159; NSGC 16489. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627333. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602161; NSGC 16490. Collected in Esfahan, Iran. Latitude
32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627334. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602164; NSGC 16491. Collected in Esfahan, Iran. Latitude
31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 627335. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602165; NSGC 16492. Collected in Esfahan, Iran. Latitude
31° 25' N. Longitude 51° 34' E. Elevation 2325 m. Semirom.
- PI 627336. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602166; NSGC 16493. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627337. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602168; NSGC 16494. Collected in Esfahan, Iran. Latitude
32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627338. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602171; NSGC 16495. Collected in Khorasan, Iran. Latitude
33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627339. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602173; NSGC 16496. Collected in Esfahan, Iran. Latitude
33° 21' N. Longitude 52° 23' E. Elevation 1385 m. Ardestan.
- PI 627340. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602174; NSGC 16497. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627341. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602178; NSGC 16498. Collected in Khorasan, Iran. Latitude
37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.

- PI 627342. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602179; NSGC 16499. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627343. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602180; NSGC 16500. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627344. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602182; NSGC 16501. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627345. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602183; NSGC 16502. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627346. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602185; NSGC 16503. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627347. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602189; NSGC 16504. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627348. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602190; NSGC 16505. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627349. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602191; NSGC 16506. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627350. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602193; NSGC 16507. Collected in Fars, Iran. Latitude 29° 12' N. Longitude 54° 19' 30" E. Elevation 1603 m. Niriz.
- PI 627351. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602198; NSGC 16508. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627352. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602199; NSGC 16509. Collected in West Azerbaijan, Iran. Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 627353. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602200; NSGC 16510. Collected in East Azerbaijan, Iran. Latitude 37° 25' N. Longitude 46° 13' E. Elevation 1503 m. Maragheh.
- PI 627354. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602202; NSGC 16511. Collected in West Azerbaijan, Iran. Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627355. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602206; NSGC 16513. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.

- PI 627356. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602207; NSGC 16514. Collected in Hormozgan, Iran. Latitude 27° 12' N. Longitude 56° 15' E. Elevation 31 m. Bandar-Abbas.
- PI 627357. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602210; NSGC 16515. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627358. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602212; NSGC 16516. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 627359. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602213; NSGC 16517. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627360. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602214; NSGC 16518. Collected in Kerman, Iran. Latitude 30° 25' N. Longitude 56° 0' E. Elevation 1518 m. Rafsanjan.
- PI 627361. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602215; NSGC 16519. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627362. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602216; NSGC 16520. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 627363. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602219; NSGC 16521. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627364. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602220; NSGC 16522. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627365. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602223; NSGC 16523. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 627366. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602224; NSGC 16524. Collected in Khorasan, Iran. Latitude 35° 46' N. Longitude 59° 49' E. Elevation 1381 m. Fariman.
- PI 627367. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602225; NSGC 16525. Collected in West Azerbaijan, Iran. Latitude 36° 44' N. Longitude 45° 44' E. Elevation 1673 m. Mahabad.
- PI 627368. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602226; NSGC 16526. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627369. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602229; NSGC 16527. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 627370. *Triticum* sp.**
Landrace. IWA8602233; NSGC 16528. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627371. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602234; NSGC 16529. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627372. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602236; NSGC 16530. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627373. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602239; NSGC 16531. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627374. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602242; NSGC 16532. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627375. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602243; NSGC 16533. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627376. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602245; NSGC 16534. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627377. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602246; NSGC 16535. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627378. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602248; NSGC 16536. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627379. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602254; NSGC 16537. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627380. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602257; NSGC 16538. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627381. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602261; NSGC 16539. Collected in Khorasan, Iran. Latitude 37° 25' N. Longitude 57° 55' E. Elevation 1075 m. Shirvan.
- PI 627382. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602264; NSGC 16540. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627383. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602266; NSGC 16541. Collected in Khorasan, Iran. Latitude 34° 0' N. Longitude 58° 4' E. Elevation 1272 m. Ferdous.

- PI 627384. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602272; NSGC 16543. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627385. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602273; NSGC 16544. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627386. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602275; NSGC 16545. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627387. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602276; NSGC 16546. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627388. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602277; NSGC 16547. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627389. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602278; NSGC 16548. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627390. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602284; NSGC 16549. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahidasht.
- PI 627391. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602286; NSGC 16550. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahidasht.
- PI 627392. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602287; NSGC 16551. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahidasht.
- PI 627393. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602293; NSGC 16552. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627394. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602294; NSGC 16553. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627395. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602295; NSGC 16554. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627396. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602298; NSGC 16555. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627397. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602302; NSGC 16556. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.

- PI 627398. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602303; NSGC 16557. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627399. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602304; NSGC 16558. Collected in Gilan, Iran. Latitude 36° 44' N. Longitude 49° 24' E. Elevation 300 m. Manjil.
- PI 627400. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602305; NSGC 16559. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627401. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602306; NSGC 16560. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad-Gharb.
- PI 627402. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602307; NSGC 16561. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627403. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602309; NSGC 16562. Collected in Hamadan, Iran. Latitude 35° 0' N. Longitude 48° 40' E.
- PI 627404. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602311; NSGC 16563. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627405. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602312; NSGC 16564. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627406. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602323; NSGC 16565. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahi-Dasht
- PI 627407. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602324; NSGC 16566. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahi-Dasht
- PI 627408. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602327; NSGC 16567. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627409. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602328; NSGC 16568. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627410. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602331; NSGC 16569. Collected in East Azerbaijan, Iran. Latitude 37° 25' N. Longitude 46° 13' E. Elevation 1503 m. Maragheh.
- PI 627411. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602332; NSGC 16570. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 627412. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602333; NSGC 16571. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627413. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602334; NSGC 16572. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627414. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602335; NSGC 16573. Collected in Bakhtaran, Iran. Latitude 34° 30' 12" N. Longitude 47° 58' 6" E. Elevation 1458 m. Kangavar.
- PI 627415. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602336; NSGC 16574. Collected in Lorestan, Iran. Latitude 34° 14' 24" N. Longitude 47° 29' 54" E. Elevation 1644 m. Sanjabi.
- PI 627416. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602337; NSGC 16575. Collected in Lorestan, Iran. Latitude 34° 14' 24" N. Longitude 47° 29' 54" E. Elevation 1644 m. Sanjabi.
- PI 627417. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602339; NSGC 16576. Collected in Lorestan, Iran. Latitude 34° 14' 24" N. Longitude 47° 29' 54" E. Elevation 1644 m. Sanjabi.
- PI 627418. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602340; NSGC 16577. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahi-Dasht.
- PI 627419. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602342; NSGC 16578. Collected in Kordestan, Iran. Latitude 35° 55' N. Longitude 47° 2' E. Elevation 1896 m. Divan-Dareh.
- PI 627420. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602345; NSGC 16579. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627421. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602351; NSGC 16581. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 627422. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602353; NSGC 16582. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627423. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602354; NSGC 16583. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627424. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602355; NSGC 16584. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.
- PI 627425. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602356; NSGC 16585. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.

- PI 627426. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602358; NSGC 16586. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.
- PI 627427. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602360; NSGC 16587. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627428. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602361; NSGC 16588. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627429. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602362; NSGC 16589. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627430. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602364; NSGC 16590. Collected in Semnan, Iran. Latitude 36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627431. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602366; NSGC 16591. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.
- PI 627432. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602370; NSGC 16592. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627433. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602371; NSGC 16593. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627434. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602372; NSGC 16594. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627435. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602382; NSGC 16595. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627436. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602385; NSGC 16596. Collected in Lorestan, Iran. Latitude 34° 14' 24" N. Longitude 47° 29' 54" E. Elevation 1644 m. Sanjabi.
- PI 627437. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602388; NSGC 16597. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627438. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602390; NSGC 16598. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627439. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602392; NSGC 16599. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 627440. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602396; NSGC 16600. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627441. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602399; NSGC 16601. Collected in Bakhtaran, Iran. Latitude 34° 16' 12" N. Longitude 46° 48' E. Elevation 1354 m. Mahi-Dasht.
- PI 627442. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602400; NSGC 16602. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 627443. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602402; NSGC 16603. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627444. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602403; NSGC 16604. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627445. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602404; NSGC 16605. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627446. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602405; NSGC 16606. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627447. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602406; NSGC 16607. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 627448. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602409; NSGC 16608. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627449. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602413; NSGC 16609. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627450. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602414; NSGC 16610. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627451. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602418; NSGC 16611. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627452. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602419; NSGC 16612. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627453. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602422; NSGC 16613. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.

- PI 627454. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602423; NSGC 16614. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627455. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602424; NSGC 16615. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627456. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602425; NSGC 16616. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627457. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602430; NSGC 16617. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627458. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602433; NSGC 16618. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627459. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602434; NSGC 16619. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627460. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602436; NSGC 16620. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627461. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602437; NSGC 16621. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627462. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602438; NSGC 16622. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627463. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602439; NSGC 16623. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627464. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602443; NSGC 16624. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627465. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602444; NSGC 16625. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627466. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602448; NSGC 16626. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627467. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602452; NSGC 16627. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 627468. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602453; NSGC 16628. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627469. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602454; NSGC 16629. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627470. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602461; NSGC 16630. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627471. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602463; NSGC 16631. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627472. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602470; NSGC 16632. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627473. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602474; NSGC 16633. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627474. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602479; NSGC 16634. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627475. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602480; NSGC 16635. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627476. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602482; NSGC 16636. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627477. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602491; NSGC 16637. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627478. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602497; NSGC 16638. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627479. *Triticum* sp.**
Landrace. IWA8602499; NSGC 16639. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627480. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602500; NSGC 16640. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627481. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602501; NSGC 16641. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 627482. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602505; NSGC 16642. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627483. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602506; NSGC 16643. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627484. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602511; NSGC 16644. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 627485. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602515; NSGC 16645. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 627486. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602517; NSGC 16646. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627487. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602521; NSGC 16647. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627488. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602525; NSGC 16648. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627489. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602527; NSGC 16649. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627490. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602531; NSGC 16650. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627491. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602532; NSGC 16651. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 49' E. Elevation 1188 m. Neishabour.
- PI 627492. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602535; NSGC 16652. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627493. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602536; NSGC 16653. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627494. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602537; NSGC 16654. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627495. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602538; NSGC 16655. Collected in Esfahan, Iran. Latitude 32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.

- PI 627496. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602548; NSGC 16656. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627497. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602551; NSGC 16657. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627498. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602552; NSGC 16658. Collected in Esfahan, Iran. Latitude 32° 38' N. Longitude 51° 23' E. Elevation 1629 m. Najaf-Abad.
- PI 627499. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602558; NSGC 16659. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627500. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602560; NSGC 16660. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627501. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602566; NSGC 16661. Collected in Yazd, Iran. Latitude 32° 19' N. Longitude 54° 1' E. Elevation 1034 m. Ardakan.
- PI 627502. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602567; NSGC 16662. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627503. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602569; NSGC 16663. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627504. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602573; NSGC 16664. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627505. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602576; NSGC 16665. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627506. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602577; NSGC 16666. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627507. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602578; NSGC 16667. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627508. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602579; NSGC 16668. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627509. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602581; NSGC 16669. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.

- PI 627510. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602582; NSGC 16670. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627511. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602583; NSGC 16671. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627512. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602585; NSGC 16672. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627513. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602587; NSGC 16673. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 627514. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602589; NSGC 16674. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627515. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602591; NSGC 16675. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627516. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602593; NSGC 16676. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627517. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602595; NSGC 16677. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627518. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602596; NSGC 16678. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627519. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602598; NSGC 16679. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627520. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602599; NSGC 16680. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627521. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602602; NSGC 16681. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627522. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602604; NSGC 16682. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627523. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602607; NSGC 16683. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.

- PI 627524. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602608; NSGC 16684. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627525. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602609; NSGC 16685. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627526. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602610; NSGC 16686. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627527. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602611; NSGC 16687. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627528. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602615; NSGC 16688. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627529. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602616; NSGC 16689. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 627530. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602620; NSGC 16690. Collected in Bakhtiari va Chahar, Iran Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627531. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602621; NSGC 16691. Collected in Khorasan, Iran. Latitude 32° 55' N. Longitude 59° 10' E. Elevation 1496 m. Birjand.
- PI 627532. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602622; NSGC 16692. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627533. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602628; NSGC 16693. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627534. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602644; NSGC 16694. Collected in Bakhtiari va Chahar, Iran Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627535. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602647; NSGC 16695. Collected in Bakhtiari va Chahar, Iran Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627536. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602651; NSGC 16696. Collected in Bakhtiari va Chahar, Iran Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627537. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602657; NSGC 16697. Collected in Bakhtiari va Chahar, Iran Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.

- PI 627538. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602659; NSGC 16698. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627539. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602660; NSGC 16699. Collected in Bakhtiari va Chahar, Iran
Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 627540. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602661; NSGC 16700. Collected in Khorasan, Iran. Latitude
33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627541. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602663; NSGC 16701. Collected in Khorasan, Iran. Latitude
33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627542. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602666; NSGC 16702. Collected in Esfahan, Iran. Latitude
33° 21' N. Longitude 52° 23' E. Elevation 1385 m. Ardestan.
- PI 627543. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602674; NSGC 16703. Collected in Fars, Iran. Latitude
29° 12' N. Longitude 54° 19' 30" E. Elevation 1603 m. Niriz.
- PI 627544. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602675; NSGC 16704. Collected in Semnan, Iran. Latitude
36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 627545. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602682; NSGC 16705. Collected in Fars, Iran. Latitude
29° 12' N. Longitude 54° 19' 30" E. Elevation 1603 m. Niriz.
- PI 627546. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602683; NSGC 16706. Collected in Fars, Iran. Latitude
29° 12' N. Longitude 54° 19' 30" E. Elevation 1603 m. Niriz.
- PI 627547. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602684; NSGC 16707. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 627548. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602687; NSGC 16708. Collected in West Azerbaijan, Iran.
Latitude 39° 17' N. Longitude 44° 33' E. Elevation 1192 m. Makoo.
- PI 627549. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602689; NSGC 16709. Collected in Gilan, Iran. Latitude
37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627550. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602696; NSGC 16710. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 627551. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602698; NSGC 16711. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.

- PI 627552. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602699; NSGC 16712. Collected in Gilan, Iran. Latitude 38° 24' N. Longitude 48° 52' E. Elevation -28 m. Astara.
- PI 627553. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602700; NSGC 16713. Collected in West Azerbaijan, Iran. Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627554. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602701; NSGC 16714. Collected in West Azerbaijan, Iran. Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627555. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602704; NSGC 16715. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 627556. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602705; NSGC 16716. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 627557. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602707; NSGC 16717. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 627558. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8602709; NSGC 16718. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 627559. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602712; NSGC 16719. Collected in Mazandaran, Iran. Latitude 36° 28' N. Longitude 52° 21' E. Elevation 35 m. Amol.
- PI 627560. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602713; NSGC 16720. Collected in Mazandaran, Iran. Latitude 36° 32' N. Longitude 52° 42' E. Elevation 7 m. Babol.
- PI 627561. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602716; NSGC 16721. Collected in West Azerbaijan, Iran. Latitude 37° 33' N. Longitude 45° 4' E. Elevation 1311 m. Rezaieh.
- PI 627562. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602720; NSGC 16722. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627563. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602722; NSGC 16723. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627564. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602723; NSGC 16724. Collected in Semnan, Iran. Latitude 36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627565. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602725; NSGC 16725. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.

- PI 627566. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602726; NSGC 16726. Collected in Mazandaran, Iran.
Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.
- PI 627567. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602730; NSGC 16727. Collected in Mazandaran, Iran.
Latitude 36° 27' 54" N. Longitude 52° 51' 30" E. Elevation 86 m. Shahi.
- PI 627568. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602732; NSGC 16728. Collected in Semnan, Iran. Latitude
36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627569. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602741; NSGC 16729. Collected in Semnan, Iran. Latitude
36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627570. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602742; NSGC 16730. Collected in Semnan, Iran. Latitude
36° 9' N. Longitude 54° 22' E. Elevation 1183 m. Damghan.
- PI 627571. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602746; NSGC 16731. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627572. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602763; NSGC 16732. Collected in Khorasan, Iran. Latitude
33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 627573. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602768; NSGC 16733. Collected in Bakhtaran, Iran. Latitude
34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627574. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602812; NSGC 16734. Collected in Kordestan, Iran. Latitude
35° 52' N. Longitude 47° 49' E. Elevation 1713 m. Bijar.
- PI 627575. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602825; NSGC 16735. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627576. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602842; NSGC 16736. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627577. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602847; NSGC 16737. Collected in Markazi, Iran. Latitude
35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627578. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602881; NSGC 16738. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627579. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602883; NSGC 16739. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.

- PI 627580. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602899; NSGC 16740. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627581. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602909; NSGC 16741. Collected in Bakhtaran, Iran. Latitude 34° 15' N. Longitude 46° 14' E. Elevation 1561 m. Kerend.
- PI 627582. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602911; NSGC 16742. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 627583. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602912; NSGC 16743. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 627584. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602917; NSGC 16744. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 627585. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602970; NSGC 16745. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627586. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602971; NSGC 16746. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627587. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602975; NSGC 16747. Collected in Kordestan, Iran. Latitude 35° 58' N. Longitude 45° 54' E. Elevation 1516 m. Baneh.
- PI 627588. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602976; NSGC 16748. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627589. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602978; NSGC 16749. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627590. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602979; NSGC 16750. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627591. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602982; NSGC 16751. Collected in Markazi, Iran. Latitude 34° 30' N. Longitude 50° 0' E. Kahriz.
- PI 627592. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602985; NSGC 16752. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627593. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602986; NSGC 16753. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 627594. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8602987; NSGC 16754. Collected in East Azerbaijan, Iran.
Latitude 37° 25' N. Longitude 46° 13' E. Elevation 1503 m. Maragheh.
- PI 627595. *Triticum* sp.**
Landrace. IWA8602993; NSGC 16755. Collected in Bakhtaran, Iran. Latitude
34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627596. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603001; NSGC 16756. Collected in Khorasan, Iran. Latitude
33° 44' N. Longitude 59° 11' E. Elevation 1530 m. Qayen.
- PI 627597. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603002; NSGC 16757. Collected in Esfahan, Iran. Latitude
32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627598. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603003; NSGC 16758. Collected in Esfahan, Iran. Latitude
32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627599. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603004; NSGC 16759. Collected in Esfahan, Iran. Latitude
32° 59' N. Longitude 50° 40' E. Elevation 2981 m. Feridan.
- PI 627600. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603006; NSGC 16760. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627601. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603007; NSGC 16761. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627602. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603008; NSGC 16762. Collected in Zanjan, Iran. Latitude
36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627603. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603009; NSGC 16763. Collected in Zanjan, Iran. Latitude
36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627604. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603010; NSGC 16764. Collected in Zanjan, Iran. Latitude
36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627605. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603012; NSGC 16765. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627606. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603013; NSGC 16766. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627607. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603014; NSGC 16767. Collected in Khorasan, Iran. Latitude
36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 627608. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603015; NSGC 16768. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627609. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603016; NSGC 16769. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627610. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603017; NSGC 16770. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627611. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603019; NSGC 16771. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 627612. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603020; NSGC 16772. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627613. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603021; NSGC 16773. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 627614. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603022; NSGC 16774. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627615. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603023; NSGC 16775. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627616. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603025; NSGC 16776. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627617. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603026; NSGC 16777. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627618. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603027; NSGC 16778. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627619. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603028; NSGC 16779. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627620. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603029; NSGC 16780. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627621. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603030; NSGC 16781. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.

- PI 627622. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603032; NSGC 16782. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627623. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603033; NSGC 16783. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627624. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603034; NSGC 16784. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627625. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603036; NSGC 16785. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627626. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603041; NSGC 16786. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627627. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603042; NSGC 16787. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627628. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603044; NSGC 16788. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627629. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603046; NSGC 16789. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627630. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603047; NSGC 16790. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627631. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603048; NSGC 16791. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627632. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603050; NSGC 16792. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627633. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603053; NSGC 16793. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 627634. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603054; NSGC 16794. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627635. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603055; NSGC 16795. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 627636. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603056; NSGC 16796. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627637. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603057; NSGC 16797. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627638. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603059; NSGC 16798. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627639. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603060; NSGC 16799. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 627640. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603063; NSGC 16800. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 627641. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603064; NSGC 16801. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627642. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603065; NSGC 16802. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627643. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603066; NSGC 16803. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 627644. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603067; NSGC 16804. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627645. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603068; NSGC 16805. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627646. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603069; NSGC 16806. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627647. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603070; NSGC 16807. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627648. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603071; NSGC 16808. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627649. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603072; NSGC 16809. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 627650. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603073; NSGC 16810. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627651. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603074; NSGC 16811. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627652. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603075; NSGC 16812. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627653. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603076; NSGC 16813. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627654. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603077; NSGC 16814. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627655. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603078; NSGC 16815. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627656. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603080; NSGC 16816. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627657. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603082; NSGC 16817. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627658. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603084; NSGC 16818. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627659. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603085; NSGC 16819. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627660. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603087; NSGC 16820. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627661. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603088; NSGC 16821. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627662. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603089; NSGC 16822. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627663. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603091; NSGC 16823. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 627664. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603094; NSGC 16824. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627665. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603095; NSGC 16825. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627666. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603096; NSGC 16826. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627667. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603098; NSGC 16827. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 627668. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603099; NSGC 16828. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627669. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603100; NSGC 16829. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627670. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603101; NSGC 16830. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627671. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603102; NSGC 16831. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627672. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603103; NSGC 16832. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627673. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603104; NSGC 16833. Collected in Semnan, Iran. Latitude 35° 30' N. Longitude 53° 25' E. Elevation 1040 m. Semnan.
- PI 627674. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603106; NSGC 16834. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627675. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603107; NSGC 16835. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627676. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603108; NSGC 16836. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627677. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603110; NSGC 16837. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.

- PI 627678. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603113; NSGC 16838. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627679. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603116; NSGC 16839. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627680. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603117; NSGC 16840. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627681. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603118; NSGC 16841. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627682. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603119; NSGC 16842. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627683. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603120; NSGC 16843. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627684. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603124; NSGC 16844. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627685. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603125; NSGC 16845. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627686. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603126; NSGC 16846. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627687. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603127; NSGC 16847. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627688. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603128; NSGC 16848. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627689. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603129; NSGC 16849. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627690. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603130; NSGC 16850. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627691. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603131; NSGC 16851. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 627692. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603132; NSGC 16852. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627693. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603136; NSGC 16853. Collected in Esfahan, Iran. Latitude 32° 50' N. Longitude 50° 0' E. Elevation 3113 m. Feridoon-Shahr.
- PI 627694. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603137; NSGC 16854. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627695. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603138; NSGC 16855. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627696. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603139; NSGC 16856. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627697. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603140; NSGC 16857. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627698. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603141; NSGC 16858. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627699. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603142; NSGC 16859. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627700. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603143; NSGC 16860. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627701. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603144; NSGC 16861. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627702. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603145; NSGC 16862. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627703. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603147; NSGC 16863. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627704. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603148; NSGC 16864. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 627705. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603149; NSGC 16865. Collected in Esfahan, Iran. Latitude 32° 50' N. Longitude 50° 0' E. Elevation 3113 m. Feridoon-Shahr.

- PI 627706. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603150; NSGC 16866. Collected in Esfahan, Iran. Latitude 32° 50' N. Longitude 50° 0' E. Elevation 3113 m. Feridoon-Shahr.
- PI 627707. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603151; NSGC 16867. Collected in Esfahan, Iran. Latitude 32° 50' N. Longitude 50° 0' E. Elevation 3113 m. Feridoon-Shahr.
- PI 627708. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603152; NSGC 16868. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627709. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603153; NSGC 16869. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627710. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603154; NSGC 16870. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627711. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603155; NSGC 16871. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627712. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603156; NSGC 16872. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627713. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603157; NSGC 16873. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 627714. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603158; NSGC 16874. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627715. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603162; NSGC 16875. Collected in Kerman, Iran. Latitude 30° 26' 24" N. Longitude 55° 51' E. Elevation 1507 m. Soofi-Abad
- PI 627716. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603171; NSGC 16876. Collected in Kerman, Iran. Latitude 28° 40' 12" N. Longitude 57° 44' 12" E. Elevation 697 m. Jiroft.
- PI 627717. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603172; NSGC 16877. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627718. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603173; NSGC 16878. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627719. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603174; NSGC 16879. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 627720. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603175; NSGC 16880. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627721. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603176; NSGC 16881. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627722. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603177; NSGC 16882. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627723. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603178; NSGC 16883. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627724. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603179; NSGC 16884. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627725. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603180; NSGC 16885. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627726. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603181; NSGC 16886. Collected in East Azerbaijan, Iran. Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627727. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603182; NSGC 16887. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627728. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603183; NSGC 16888. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627729. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603184; NSGC 16889. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627730. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603185; NSGC 16890. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627731. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603186; NSGC 16891. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627732. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603187; NSGC 16892. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627733. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603188; NSGC 16893. Collected in Gilan, Iran. Latitude 37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.

- PI 627734. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8603189; NSGC 16894. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627735. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603190; NSGC 16895. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627736. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603191; NSGC 16896. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627737. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603194; NSGC 16897. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627738. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603195; NSGC 16898. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627739. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603196; NSGC 16899. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627740. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603197; NSGC 16900. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627741. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603200; NSGC 16901. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627742. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603203; NSGC 16902. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627743. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603204; NSGC 16903. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627744. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603205; NSGC 16904. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardabil.
- PI 627745. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603211; NSGC 16905. Collected in Gilan, Iran. Latitude
37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.
- PI 627746. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603212; NSGC 16906. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627747. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8603213; NSGC 16907. Collected in Gilan, Iran. Latitude
37° 36' N. Longitude 48° 36' E. Elevation 2175 m. Khalkhal.

- PI 627748. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603215; NSGC 16908. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627749. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603217; NSGC 16909. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627750. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603218; NSGC 16910. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627751. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603219; NSGC 16911. Collected in East Azerbaijan, Iran.
Latitude 38° 24' N. Longitude 47° 40' E. Elevation 1440 m.
Meshgin-Shahr.
- PI 627752. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603220; NSGC 16912. Collected in East Azerbaijan, Iran.
Latitude 38° 24' N. Longitude 47° 40' E. Elevation 1440 m.
Meshgin-Shahr.
- PI 627753. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603221; NSGC 16913. Collected in East Azerbaijan, Iran.
Latitude 38° 24' N. Longitude 47° 40' E. Elevation 1440 m.
Meshgin-Shahr.
- PI 627754. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603222; NSGC 16914. Collected in East Azerbaijan, Iran.
Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 627755. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603223; NSGC 16915. Collected in East Azerbaijan, Iran.
Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 627756. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603224; NSGC 16916. Collected in East Azerbaijan, Iran.
Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 627757. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603225; NSGC 16917. Collected in East Azerbaijan, Iran.
Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 627758. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603226; NSGC 16918. Collected in East Azerbaijan, Iran.
Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 627759. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603227; NSGC 16919. Collected in East Azerbaijan, Iran.
Latitude 37° 43' N. Longitude 45° 59' E. Elevation 1717 m.
Azar-Shahr.
- PI 627760. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603229; NSGC 16920. Collected in East Azerbaijan, Iran.
Latitude 37° 43' N. Longitude 45° 59' E. Elevation 1717 m.
Azar-Shahr.

- PI 627761. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603230; NSGC 16921. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627762. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603231; NSGC 16922. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627763. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603232; NSGC 16923. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627764. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603234; NSGC 16924. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627765. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603235; NSGC 16925. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627766. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603236; NSGC 16926. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627767. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603237; NSGC 16927. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627768. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603238; NSGC 16928. Collected in East Azerbaijan, Iran.
Latitude 37° 43' N. Longitude 45° 59' E. Elevation 1717 m.
Azar-Shahr.
- PI 627769. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603240; NSGC 16929. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627770. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603241; NSGC 16930. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627771. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603242; NSGC 16931. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627772. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603243; NSGC 16932. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627773. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603244; NSGC 16933. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627774. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603245; NSGC 16934. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.

- PI 627775. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603246; NSGC 16935. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627776. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603247; NSGC 16936. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627777. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603248; NSGC 16937. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627778. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603249; NSGC 16938. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627779. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603250; NSGC 16939. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627780. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603251; NSGC 16940. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627781. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603252; NSGC 16941. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627782. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603253; NSGC 16942. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627783. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603254; NSGC 16943. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627784. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603255; NSGC 16944. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627785. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603256; NSGC 16945. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627786. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603257; NSGC 16946. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627787. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603258; NSGC 16947. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627788. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603259; NSGC 16948. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.

- PI 627789. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603260; NSGC 16949. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627790. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603261; NSGC 16950. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627791. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603262; NSGC 16951. Collected in East Azerbaijan, Iran.
Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 627792. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603264; NSGC 16952. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627793. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603266; NSGC 16953. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627794. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603267; NSGC 16954. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627795. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603268; NSGC 16955. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627796. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603269; NSGC 16956. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627797. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603270; NSGC 16957. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627798. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603271; NSGC 16958. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627799. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603272; NSGC 16959. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627800. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603273; NSGC 16960. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627801. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603274; NSGC 16961. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627802. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603275; NSGC 16962. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.

- PI 627803. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603276; NSGC 16963. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627804. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603277; NSGC 16964. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627805. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603278; NSGC 16965. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627806. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603279; NSGC 16966. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627807. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603280; NSGC 16967. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627808. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603281; NSGC 16968. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627809. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603282; NSGC 16969. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627810. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603284; NSGC 16970. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627811. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603286; NSGC 16971. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627812. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603288; NSGC 16972. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627813. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603289; NSGC 16973. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627814. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603290; NSGC 16974. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627815. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603291; NSGC 16975. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.
- PI 627816. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603293; NSGC 16976. Collected in East Azerbaijan, Iran.
Latitude 37° 23' N. Longitude 47° 45' E. Elevation 1060 m. Mianeh.

- PI 627817. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603296; NSGC 16977. Collected in West Azerbaijan, Iran.
Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 627818. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603298; NSGC 16978. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627819. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8603299; NSGC 16979. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627820. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603301; NSGC 16980. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627821. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603302; NSGC 16981. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627822. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603304; NSGC 16982. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627823. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603305; NSGC 16983. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627824. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603306; NSGC 16984. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627825. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603307; NSGC 16985. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627826. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603308; NSGC 16986. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627827. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603309; NSGC 16987. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627828. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603311; NSGC 16988. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627829. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603313; NSGC 16989. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627830. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603314; NSGC 16990. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 627831. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603317; NSGC 16991. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627832. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603323; NSGC 16992. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627833. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603325; NSGC 16993. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627834. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603326; NSGC 16994. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 627835. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603398; NSGC 16995. Collected in Baluchestan Sistan, Iran. Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627836. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603963; NSGC 16996. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627837. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603965; NSGC 16997. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 627838. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603966; NSGC 16998. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 627839. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603967; NSGC 16999. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 627840. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603983; NSGC 17000. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 627841. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603984; NSGC 17001. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 627842. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603985; NSGC 17002. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 627843. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603986; NSGC 17003. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 627844. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603988; NSGC 17004. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.

- PI 627845. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8603997; NSGC 17005. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627846. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604000; NSGC 17006. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627847. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604001; NSGC 17007. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627848. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604006; NSGC 17008. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627849. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604008; NSGC 17009. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627850. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604009; NSGC 17010. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627851. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604010; NSGC 17011. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627852. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604012; NSGC 17012. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627853. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604015; NSGC 17013. Collected in Baluchestan Sistan, Iran.
Latitude 31° 0' N. Longitude 61° 32' E. Elevation 473 m. Zabol.
- PI 627854. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604024; NSGC 17014. Collected in Markazi, Iran. Latitude
35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 627855. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604038; NSGC 17015. Collected in Markazi, Iran. Latitude
35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627856. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604040; NSGC 17016. Collected in Mazandaran, Iran.
Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 627857. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604048; NSGC 17017. Collected in Semnan, Iran. Latitude
35° 15' N. Longitude 52° 20' E. Elevation 1352 m. Garmsar.
- PI 627858. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604049; NSGC 17018. Collected in Semnan, Iran. Latitude
35° 15' N. Longitude 52° 20' E. Elevation 1352 m. Garmsar.

- PI 627859. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604052; NSGC 17019. Collected in Semnan, Iran. Latitude 35° 15' N. Longitude 52° 20' E. Elevation 1352 m. Garmsar.
- PI 627860. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604056; NSGC 17020. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627861. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604057; NSGC 17021. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627862. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604058; NSGC 17022. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627863. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604061; NSGC 17023. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627864. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604067; NSGC 17024. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627865. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604072; NSGC 17025. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627866. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604074; NSGC 17026. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627867. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604077; NSGC 17027. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627868. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604078; NSGC 17028. Collected in Mazandaran, Iran. Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m. Babolsar.
- PI 627869. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604080; NSGC 17029. Collected in Mazandaran, Iran. Latitude 36° 41' N. Longitude 52° 39' E. Elevation -15 m. Babolsar.
- PI 627870. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604081; NSGC 17030. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627871. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604082; NSGC 17031. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627872. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604083; NSGC 17032. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.

- PI 627873. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604084; NSGC 17033. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627874. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604085; NSGC 17034. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627875. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604086; NSGC 17035. Collected in Zanjan, Iran. Latitude 36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627876. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604088; NSGC 17036. Collected in Gilan, Iran. Latitude 37° 18' N. Longitude 49° 38' E. Elevation -2 m. Rasht.
- PI 627877. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604089; NSGC 17037. Collected in Gilan, Iran. Latitude 37° 18' N. Longitude 49° 38' E. Elevation -2 m. Rasht.
- PI 627878. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604090; NSGC 17038. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627879. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604091; NSGC 17039. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627880. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604094; NSGC 17040. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627881. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604095; NSGC 17041. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627882. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604097; NSGC 17042. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627883. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604098; NSGC 17043. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627884. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604103; NSGC 17044. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627885. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604104; NSGC 17045. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627886. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604105; NSGC 17046. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 627887. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604106; NSGC 17047. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627888. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604107; NSGC 17048. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627889. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604108; NSGC 17049. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627890. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604110; NSGC 17050. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627891. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604114; NSGC 17051. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 627892. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604115; NSGC 17052. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 627893. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604116; NSGC 17053. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 627894. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604120; NSGC 17054. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 627895. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604121; NSGC 17055. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627896. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604124; NSGC 17056. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627897. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604129; NSGC 17057. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627898. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604130; NSGC 17058. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627899. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604133; NSGC 17059. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627900. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604134; NSGC 17060. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 627901. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604135; NSGC 17061. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627902. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604136; NSGC 17062. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 627903. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604139; NSGC 17063. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627904. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604141; NSGC 17064. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627905. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604142; NSGC 17065. Collected in Mazandaran, Iran. Latitude 36° 28' N. Longitude 52° 21' E. Elevation 35 m. Amol.
- PI 627906. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604144; NSGC 17066. Collected in Mazandaran, Iran. Latitude 36° 28' N. Longitude 52° 21' E. Elevation 35 m. Amol.
- PI 627907. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604145; NSGC 17067. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627908. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604146; NSGC 17068. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627909. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604148; NSGC 17069. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627910. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604151; NSGC 17070. Collected in Semnan, Iran. Latitude 35° 15' N. Longitude 52° 20' E. Elevation 1352 m. Garmsar.
- PI 627911. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604152; NSGC 17071. Collected in Markazi, Iran. Latitude 33° 38' N. Longitude 50° 4' E. Elevation 1865 m. Khomein.
- PI 627912. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604153; NSGC 17072. Collected in Markazi, Iran. Latitude 33° 38' N. Longitude 50° 4' E. Elevation 1865 m. Khomein.
- PI 627913. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604156; NSGC 17073. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627914. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604157; NSGC 17074. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 627915. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604158; NSGC 17075. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627916. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604159; NSGC 17076. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627917. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604160; NSGC 17077. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627918. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604163; NSGC 17079. Collected in Markazi, Iran. Latitude 33° 38' N. Longitude 50° 4' E. Elevation 1865 m. Khomein.
- PI 627919. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604165; NSGC 17080. Collected in Mazandaran, Iran. Latitude 36° 39' N. Longitude 51° 31' E. Elevation 10 m. Nov-Shahr.
- PI 627920. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604166; NSGC 17081. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627921. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604167; NSGC 17082. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627922. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604168; NSGC 17083. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627923. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604169; NSGC 17084. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627924. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604170; NSGC 17085. Collected in Markazi, Iran. Latitude 33° 38' N. Longitude 50° 4' E. Elevation 1865 m. Khomein.
- PI 627925. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604171; NSGC 17086. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627926. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604175; NSGC 17087. Collected in Markazi, Iran. Latitude 35° 49' N. Longitude 50° 42' E. Elevation 1254 m. Kahrizak.
- PI 627927. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604176; NSGC 17088. Collected in Markazi, Iran. Latitude 35° 49' N. Longitude 50° 42' E. Elevation 1254 m. Kahrizak.
- PI 627928. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604181; NSGC 17089. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.

- PI 627929. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604183; NSGC 17090. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627930. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604187; NSGC 17091. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627931. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604188; NSGC 17092. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627932. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604196; NSGC 17093. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 627933. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604204; NSGC 17094. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627934. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604207; NSGC 17095. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627935. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604221; NSGC 17096. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627936. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604227; NSGC 17097. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627937. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604230; NSGC 17098. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627938. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604233; NSGC 17099. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627939. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604238; NSGC 17100. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 627940. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604247; NSGC 17101. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 627941. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604248; NSGC 17102. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 627942. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604249; NSGC 17103. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 627943. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604251; NSGC 17104. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627944. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604252; NSGC 17105. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627945. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604255; NSGC 17106. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627946. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604256; NSGC 17107. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 627947. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604259; NSGC 17108. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627948. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604263; NSGC 17109. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627949. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604264; NSGC 17110. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627950. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604265; NSGC 17111. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627951. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604266; NSGC 17112. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627952. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604267; NSGC 17113. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.
- PI 627953. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604268; NSGC 17114. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.
- PI 627954. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604270; NSGC 17115. Collected in Kordestan, Iran. Latitude 35° 36' N. Longitude 47° 1' E. Elevation 1970 m. Ghazvin.
- PI 627955. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604274; NSGC 17116. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 627956. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604275; NSGC 17117. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.

- PI 627957. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604276; NSGC 17118. Collected in Hamadan, Iran. Latitude 34° 19' N. Longitude 48° 51' E. Elevation 1721 m. Malayer.
- PI 627958. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604281; NSGC 17119. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 627959. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604282; NSGC 17120. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 627960. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604285; NSGC 17121. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 627961. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604288; NSGC 17122. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 627962. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604292; NSGC 17123. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 627963. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604293; NSGC 17124. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627964. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604295; NSGC 17125. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627965. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604297; NSGC 17126. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 627966. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604301; NSGC 17127. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627967. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604302; NSGC 17128. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627968. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604310; NSGC 17129. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 627969. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604319; NSGC 17130. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 627970. *Triticum* sp.**
Landrace. IWA8604320; NSGC 17131. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.

- PI 627971. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604321; NSGC 17132. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627972. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604322; NSGC 17133. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 627973. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604324; NSGC 17134. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 627974. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604325; NSGC 17135. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 627975. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604330; NSGC 17136. Collected in Hamadan, Iran. Latitude 34° 33' N. Longitude 48° 27' E. Elevation 1794 m. Toysercan.
- PI 627976. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604331; NSGC 17137. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627977. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604332; NSGC 17138. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627978. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604333; NSGC 17139. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627979. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604336; NSGC 17140. Collected in Gilan, Iran. Latitude 37° 18' N. Longitude 49° 38' E. Elevation -2 m. Rasht.
- PI 627980. *Triticum* sp.**
Landrace. IWA8604337; NSGC 17141. Collected in Bakhtiari va Chahar, Iran. Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627981. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604338; NSGC 17142. Collected in Gilan, Iran. Latitude 37° 18' N. Longitude 49° 38' E. Elevation -2 m. Rasht.
- PI 627982. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604341; NSGC 17143. Collected in Hamadan, Iran. Latitude 34° 13' N. Longitude 48° 21' E. Elevation 1596 m. Nahavand.
- PI 627983. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604345; NSGC 17144. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 627984. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604346; NSGC 17145. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.

- PI 627985. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604352; NSGC 17146. Collected in Bakhtiari va Chahar, Iran
Latitude 31° 59' N. Longitude 51° 16' E. Elevation 2267 m. Borujen.
- PI 627986. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604353; NSGC 17147. Collected in Markazi, Iran. Latitude
35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627987. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604358; NSGC 17148. Collected in Zanjan, Iran. Latitude
36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 627988. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604360; NSGC 17149. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 627989. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604364; NSGC 17150. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 627990. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604367; NSGC 17151. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 627991. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604369; NSGC 17152. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627992. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604370; NSGC 17153. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627993. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604374; NSGC 17154. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 627994. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604375; NSGC 17155. Collected in Markazi, Iran. Latitude
35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627995. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604376; NSGC 17156. Collected in Markazi, Iran. Latitude
35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 627996. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604379; NSGC 17157. Collected in Bakhtaran, Iran. Latitude
34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627997. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604381; NSGC 17158. Collected in Bakhtaran, Iran. Latitude
34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 627998. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604383; NSGC 17159. Collected in Markazi, Iran. Latitude
35° 48' N. Longitude 50° 58' E. Elevation 1315 m. Karaj.

- PI 627999. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8604388; NSGC 17160. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628000. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8604389; NSGC 17161. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628001. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604390; NSGC 17162. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628002. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604395; NSGC 17163. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628003. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8604396; NSGC 17164. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 628004. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604406; NSGC 17165. Collected in Markazi, Iran. Latitude 35° 0' N. Longitude 50° 22' E. Elevation 970 m. Saveh.
- PI 628005. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604417; NSGC 17166. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628006. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604418; NSGC 17167. Collected in Kordestan, Iran. Latitude 36° 14' N. Longitude 46° 16' E. Elevation 1643 m. Saghez.
- PI 628007. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604425; NSGC 17168. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 628008. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604426; NSGC 17169. Collected in Bakhtaran, Iran. Latitude 34° 8' N. Longitude 45° 55' E. Elevation 1044 m. Gilane-Gharb.
- PI 628009. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604431; NSGC 17170. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628010. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8604449; NSGC 17171. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628011. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604451; NSGC 17172. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628012. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604459; NSGC 17173. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.

- PI 628013. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604460; NSGC 17174. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Bakhtaran.
- PI 628014. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604463; NSGC 17175. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628015. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604465; NSGC 17176. Collected in Semnan, Iran. Latitude 35° 15' N. Longitude 52° 20' E. Elevation 1352 m. Garmsar.
- PI 628016. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604469; NSGC 17177. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 628017. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604476; NSGC 17178. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628018. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604477; NSGC 17179. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628019. *Triticum* sp.**
Landrace. IWA8604478; NSGC 17180. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628020. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604480; NSGC 17181. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628021. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604481; NSGC 17182. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628022. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604484; NSGC 17183. Collected in Mazandaran, Iran. Latitude 36° 34' N. Longitude 53° 3' E. Elevation 20 m. Sari.
- PI 628023. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604497; NSGC 17184. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628024. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604506; NSGC 17185. Collected in Markazi, Iran. Latitude 35° 35' N. Longitude 51° 25' E. Elevation 1054 m. Rey.
- PI 628025. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604508; NSGC 17186. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.
- PI 628026. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604509; NSGC 17187. Collected in Markazi, Iran. Latitude 35° 20' N. Longitude 51° 39' E. Elevation 882 m. Varamin.

- PI 628027. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604518; NSGC 17188. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628028. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604522; NSGC 17189. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628029. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604523; NSGC 17190. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628030. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604524; NSGC 17191. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 628031. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604526; NSGC 17192. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628032. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604531; NSGC 17193. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 628033. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604532; NSGC 17194. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 628034. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604537; NSGC 17195. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 628035. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604539; NSGC 17196. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628036. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604544; NSGC 17197. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628037. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604554; NSGC 17198. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628038. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604556; NSGC 17199. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628039. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604558; NSGC 17200. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 628040. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604559; NSGC 17201. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.

- PI 628041. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604560; NSGC 17202. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628042. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604561; NSGC 17203. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628043. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604562; NSGC 17204. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628044. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604563; NSGC 17205. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628045. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604568; NSGC 17206. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 628046. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604569; NSGC 17207. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628047. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604571; NSGC 17208. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628048. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604573; NSGC 17209. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628049. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604574; NSGC 17210. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628050. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604576; NSGC 17211. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628051. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604578; NSGC 17212. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628052. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604581; NSGC 17213. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628053. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604583; NSGC 17214. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628054. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604585; NSGC 17215. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 628055. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604586; NSGC 17216. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 628056. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604588; NSGC 17217. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 628057. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604592; NSGC 17218. Collected in Khorasan, Iran. Latitude 37° 22' N. Longitude 59° 8' E. Elevation 590 m. Dareh-Gaz.
- PI 628058. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604598; NSGC 17219. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 628059. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604601; NSGC 17220. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 628060. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604605; NSGC 17221. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628061. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604609; NSGC 17222. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628062. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604610; NSGC 17223. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628063. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604611; NSGC 17224. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628064. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604613; NSGC 17225. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628065. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604614; NSGC 17226. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628066. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604615; NSGC 17227. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628067. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604616; NSGC 17228. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628068. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604617; NSGC 17229. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.

- PI 628069. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604626; NSGC 17230. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 628070. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604628; NSGC 17231. Collected in Mazandaran, Iran.
Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 628071. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604631; NSGC 17232. Collected in Zanjan, Iran. Latitude
36° 16' N. Longitude 50° 0' E. Elevation 1337 m. Gazvin.
- PI 628072. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604632; NSGC 17233. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628073. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604633; NSGC 17234. Collected in Bakhtaran, Iran. Latitude
34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628074. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604637; NSGC 17236. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628075. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604641; NSGC 17237. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628076. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604646; NSGC 17238. Collected in Semnan, Iran. Latitude
36° 25' N. Longitude 54° 57' E. Elevation 1316 m. Shah-Roud.
- PI 628077. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604648; NSGC 17239. Collected in Markazi, Iran. Latitude
34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628078. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604650; NSGC 17240. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628079. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604652; NSGC 17241. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628080. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604653; NSGC 17242. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628081. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604654; NSGC 17243. Collected in Bakhtaran, Iran. Latitude
34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628082. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604655; NSGC 17244. Collected in Esfahan, Iran. Latitude
32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.

- PI 628083. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604656; NSGC 17245. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 628084. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604658; NSGC 17246. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 628085. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604663; NSGC 17247. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628086. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604664; NSGC 17248. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628087. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604665; NSGC 17249. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628088. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604666; NSGC 17250. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628089. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604667; NSGC 17251. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628090. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604668; NSGC 17252. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628091. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604671; NSGC 17253. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628092. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604672; NSGC 17254. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628093. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604673; NSGC 17255. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628094. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604675; NSGC 17256. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628095. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604677; NSGC 17257. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628096. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604678; NSGC 17258. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.

- PI 628097. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604680; NSGC 17259. Collected in Bakhtaran, Iran. Latitude 34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628098. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604682; NSGC 17260. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628099. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604685; NSGC 17261. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628100. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604686; NSGC 17262. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628101. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604687; NSGC 17263. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 58° 49' E. Elevation 1209 m. Neishabour.
- PI 628102. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604688; NSGC 17264. Collected in Kordestan, Iran. Latitude 35° 18' N. Longitude 47° 1' E. Elevation 1482 m. Sanandaj.
- PI 628103. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604689; NSGC 17265. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628104. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604690; NSGC 17266. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628105. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604692; NSGC 17267. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628106. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604694; NSGC 17268. Collected in Mazandaran, Iran. Latitude 36° 50' N. Longitude 54° 29' E. Elevation 317 m. Gorgan.
- PI 628107. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604695; NSGC 17269. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628108. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604696; NSGC 17270. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628109. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604697; NSGC 17271. Collected in Khorasan, Iran. Latitude 33° 36' N. Longitude 56° 54' E. Elevation 657 m. Tabas.
- PI 628110. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604702; NSGC 17272. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 628111. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604703; NSGC 17273. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 628112. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604704; NSGC 17274. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 628113. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604705; NSGC 17275. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 628114. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604706; NSGC 17276. Collected in Esfahan, Iran. Latitude 32° 1' N. Longitude 51° 52' E. Elevation 1877 m. Shahreza.
- PI 628115. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604708; NSGC 17277. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 628116. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604710; NSGC 17279. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628117. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604711; NSGC 17280. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 628118. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604712; NSGC 17281. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 628119. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604715; NSGC 17282. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628120. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604716; NSGC 17283. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628121. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604724; NSGC 17284. Collected in Bakhtiari va Chahar, Iran. Latitude 32° 19' N. Longitude 50° 50' E. Elevation 2067 m. Shahre-Kord.
- PI 628122. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604726; NSGC 17285. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628123. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604727; NSGC 17286. Collected in Esfahan, Iran. Latitude 32° 41' N. Longitude 51° 41' E. Elevation 1558 m. Esfahan.
- PI 628124. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604729; NSGC 17287. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 628125. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604730; NSGC 17288. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628126. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604731; NSGC 17289. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628127. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604733; NSGC 17290. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628128. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604734; NSGC 17291. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628129. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604735; NSGC 17292. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628130. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604736; NSGC 17293. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628131. *Triticum* sp.**
Landrace. IWA8604738; NSGC 17294. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628132. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604740; NSGC 17295. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628133. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604741; NSGC 17296. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628134. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604742; NSGC 17297. Collected in Kerman, Iran. Latitude 30° 18' N. Longitude 57° 5' E. Elevation 1762 m. Kerman.
- PI 628135. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604744; NSGC 17298. Collected in Esfahan, Iran. Latitude 33° 21' N. Longitude 52° 23' E. Elevation 1385 m. Ardestan.
- PI 628136. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604746; NSGC 17299. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 628137. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604752; NSGC 17300. Collected in Khorasan, Iran. Latitude 37° 28' N. Longitude 57° 20' E. Elevation 1074 m. Bojnourd.
- PI 628138. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604758; NSGC 17301. Collected in East Azerbaijan, Iran. Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardebil.

- PI 628139. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604759; NSGC 17302. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardebil.
- PI 628140. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604760; NSGC 17303. Collected in East Azerbaijan, Iran.
Latitude 38° 15' N. Longitude 48° 18' E. Elevation 1399 m. Ardebil.
- PI 628141. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604761; NSGC 17304. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 628142. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604762; NSGC 17305. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 628143. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604763; NSGC 17306. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 628144. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604765; NSGC 17307. Collected in Khorasan, Iran. Latitude
36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 628145. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604767; NSGC 17308. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628146. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604770; NSGC 17309. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628147. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604778; NSGC 17310. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628148. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604780; NSGC 17311. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628149. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604781; NSGC 17312. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628150. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604782; NSGC 17313. Collected in Zanjan, Iran. Latitude
36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628151. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604784; NSGC 17314. Collected in East Azerbaijan, Iran.
Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz
- PI 628152. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604786; NSGC 17315. Collected in West Azerbaijan, Iran.
Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.

- PI 628153. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604787; NSGC 17316. Collected in West Azerbaijan, Iran. Latitude 38° 34' N. Longitude 45° 4' E. Elevation 1083 m. Hasht-Rood.
- PI 628154. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604788; NSGC 17317. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628155. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604789; NSGC 17318. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628156. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604791; NSGC 17319. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628157. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604792; NSGC 17320. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 628158. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604794; NSGC 17321. Collected in Khorasan, Iran. Latitude 35° 13' N. Longitude 58° 25' E. Elevation 1026 m. Kashmar.
- PI 628159. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604796; NSGC 17322. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.
- PI 628160. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604797; NSGC 17323. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628161. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604799; NSGC 17324. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628162. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604801; NSGC 17325. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628163. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604802; NSGC 17326. Collected in East Azerbaijan, Iran. Latitude 38° 5' N. Longitude 46° 18' E. Elevation 1439 m. Tabriz.
- PI 628164. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604804; NSGC 17327. Collected in Esfahan, Iran. Latitude 32° 51' 54" N. Longitude 53° 5' 24" E. Elevation 1588 m. Naein.
- PI 628165. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604805; NSGC 17328. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 628166. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604806; NSGC 17329. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.

- PI 628167. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604807; NSGC 17330. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 628168. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604810; NSGC 17331. Collected in Yazd, Iran. Latitude 31° 53' N. Longitude 54° 22' E. Elevation 1211 m. Yazd.
- PI 628169. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604811; NSGC 17332. Collected in Lorestan, Iran. Latitude 33° 45' N. Longitude 46° 37' 48" E. Elevation 1625 m. Chardavol.
- PI 628170. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604812; NSGC 17333. Collected in Lorestan, Iran. Latitude 33° 45' N. Longitude 46° 37' 48" E. Elevation 1625 m. Chardavol.
- PI 628171. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604814; NSGC 17334. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628172. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604817; NSGC 17335. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628173. *Triticum turgidum* L. subsp. *turgidum***
Landrace. IWA8604818; NSGC 17336. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628174. *Triticum* sp.**
Landrace. IWA8604821; NSGC 17337. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628175. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604824; NSGC 17338. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628176. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604827; NSGC 17339. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628177. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604828; NSGC 17340. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628178. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604829; NSGC 17341. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628179. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604831; NSGC 17342. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628180. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604832; NSGC 17343. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.

- PI 628181. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604834; NSGC 17344. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628182. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604838; NSGC 17345. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628183. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604839; NSGC 17346. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628184. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604840; NSGC 17347. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628185. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604842; NSGC 17348. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628186. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604843; NSGC 17349. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628187. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604845; NSGC 17350. Collected in Bakhtaran, Iran. Latitude 34° 31' N. Longitude 45° 35' E. Elevation 348 m. Ghasre-Shirin.
- PI 628188. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604848; NSGC 17351. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628189. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604850; NSGC 17352. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628190. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604852; NSGC 17353. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628191. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604853; NSGC 17354. Collected in Ilam, Iran. Latitude 33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628192. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604859; NSGC 17355. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628193. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604860; NSGC 17356. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628194. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604861; NSGC 17357. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.

- PI 628195. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604862; NSGC 17358. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628196. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604863; NSGC 17359. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628197. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604865; NSGC 17360. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628198. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604866; NSGC 17361. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628199. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604867; NSGC 17362. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628200. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604868; NSGC 17363. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628201. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604871; NSGC 17364. Collected in Markazi, Iran. Latitude 34° 30' N. Longitude 50° 0' E.
- PI 628202. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604873; NSGC 17365. Collected in Markazi, Iran. Latitude 34° 30' N. Longitude 50° 0' E.
- PI 628203. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604874; NSGC 17366. Collected in Esfahan, Iran. Latitude 33° 59' N. Longitude 51° 35' E. Elevation 937 m. Kashan.
- PI 628204. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604875; NSGC 17367. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628205. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604877; NSGC 17368. Collected in Markazi, Iran. Latitude 34° 5' N. Longitude 49° 42' E. Elevation 1720 m. Arak.
- PI 628206. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604878; NSGC 17369. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628207. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604880; NSGC 17370. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628208. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604881; NSGC 17371. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.

- PI 628209. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604882; NSGC 17372. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628210. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604883; NSGC 17373. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628211. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604885; NSGC 17374. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628212. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604886; NSGC 17375. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628213. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604887; NSGC 17376. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628214. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604888; NSGC 17377. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628215. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604891; NSGC 17378. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628216. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604893; NSGC 17379. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628217. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604896; NSGC 17380. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628218. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604897; NSGC 17381. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628219. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604898; NSGC 17382. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628220. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604901; NSGC 17383. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628221. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604905; NSGC 17384. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628222. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604908; NSGC 17385. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.

- PI 628223. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604909; NSGC 17386. Collected in Zanjan, Iran. Latitude 36° 40' N. Longitude 48° 30' E. Elevation 1739 m. Zanjan.
- PI 628224. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604910; NSGC 17387. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 628225. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8604912; NSGC 17388. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628226. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604913; NSGC 17389. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 60° 36' E. Elevation 925 m. Torbat-Jam.
- PI 628227. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604915; NSGC 17390. Collected in Khorasan, Iran. Latitude 37° 6' N. Longitude 58° 30' E. Elevation 1308 m. Ghoochan.
- PI 628228. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604916; NSGC 17391. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628229. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604919; NSGC 17392. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628230. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604920; NSGC 17393. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628231. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604921; NSGC 17394. Collected in East Azerbaijan, Iran. Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 628232. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604922; NSGC 17395. Collected in East Azerbaijan, Iran. Latitude 38° 25' N. Longitude 47° 7' E. Elevation 1715 m. Ahar.
- PI 628233. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604924; NSGC 17396. Collected in Khorasan, Iran. Latitude 36° 16' N. Longitude 59° 34' E. Elevation 1017 m. Mashhad.
- PI 628234. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604927; NSGC 17397. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 628235. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604928; NSGC 17398. Collected in Khorasan, Iran. Latitude 35° 16' N. Longitude 59° 13' E. Elevation 1377 m. Torbat-Heidar.
- PI 628236. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8604940; NSGC 17399. Collected in Khorasan, Iran. Latitude 36° 13' N. Longitude 57° 38' E. Elevation 953 m. Sabzvar.

- PI 628237. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606004; NSGC 17400. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628238. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606006; NSGC 17401. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628239. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606007; NSGC 17402. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628240. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606009; NSGC 17403. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628241. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606017; NSGC 17404. Collected in Ilam, Iran. Latitude
33° 37' N. Longitude 46° 27' E. Elevation 2070 m. Ilam.
- PI 628242. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606018; NSGC 17405. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628243. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606020; NSGC 17406. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628244. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606021; NSGC 17407. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628245. *Triticum turgidum* subsp. *durum* (Desf.) Husn.
Landrace. IWA8606023; NSGC 17408. Collected in Bakhtaran, Iran. Latitude
34° 6' 42" N. Longitude 46° 31' 42" E. Elevation 1345 m. Shah-Abad.
- PI 628246. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606027; NSGC 17409. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628247. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606030; NSGC 17410. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628248. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606032; NSGC 17411. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628249. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606033; NSGC 17412. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628250. *Triticum aestivum* L. subsp. *aestivum*
Landrace. IWA8606034; NSGC 17413. Collected in Hamadan, Iran. Latitude
34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.

- PI 628251. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606035; NSGC 17414. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628252. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606038; NSGC 17415. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628253. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606039; NSGC 17416. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628254. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606040; NSGC 17417. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628255. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606041; NSGC 17418. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628256. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606042; NSGC 17419. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628257. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606043; NSGC 17420. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628258. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606044; NSGC 17421. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628259. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606046; NSGC 17422. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628260. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606047; NSGC 17423. Collected in Hamadan, Iran. Latitude 34° 46' N. Longitude 48° 35' E. Elevation 1861 m. Hamedan.
- PI 628261. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606052; NSGC 17424. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628262. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606053; NSGC 17425. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628263. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606054; NSGC 17426. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628264. *Triticum turgidum* subsp. *durum* (Desf.) Husn.**
Landrace. IWA8606055; NSGC 17427. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

- PI 628265. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8606056; NSGC 17428. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628266. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8606057; NSGC 17429. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628267. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8606058; NSGC 17430. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628268. *Triticum aestivum* L. subsp. *aestivum***
Landrace. IWA8606059; NSGC 17431. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628269. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8606063; NSGC 17432. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.
- PI 628270. *Triticum turgidum* subsp. *durum*** (Desf.) Husn.
Landrace. IWA8606064; NSGC 17433. Collected in Bakhtaran, Iran. Latitude 34° 19' N. Longitude 47° 4' E. Elevation 1580 m. Kermanshah.

The following were developed by Reid G. Palmer, USDA, ARS, Iowa State University, Department of Agronomy, Ames, Iowa 50011, United States. Received 06/15/1998.

- PI 628271. *Glycine max* (L.) Merr.**
Genetic. Pureline. T361; SY9821003. Pedigree - Somaclonal mutant in Jilin 3 (PI 427.099). Genetic type with gene y18(Ames 2) with nearly lethal, yellow leaves.

The following were developed by J. Mitchell McGrath, USDA, ARS, Department of Crop and Soil Science, Michigan State University, East Lansing, Michigan 48824-1325, United States. Received 12/10/2001.

- PI 628272. *Beta vulgaris* L. subsp. *vulgaris***
Breeding. SR96. GP-224. Pedigree - F6 population from an initial cross of SP85700 with a high sucrose commercial breeding line. Released 2001. Released for use in creating sugarbeet hybrids with smooth-root(SR), low soil tare characteristics. Low soil tare reduces industry costs by reducing the amount of harvested soil and the attendant soil disposal costs and reducing the spread of soil borne diseases.
- PI 628273. *Beta vulgaris* L. subsp. *vulgaris***
Breeding. SR97. GP-225. Pedigree - Selected over four generations of mass selection from a composite population whose parents included SP85700, L19, L53, US35. Released 2001. Released for use in creating sugarbeet hybrids with smooth-rot(SR), low soil tare characteristics. Low soil tare reduces industry costs by reducing the amount of harvested soil and the attendant soil disposal costs and reducing the spread of soil borne diseases. Diploid and multigerm.

The following were developed by Joseph W. Saunders, USDA, ARS, Michigan State University, Sugarbeet, Bean & Cereal Res., East Lansing, Michigan 48823-1325, United States; J.M. Halloin, USDA, ARS, Sugarbeet and Bean Research Unit, Dept. of Botany and Plant Pathology, East Lansing, Michigan 48824, United States; J. Mitchell McGrath, USDA, ARS, Department of Crop and Soil Science, Michigan State University, East Lansing, Michigan 48824-1325, United States. Received 12/10/2001.

PI 628274. *Beta vulgaris* L. subsp. *vulgaris*

Breeding. EL52. GP-222. Pedigree - A bulk of predominantly half-sib from the most resistant of 20 half-sib families evaluated for resistance to Rhizoctonia. Those 20 half-sib families originated on 20 plants of the half-sib family 85B1-R26, which itself was one of 25 half-sib families identified as O-type or near O-type individuals. Released 2001. A diploid monogerm sugarbeet with ancestry through selections at East Lansing of monogerm, O-type lines with resistance to blackroot seedling disease (*Aphanomyces cochlioides*) and *Cercospora* leafspot (*Cercospora beticola*). Has undergone additional selection for resistance to crown and root rot (*Rhizoctonia solani*) (anastomosis group AG2-2). Expected to be a source for development of monogerm parental lines for hybrid cultivars adapted to the humid growing regions of the eastern United States.

The following were developed by Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Kevin E. McPhee, Washington State University, Crop & Soil Science Department, Johnson 305, Pullman, Washington 99164-6420, United States. Received 10/10/2000.

PI 628275. *Pisum sativum* L.

Cultivar. "Franklin"; W6 22706. CV-19. Pedigree - RNK - 2100 / PS010838. Green cotyledon (ii) dry pea released based on multiple disease resistance and persistent dark green seed color. Shortened internodes and vine length of 51 cm. Leaves have two pairs of extremely dark green leaflets appearing at each node. Normal, non-clasping stipules are present with moderate marbling. Flowers white and borne two per peduncle beginning at the 16th node. Pods straight and blunt with six to seven seeds each. Mature seeds smooth, round and dark green with a clear testa. The distinctive character is unusually dark green cotyledons. One thousand seed weight averages 202 g. Resistant to race 1 of fusarium wilt, pea enation mosaic virus, pea seed borne mosaic virus, powdery mildew and has a high level of tolerance to fusarium root rot.

PI 628276. *Pisum sativum* L.

Cultivar. "Lifter"; W6 22707. CV-20. Pedigree - PS810102/Alaska 81/2/PS810106/3/PS010838. Green cotyledon dry pea released based on multiple disease resistance, persistent green seed color and significant yield improvement. Shortened internodes and normal leaf morphology with two pairs of medium green leaflets. Vines 80 cm long and internodes appear in a zigzag manner. One to two basal branches are common in most environments. Normal, non-clasping stipules are moderately marbled. Flowers white, usually borne double on the peduncles and begin at the 17th node. Pods are straight, blunt-ended and medium green with six to seven seeds. Seeds smooth and round with dark green cotyledons and a clear testa. One thousand seed weight averages 214 g. Resistant to race

1 of fusarium wilt, pea enation mosaic virus, pea seed borne mosaic virus, powdery mildew and has a high degree of tolerance to fusarium root rot.

The following were developed by Jeff Pedersen, USDA, ARS, University of Nebraska, Department of Agronomy, Lincoln, Nebraska 68583-0937, United States; John J. Toy, USDA, ARS, University of Nebraska-Lincoln, Dept. of Agronomy, Lincoln, Nebraska 68583-0937, United States. Received 12/10/2001.

PI 628277. *Sorghum bicolor* (L.) Moench subsp. *bicolor*

Breeding. RN582. GP-591. Pedigree - S6 selection from the cross (RTx430 ms3ms3 x E-35-1) x E-35-1. Exhibits tan necrotic plant color and white seed color. Demonstrated high heterotic potential for grain yield when crossed to AWheatland, with 10% higher yields than the check hybrid AWheatland x RTx430 over a three-year period. Adapted to the northern portion of the U.S. grain sorghum producing area and reached anthesis 5 days earlier than RTx430 in that environment. A strong restorer of fertility in A1 cytoplasm and does not have a pigmented testa. Nuclear male sterility has not been observed.

The following were developed by Raymond L. Ditterline, Montana State University, Department of Plant and Soil Science, P.O. Box 173120, Bozeman, Montana 59717-0312, United States; D.W. Wichman, Montana State University, Central Agric. Research Center, Moccasin, Montana 59462, United States; Mark E. Majerus, USDA-NRCS, Plant Materials Center, Rt. 2, Box 1189, Bridger, Montana 59014-9718, United States; Dennis Cash, Montana State University, Animal & Range Sciences Department, 235 Linfield Hall, Bozeman, Montana 59717-3120, United States. Received 12/31/2001.

PI 628278. *Bromus riparius* Rehmann

Cultivar. "MONTANA". CV-21. Pedigree - Synthetic variety with 96 parent plants selected from Paddock, Fleet and Regar. Cool-season, mildly rhizomatous perennial forage grass. Produces abundant basal leaf growth, and spreads by creeping, roots in space plantings or light-textured soils, is less aggressive than Fleet. Regrowth following clipping is rapid, similar to Fleet and Paddock. Leaf dimensions, degree of leaf pubescence, rate of phenological development, culm length and seed characteristics are similar to Paddock. Tolerates intensive fall clipping better than Regar or adapted cvs. of orchardgrass (*Dactylis glomerata*). Forage yields in multi-year trials across Montana of 105, 105 and 106% of Paddock, Regar and Fleet, respectively. Across dryland sites, had 9% higher forage yields than Regar. Excellent seed production potential. Across three locations, produced 35% and 167% higher seed yields than Paddock and Regar, respectively. Adapted to cool, moist (or irrigated) areas in the intermountain western U.S. Useful as a single species for permanent pastures, or in grass-legume mixtures for grazing or hay production.

The following were developed by HZPC Holland B.V., Netherlands. Received 01/17/2002.

PI 628279 PVPO. *Solanum tuberosum* L.

Cultivar. "CASANOVA". PVP 9900178.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States; Z. Kutlu. Donated by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/08/1989.

PI 628280. *Vicia ervilia* (L.) Willd.

Wild. 140689-0104; W6 179. Collected 06/14/1989 in Turkey. Latitude 38° 20' N. Longitude 39° 44' E. Elevation 920 m. North facing slope, limestone outcrops and rocky rubble. 11.1km N of Ergani on the Diyarbakir-Elazig road, Diyarbakir Province. Growing with scattered *Quercus*, *Pistacia*, *Pyrus* and *Crataegus*.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 09/15/1989.

PI 628281. *Vicia ervilia* (L.) Willd.

Cultivated. 110689-0201; W6 2099. Collected 06/11/1989 in Siirt, Turkey. Latitude 37° 45' N. Longitude 42° 10' E. Elevation 1200 m. Poor yield due to droughty conditions. Rocky limestone soil on gentle slope. Cultivated field associated with *Vicia ervilia*. 1.3km W of Eruh on the Siirt-Eruh road. Plants short 6-10cm. Few pods.

The following were collected by Nigel Maxted, Univ. of Southampton - Dept. of Biology, Med. & Biological Science Building, Bassett Crescent East, Southampton, England SO9 3TU, United Kingdom; Calvin R. Sperling, USDA, ARS, Natl. Germplasm Resources Laboratory, Room 402, Building 003, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 10/04/1991.

PI 628282. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. 8151; 918151; W6 8327. Collected 06/03/1991 in Uzbekistan. Latitude 39° 48' N. Longitude 67° 23' E. Elevation 880 m. Flat orchard 5km southwest of railway bridge near Pertolrobad. Associated with grasses, legumes, plums and almonds.

PI 628283. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. 8195-a; 918265; W6 8331. Collected 06/10/1991 in Tajikistan. Latitude 39° 28' N. Longitude 68° 19' E. Elevation 1420 m. Southern aspect, mulberry orchard on sloping terrace on northern side of river gorge 3km west of Madi on Anyi to Pendzikent Road.

PI 628284. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. 8198; 918198; W6 8332. Collected 06/10/1991 in Tajikistan. Latitude 39° 28' N. Longitude 68° 6' E. Elevation 1520 m.

Southern aspect, field margin in small river valley 3km north of Vechkan in gorge. Associated with mixed shrubs and cereal fields.

PI 628285. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. 8209; 918209; W6 8333. Collected 06/11/1991 in Tajikistan. Latitude 39° 28' N. Longitude 67° 44' E. Elevation 1270 m. Northern aspect, rocky slope of shrub-covered hillside adjacent to roadside 52km east of Penzikent near Erun. Associated with *Amygdalus* sp. and *Prunus prostrata*.

PI 628286. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. 8225; 918225; W6 8335. Collected 06/11/1991 in Tajikistan. Latitude 39° 28' N. Longitude 67° 37' E. Elevation 1180 m. Flat orchard (apple) 24km east of Pendzikent near Novobad. Associated with legumes and grasses.

PI 628287. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. 8243; 918243; W6 8337. Collected 06/17/1991 in Uzbekistan. Latitude 41° 35' N. Longitude 69° 53' E. Elevation 780 m. Flat field margin of irrigated fields 6km southwest of Charvok on Gazalkent road near Korankul. Associated with vineyard and potato.

PI 628288. *Vicia sativa* L. subsp. *sativa*

Wild. 8140; 918140; W6 8338. Collected 06/01/1991 in Uzbekistan. Latitude 39° 12' N. Longitude 66° 53' E. Elevation 1060 m. Southern aspect, roadside pasture 15km north of Shakhrisyabz near Kitab. Associated with grasses and legumes.

The following were donated by J.H. Marion, NWFP Agricultural University, Tipan Project/USAID, Peshawar, North-West Frontier, Pakistan. Received 12/20/1991.

PI 628289. *Vicia sativa* L.

Cultivated. VETCH #1; W6 9391. Collected 1986 in North-West Frontier, Pakistan. Weed found in wheat fields. Climbs wheat. Matures in March, about the time the wheat heads out. Aggressive climber.

PI 628290. *Vicia sativa* L.

Cultivated. VETCH #2; W6 9392. Collected 1986 in North-West Frontier, Pakistan. Weed found in wheat fields. Matures before the wheat joints, late February to early March.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/24/1992.

PI 628291. *Vicia ervilia* (L.) Willd.

Cultivated. B92-154; No. 129; W6 10837. Collected 07/02/1992 in Bulgaria. Latitude 42° 9' N. Longitude 27° 1' E. Zhelyazkovo-1.

PI 628292. *Vicia ervilia* (L.) Willd.

Cultivated. B92-155; No. 130; W6 10838. Collected 07/02/1992 in Bulgaria. Voden-1.

- PI 628293. *Vicia ervilia* (L.) Willd.**
Cultivated. B92-198; No. 254 157/78; W6 10880. Collected 07/02/1992 in Bulgaria.
- PI 628294. *Vicia ervilia* (L.) Willd.**
Cultivated. B92-200; No. 257 1566/78; W6 10882. Collected 07/02/1992 in Bulgaria.
- PI 628295. *Vicia ervilia* (L.) Willd.**
Cultivated. B92-202; No. 261 1571/78; W6 10884. Collected 07/02/1992 in Bulgaria.
- PI 628296. *Vicia ervilia* (L.) Willd.**
Cultivated. B92-203; No. 264 1573b/78; W6 10885. Collected 07/02/1992 in Bulgaria.
- PI 628297. *Vicia ervilia* (L.) Willd.**
Cultivated. B92-64; No. 15736/78; W6 10944. Collected 07/03/1992 in Bulgaria. Latitude 43° 42' N. Longitude 28° 2' E. Elevation 30 m. Winder hardy plots Institute of Wheat and Sunflower (IWS), Dobrudja, near General Toshevo. Cold tolerance good.
- PI 628298. *Vicia ervilia* (L.) Willd.**
Cultivar. B92-104; "STRANGA"; W6 10945. Collected 07/02/1992 in Bulgaria Institute of Wheat and Sunflower (IWS).
- PI 628299. *Vicia sativa* L.**
Cultivated. B92-105; W6 10949. Collected 07/02/1992 in Bulgaria. Institute of Wheat and Sunflower (IWS). Spring vetch. Local landrace.

The following were collected by J.O. Ware, USDA, Bureau of Plant Industry, Soils &, Agricultural Engineering, Beltsville, Maryland, United States; C.W. Manning, USDA, Bureau of Plant Industry, Soils &, Agricultural Engineering, Beltsville, Maryland, United States. Donated by Om, Bureau of Plant Industry - USDA, Soils and Agricultural Engineering, Beltsville, Maryland 20705, United States. Received 01/01/1983.

- PI 628300. *Vicia ervilia* (L.) Willd.**
Uncertain. PI 163589 contaminate; W6 11526. Collected in Guatemala. *Vicia* seeds found mixed in with PI 163589.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 08/01/1985.

- PI 628301. *Vicia michauxii* Spreng.**
Wild. 190785-44; W6 12096. Collected 07/19/1985 in Turkey. Latitude 40° 23' N. Longitude 36° 55' E. Elevation 900 m. Edge of wheat field, about 1km from Almus, Tokat Prrovince.

The following were collected by Kevin B. Jensen, USDA, ARS, Utah State University, Forage & Range Research Laboratory, Logan, Utah 84322-6300, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research

Laboratory, Utah State University, Logan, Utah 84322-6300, United States.
Received 11/02/1993.

PI 628302. *Vicia costata* Ledeb.

Wild. X93175; W6 13081. Collected 08/18/1993 in Xinjiang, China.
Latitude 44° 7' N. Longitude 87° 58' E. Elevation 1680 m. Uncut,
non-irrigated mountain pasture. Bottom of slope at Y in road 4km from
main road to Tien Shi Lake (Heavenly Lake) on left side of road going
east, Xinjiang.

The following were donated by International Board for Plant Genetic
Resources, AGPG, FAO, Via della terme de Caracalla, Rome, Latium 00100, Italy.
Received 12/18/1993.

PI 628303. *Vicia hirsuta* (L.) Gray

Uncertain. 8051b; W6 14679. Collected in Nepal.

PI 628304. *Vicia hirsuta* (L.) Gray

Uncertain. 2314b; W6 14680. Collected in Nepal.

The following were donated by Pierre Bourdon, Carneau Freres, Semences
Fourrageres, 26, rue Leon Rudent, B.P. 8, Orchies, France. Received
04/25/1994.

PI 628305. *Vicia sativa* L.

Cultivar. "CAROLE"; W6 15552.

PI 628306. *Vicia sativa* L.

Cultivar. "CAROLINE"; W6 15553.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State
University, Regional Plant Introduction Station, Pullman, Washington
99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State
University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington
99164-6434, United States. Received 1994.

PI 628307. *Vicia sativa* L.

Wild. WJK94-T61; W6 16271. Collected 06/03/1994 in Turkey. Latitude
37° 55' N. Longitude 40° 14' E. Elevation 680 m. Collected at
the Southeastern Anatolian Research Institute in Diyarbakir.

The following were collected by Fred J. Muehlbauer, USDA, ARS, Washington
State University, Grain Legume Genetics & Phys. Res. Unit, Pullman,
Washington 99164-6434, United States. Received 1994.

PI 628308. *Vicia pannonica* Crantz

Uncertain. FJM94-T2; W6 16273; L-750. Collected 06/23/1994 in Turkey.
Latitude 39° 56' N. Longitude 32° 52' E. Collected from the
Field Crops Research Institute, Ankara.

PI 628309. *Vicia villosa* Roth

Uncertain. FJM94-T3; W6 16274; L-1010. Collected 06/23/1994 in Turkey. Latitude 39° 56' N. Longitude 32° 52' E. Collected from the Field Crops Research Institute, Ankara.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Developed by Miho Mihov, Institute for Wheat and Sunflower, "Dobroudja" 9520, General Toschevo, Tolbukhin 9520, Bulgaria. Received 09/1995.

PI 628310. *Vicia ervilia* (L.) Willd.

Cultivated. B94-36; "Borina"; W6 16417. Collected 09/23/1994 in Bulgaria. Elevation 325 m.

The following were collected by Tara Luna, 979 Eastman Drive, Big Fork, Montana 59911, United States. Received 04/03/1995.

PI 628311. *Vicia articulata* Hornem.

Cultivated. E-95-014; W6 16867. Collected 02/02/1995 in Imbabura, Ecuador. Latitude 0° 15' N. Longitude 78° 15' W. Elevation 3000 m. Otavalo. Approx. 90 km N of Quito. Volcanic soil, fair drainage.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Received 05/22/1995.

PI 628312. *Vicia sativa* L.

Wild. W6 17046. Collected 05/16/1995 in Syria. Latitude 36° 2' N. Longitude 37° 10' E. Collected at ICARDA, Tel Hadya near Aleppo. Lat/lon accurate to Aleppo.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Fred J. Muehlbauer, USDA, ARS, Washington State University, Grain Legume Genetics & Phys. Res. Unit, Pullman, Washington 99164-6434, United States. Donated by Ali Abd Moneim, International Center for Agricultural Research in Dry Areas, P.O. Box 5466, Aleppo, Syria. Received 05/22/1995.

PI 628313. *Vicia sativa* subsp. *amphicarpa* (L.) Batt.

Cultivated. IFLV Amp. 2569; W6 17053. Collected 05/18/1995 in Syria. Latitude 36° 12' N. Longitude 37° 10' E. ICADA, Tel Hadya near Aleppo. Lat/lon accurate to Aleppo.

PI 628314. *Vicia sativa* subsp. *amphicarpa* (L.) Batt.

Cultivated. IFLV Amp. 2570; W6 17054. Collected 05/18/1995 in Syria. Latitude 36° 12' N. Longitude 37° 10' E. ICARDA, Tel Hadya near Aleppo. Lat/lon accurate to Aleppo.

PI 628315. *Vicia sativa* subsp. *amphicarpa* (L.) Batt.
Cultivated. IFLV Amp. 2571; W6 17055. Collected 05/18/1995 in Syria.
Latitude 36° 12' N. Longitude 37° 10' E. ICARDA, Tel Hadya near
Aleppo. Lat/lon accurate to Aleppo.

PI 628316. *Vicia sativa* subsp. *amphicarpa* (L.) Batt.
Cultivated. IFLV Amp. 2572; W6 17056. Collected 05/18/1995 in Syria.
Latitude 36° 12' N. Longitude 37° 10' E. ICARDA, Tel Hadya near
Aleppo. Lat/lon accurate to Aleppo.

PI 628317. *Vicia villosa* Roth
Cultivated. IFLVH 2542; W6 17061. Collected 05/18/1995 in Syria.
Latitude 36° 12' N. Longitude 37° 10' E. ICARDA, Tel Hadya near
Aleppo. Lat/lon accurate to Aleppo.

PI 628318. *Vicia sativa* L.
Cultivated. IFLVS 2558; W6 17086. Collected 05/18/1995 in Syria.
Latitude 36° 12' N. Longitude 37° 10' E. From plot 31 at ICARDA,
Tel Hadya near Aleppo. Lat/lon accurate to Aleppo. Non-shattering line.

The following were collected by Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 06/30/1995.

PI 628319. *Vicia sativa* L.
Wild. W6 17196. Collected 06/23/1995 in Bulgaria. Latitude 42° 37' N. Longitude 25° 23' E. Collected at the Institute for Rose, Aromatic and Medicinal Plants at Kazanluk on road from Sofia to Burgas. Mixture of at least two seed types. One saucer shaped and another small round seeded and olive color.

The following were donated by M. Okhovat, University of Tehran, Faculty of Agriculture, Karaj, Tehran, Iran. Received 04/25/1995.

PI 628320. *Vicia ervilia* (L.) Willd.
Cultivated. W6 18998. Seed was mixed in with W6 16887 *Lathyrus* sp. when donated. Donor identifier TN-40-1825.

The following were donated by Leopoldo Montes, E.E.A. - I.N.T.A., Santa Cruz, CC. 332 - (9400) Rio Gallegos, Santa Cruz, Santa Cruz, Argentina. Received 03/1995.

PI 628321. *Vicia villosa* subsp. *varia* (Host) Corb.
Uncertain. RGA 466; "Ica 76"; W6 19131. Collected 1993 in Cordoba, Argentina.

The following were collected by Richard M. Hannan, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States; Walter J. Kaiser, USDA, ARS, Washington State University, Regional Plant Introduction Station, Pullman, Washington 99164-6402, United States. Received 07/28/1996.

PI 628322. *Vicia ervilia* (L.) Willd.

Wild. B96-13; "Bornina"; W6 19255. Collected 07/1996 in Bulgaria. Latitude 43° 39' 22" N. Longitude 28° 1' 48" E. Elevation 274 m. At Institute for Wheat and Sunflower, Droboudja.

PI 628323. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. B96-369; 426; W6 19506. Collected 07/1996 in Bulgaria. Latitude 42° 8' N. Longitude 24° 56' E. Received from the Institute of Plant Genetic Resources in Sadovo.

PI 628324. *Vicia sativa* subsp. *nigra* (L.) Ehrh.

Wild. B96-370; 427; W6 19507. Collected 07/1996 in Bulgaria. Latitude 42° 8' N. Longitude 24° 56' E. Received from the Institute of Plant Genetic Resources in Sadovo.

PI 628325. *Vicia sativa* L.

Wild. B96-387; 344; W6 19524. Collected 07/1996 in Bulgaria. Latitude 42° 8' N. Longitude 24° 56' E. Received from the Institute of Plant Genetic Resources in Sadovo.

PI 628326. *Vicia villosa* Roth

Wild. B96-404; E109; W6 19540. Collected 07/1996 in Bulgaria. Latitude 44° 7' N. Longitude 27° 16' E. Silistra, northeast Bulgaria.

PI 628327. *Vicia villosa* Roth

Wild. B96-405; 41E; W6 19541. Collected 07/1996 in Bulgaria. Latitude 41° 24' N. Longitude 23° 13' E. Petritch, southwest Bulgaria.

The following were collected by D.P. Sheehy, Eastern Oregon Agricultural Research Center, Post Office Box E, Union, Oregon 97833, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States. Received 03/06/1997.

PI 628328. *Vicia cracca* L.

Wild. 96S-80; W6 19607. Collected 09/1996 in Mongolia. Latitude 46° 6' 44" N. Longitude 91° 33' 16" E. Elevation 1213 m. Khovd Aimag, Bulgan Sum, an experimental area about 1 km from the sum center. 0% slope. Outwash plain in desert steppe that has been fenced for 30 years as an experimental crop area. Flood irrigation is used. Soils are coarse, recent river alluvium with coarse sandy brown soils. DOMINANT VEG: Experimental area currently being harvested for hay. Associated species other than species collected were crab apple and sea buckthorn.

The following were collected by Dennis P. Sheehy, 69086 Allen Canyon Road, Wallowa, Oregon 97885, United States; Douglas A. Johnson, USDA, ARS, Forage and Range Research Laboratory, Utah State University, Logan, Utah 84322-6300, United States; Mark E. Majerus, USDA-NRCS, Plant Materials Center, Rt. 2, Box 1189, Bridger, Montana 59014-9718, United States; Susan R. Winslow, USDA-NRCS, Bridger PMC, Route 2, Box 1189, Bridger, Montana 59014-9718, United States. Received 05/05/1999.

PI 628329. *Vicia cracca* L.

Wild. 98HT-34; W6 21162. Collected 09/1998 in Mongolia. Latitude 48° 0' 24" N. Longitude 109° 3' 47" E. Elevation 1585 m. Sinkermandel Sum, Henti Aimag. Located in center of broad valley with wet, marshy

soils and standing water. Soils are dark with some rock. Associated vegetation: Carex and grasses dominate wetter areas with standing water. Salix, Hedysarum, and Astragalus occur on raised soil mounds.

PI 628330. *Vicia amoena* Fisch.

Wild. 98HT-230; W6 21309. Collected 09/1998 in Mongolia. Latitude 48° 49' 9" N. Longitude 110° 39' 38" E. Elevation 1219 m. Binder Sum, Henti Aimag. Moisture appears to drain from forested uplands into the valley, forming wet areas subject to frost heaving. Areas with deeper soils with better drainage are very high yielding and are typically used as hay fields by local herders. Associated vegetation: Vegetation dominated by forbs (*Vicia*, *Hedysarum*, *Allium*, *Iris*).

PI 628331. *Vicia amoena* Fisch.

Wild. 98HV-1; W6 21385. Collected 09/1998 in Mongolia. Latitude 49° 45' 1" N. Longitude 106° 17' 27" E. Elevation 732 m. Bayankharaat Sum, Selenge Aimag, 51 km NE of Darkhan. native; between strips of abandoned wheat crop land; sandy, chestnut, brown soil. Associated vegetation: *Leymus chinensis*, *Cleistogenes squarrosa*, *Astragalus melilotoides*, *Vicia amoena*, *Stipa sibirica*.

PI 628332. *Vicia amoena* Fisch.

Wild. 98HV-72; W6 21453. Collected 09/1998 in Mongolia. Latitude 49° 57' 44" N. Longitude 107° 18' 49" E. Elevation 823 m. Huder Sum, Selenge Aimag, 50 km SW of Huder overlooking Tsokh River. Open forb-grass meadow in scotch pine-birch forest, mountain brown soil. Associated vegetation: *Calamagrostis* sp., *Elytrigia gmelinii*, *Potentilla viscosa*, *Artemisia vulgaris*, *Hieracium umbellatum*, *Artemisia gmelinii*.

The following were developed by Asgrow Seed Company LLC, United States. Received 12/12/2001.

PI 628333. *Zea mays* L. subsp. *mays*

Cultivar. "ZM3323"; 3323. PVP 200100238.

PI 628334 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "5750". PVP 200100239.

The following were developed by C.A. Rose-Fricker, Pure Seed Testing, Inc., 3057 G Street, Hubbard, Oregon 97032, United States; Melodee L. Fraser, Pure Seed Testing, Inc., P.O. Box 176, 606 Main Street, Rolesville, North Carolina 27571, United States. Received 12/12/2001.

PI 628335. *Festuca arundinacea* Schreb.

Cultivar. "ENDURE"; PST-R5AU. PVP 200100288; CV-91. Pedigree - The 30 original parents were selected from spaced-plant nurseries near Rolesville, NC, during the spring of 1995. These nurseries were comprised of plants that had exhibited good turf quality and brown patch (*Rhizoctonia solani*) resistance. These plants were moved, prior to anthesis, into an isolated crossing block, designated PST-R5AU, and allowed to interpollinate. Medium-dark green, upright tall fescue. Has shown good turf quality in U.S. trials. Maintains good summer density, has shown resistance to brown patch (*Rhizoctonia solani*) and has exhibited moderate stem rust (*Puccinia graminis*) resistance. Recommended

for lawns, golf course roughs, and sports turfs in areas where tall fescue is adapted. Should perform well as a monostand, in blends with other turf type tall fescues, or in mixtures with up to 5% Kentucky bluegrass (*Poa pratensis*).

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 12/12/2001.

PI 628336 PVPO. *Phaseolus vulgaris* L.
Cultivar. "TITAN". PVP 200100289.

The following were developed by Pickseed West, Inc., P.O. Box 888, 33149 Highway 99E, Tangent, Oregon 97389, United States. Received 12/12/2001.

PI 628337 PVPO. *Agrostis canina* L.
Cultivar. "VESPER". PVP 200100290.

The following were developed by North Carolina State University, Department of Crop Science, Box 7620, Raleigh, North Carolina 27695, United States. Received 12/12/2001.

PI 628338 PVPO. *Nicotiana tabacum* L.
Cultivar. "NC 2000". PVP 200100291.

The following were developed by P.H. Petersen, Saatzucht, Germany. Received 12/12/2001.

PI 628339 PVPO. *Sinapis alba* L.
Cultivar. "ABSOLUT". PVP 200100292.

The following were developed by Syngenta Seeds, Inc., United States. Received 12/12/2001.

PI 628340 PVPO. *Phaseolus vulgaris* L.
Cultivar. "LEON". PVP 200200001.

The following were developed by C.A. Rose-Fricker, Pure Seed Testing, Inc., 3057 G Street, Hubbard, Oregon 97032, United States; Melodee L. Fraser, Pure Seed Testing, Inc., P.O. Box 176, 606 Main Street, Rolesville, North Carolina 27571, United States; Joseph K. Wipff, Pure Seed Testing, Inc., P.O. Box 448, Hubbard, Oregon 97032, United States. Received 12/12/2001.

PI 628341. *Lolium perenne* L.
Cultivar. "BRIGHTSTAR SLT"; PST-2A6B. PVP 200200002; CV-226. Pedigree - Seedlings were planted in alternating rows of Brightstar II salt germination (1000 plants), 2FXX Brightstar II (2250 plants), and 2AGE (2400 plants). The nursery was rogued to uniformity of plant type and maturity and remaining plants were allowed to interpollinate. Seed was subsequently harvested from 841 plants in 1999. Of these plants, 398 traced their origin to 2FXX Brightstar II, 293 to 2AGE and 150 to Brightstar II salt germination. Dark green with good turf quality in

turf trials throughout the U.S. and is recommended for lawns and sports fields in temperate regions. Good resistance to stem rust (*Puccinia graminis*), crown rust (*P. coronata*) and red thread (*Laetisaria fuciformis*). Moderate resistance to dollar spot (*Sclerotinia homoeocarpa*) and good salt tolerance. Also shows good turf quality in winter overseeding trials and is recommended for winter overseeding of bermudagrass (*Cynodon* spp.). Taller than Brightstar II.

PI 628342. *Lolium perenne* L.

Cultivar. "QUICK TRANS"; PST-38K. PVP 200200003; CV-227. Pedigree - An advanced generation synthetic cv. selected from the progenies of five perennial ryegrass (*Lolium perenne*) plants crossed with four annual ryegrass (*L. multiflorum*) plants during the spring of 1997,. Early-maturing, dark green perennial recommended for turf uses. Has an initial heading date 7-21 days earlier than most other perennial ryegrasses. Has an inherent 0% fluorescence level. High resistance to stem rust (*Puccinia graminis*), good resistance to crown rust (*P. coronata*), and moderate resistance to red thread (*Laetisaria fuciformis*). Shows early spring transition in winter overseeding turf trials and is recommended for the winter overseeding of bermudagrass (*Cynodon* spp.). In overseeding trials, performed well as a monostand and in mixtures with 5-10% crested dogtail (*Cynosurus cristatus*) in temperate areas. Should persist as permanent turf and perform well as a monostand, in blends with other perennial ryegrasses, or in mixtures with Kentucky bluegrass (*Poa pratensis*) or fine-leaved fescues (*Festuca* spp.) in these areas. Recommended for sports turfs and lawns.

The following were developed by Florida Agr. Exp. Sta., Florida, United States; University of Georgia Research Foundation, Inc., Athens, Georgia, United States. Received 12/12/2001.

PI 628343 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. Pureline. "CRAWFORD"; 91426E39. PVP 200200004. Pedigree - GA841474(Coker797/Oasis//Saluda/Coker916)/GA-Stuckey.

The following were developed by University of Georgia Research Foundation, Inc., Athens, Georgia, United States. Received 12/12/2001.

PI 628344 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "36803"; 901146E15. PVP 200200005. Pedigree - GA831127-3//GA79102/3*GA821264.

The following were developed by Paul Pfahler, University of Florida, 304 Newell Hall, Department of Agronomy, Gainesville, Florida 32611, United States; Barry M. Cunfer, University of Georgia, Dept. of Plant Pathology, Georgia Station, Griffin, Georgia 30223-1797, United States; Ronald D. Barnett, University of Florida, North Florida Res. & Ed. Center, 155 Research Road, Quincy, Florida 32351-5677, United States; Jerry W. Johnson, University of Georgia, Department of Crop and Soil Sciences, 1109 Experiment Street, Griffin, Georgia 30223-1197, United States; G.D. Buntin, University of Georgia, Department of Entomology, Georgia Station, Griffin, Georgia, United States; Ann R. Blount, University of Florida, North Florida Research, & Education Center, Mariana, Florida 32446-7906, United States. Received 12/12/2001.

PI 628345. *Avena sativa* L.

Cultivar. Pureline. "HORIZON 314"; FL92OHR31,314; FLX499-1-B3-G6. PVP 200200006; CV-368. Pedigree - Coker 84-15 /TX84Ab2171. Released 2000. Winter oat with considerable potential for both grain and forage production in the Southeast. Maturity 3-6 days later than Chapman. Higher yielding, heavier test weight, and is about 10 cm taller than Chapman. Excellent resistance to prevalent races of crown rust, and moderately resistant to *Helminthosporium* leaf spot (*Helminthosporium sativum*). Rated as susceptible to crown rust in south Texas. Susceptible to stem rust and barley yellow dwarf virus.

The following were developed by A. Duda & Sons, Inc., United States. Received 12/12/2001.

PI 628346 PVPO. *Apium graveolens* var. *dulce* (Mill.) Pers.

Cultivar. "BATTLE". PVP 200200007.

The following were developed by Pioneer Hi-Bred International, Inc, United States. Received 12/12/2001.

PI 628347 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH54M". PVP 200200008.

PI 628348 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH5HK". PVP 200200009.

PI 628349 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH7JB". PVP 200200010.

PI 628350 PVPO. *Zea mays* L. subsp. *mays*

Cultivar. "PH7JD". PVP 200200011.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 12/12/2001.

PI 628351 PVPO. *Phaseolus vulgaris* L.

Cultivar. "XP 8104409". PVP 200200012.

The following were developed by Central Valley Seeds, Inc., United States. Received 12/12/2001.

PI 628352 PVPO. *Lactuca sativa* L.

Cultivar. "BIG STAR". PVP 200200013.

The following were developed by AgResearch Limited, New Zealand. Received 12/12/2001.

PI 628353 PVPO. *Trifolium repens* L.

Cultivar. "GRASSLANDS KOPU II". PVP 200200014.

The following were developed by Brushvale Seeds, Inc., Breckenridge, Minnesota, United States. Received 12/12/2001.

PI 628354 PVPO. *Glycine max* (L.) Merr.
Cultivar. "BS-141". PVP 200200015.

PI 628355 PVPO. *Glycine max* (L.) Merr.
Cultivar. "BS-208". PVP 200200016.

The following were developed by Kenneth Budd, Budd Seed, 199 Budd Boulevard, Winston-Salem, North Carolina 27103, United States. Received 12/12/2001.

PI 628356 PVPO. *Festuca arundinacea* Schreb.
Cultivar. "TFC-7001". PVP 200200017.

The following were developed by Proseed, Inc., United States; ProSeeds Marketing, Inc., United States. Received 12/12/2001.

PI 628357 PVPO. *Festuca arundinacea* Schreb.
Cultivar. "DLSD". PVP 200200018.

The following were developed by ProSeeds Marketing, Inc., United States. Received 12/12/2001.

PI 628358 PVPO. *Lolium perenne* L.
Cultivar. "EDR". PVP 200200019.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 12/12/2001.

PI 628359 PVPO. *Cucurbita pepo* L.
Cultivar. "MINI TREAT". PVP 200200020.

The following were developed by A. Duda & Sons, Inc., United States. Received 12/12/2001.

PI 628360 PVPO. *Apium graveolens* L.
Cultivar. "WALT'S PRIDE". PVP 200200021.

The following were developed by Progeny Advanced Genetics, Inc., Salinas, California, United States. Received 12/12/2001.

PI 628361 PVPO. *Lactuca sativa* L.
Cultivar. "LEGEND". PVP 200200023.

The following were developed by Syngenta Seeds, Inc., United States. Received 12/12/2001.

PI 628362 PVPO. *Capsicum annuum* L.
Cultivar. "7521-F". PVP 200200024.

The following were developed by Western Plant Breeders, Inc., Phoenix, Arizona, United States. Received 12/12/2001.

PI 628363 PVPO. *Triticum aestivum* L. subsp. *aestivum*

Cultivar. "ELDON". PVP 200200025. Pedigree - Yecora Rojo/Red River 68.

The following were developed by Paragon Seed, Inc., United States. Received 12/12/2001.

PI 628364 PVPO. *Lactuca sativa* L.

Cultivar. "WELLTON". PVP 200200026.

The following were developed by Seminis Vegetable Seeds, Inc., Woodland, California, United States. Received 12/12/2001.

PI 628365 PVPO. *Pisum sativum* L.

Cultivar. "SURVIVOR"; 8504198. PVP 200200027.

PI 628366 PVPO. *Pisum sativum* L.

Cultivar. "SOLUTION"; 8504178. PVP 200200028.

The following were developed by Paragon Seed, Inc., United States. Received 12/12/2001.

PI 628367 PVPO. *Lactuca sativa* L.

Cultivar. "QUEEN OF HEARTS". PVP 200200029.

The following were developed by Western Plant Breeders, Inc., Phoenix, Arizona, United States. Received 12/12/2001.

PI 628368 PVPO. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Cultivar. "ORITA". PVP 200200030. Pedigree - PH888-118-5/WPB881.

PI 628369 PVPO. *Triticum turgidum* subsp. *durum* (Desf.) Husn.

Cultivar. "ALAMO". PVP 200200031. Pedigree - Kofa/PH888-118-5(selection from Turbo alpha-86 S-1 population).

The following were donated by INIFAP, CIFAP, Experimental Valle De Mexico, Apartado Postal No. 10, KM 38.5 CARR. Mex-VER/VIA Texcoco, Chapingo, Mexico, Mexico. Received 02/26/1990.

PI 628370. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 40; AGS 40; MEX 40 (INIFAP ACC NO); NRC 1211; Maiz Blanco; CH-87 115#; Ames 12825. Collected 02/05/1952 in Aguascalientes, Mexico. Latitude 22° 14' N. Longitude 102° 20' W. Elevation 2250 m. La Lobera Presa Calles, Rincon de Ramos.

PI 628371. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 41; AGS 41; MEX 41 (INIFAP ACC NO); NRC 1212; Temporalero; CH-87 116#; Ames 12826. Collected 02/05/1952 in

Aguascalientes, Mexico. Latitude 22° 15' N. Longitude 102° 6' W.
Elevation 2195 m. El Desparramadero, Asientos.

PI 628372. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 48; AGS 48; MEX 48 (INIFAP ACC NO);
Olote Colorado; CH-87 118#; Ames 12827. Collected 01/01/1961 in
Aguascalientes, Mexico. Latitude 22° 15' N. Longitude 102° 6' W.
Colonia Calles Agricultura, Asientos.

PI 628373. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 60; AGS 60; MEX 60 (INIFAP ACC NO);
Temporal de 80 Dais.; B-88 22#; Ames 12828. Collected 1987 in
Aguascalientes, Mexico. Latitude 22° 0' N. Longitude 102° 30' W.
San Antonio de Los Ri.

PI 628374. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 63; AGS 63; MEX 63 (INIFAP ACC NO);
Poblano; CH-88 200#; Ames 12829. Collected 1987 in Aguascalientes,
Mexico. Latitude 22° 8' N. Longitude 102° 16' W. Elevation 2100
m. Pabellon de Arteaga.

PI 628375. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 65; AGS 65; CH-87 169#; Ames 12830.
Collected 1987 in Aguascalientes, Mexico.

PI 628376. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 66; AGS 66; CH-87 170#; Ames 12831.
Collected 1987 in Aguascalientes, Mexico.

PI 628377. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 71; AGS 71; CH-87 174#; Ames 12832.
Collected 1987 in Aguascalientes, Mexico.

PI 628378. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 72; AGS 72; CH-87 175#; Ames 12833.
Collected 1987 in Aguascalientes, Mexico.

PI 628379. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 73; AGS 73; CH-87 176#; Ames 12834.
Collected 1987 in Aguascalientes, Mexico.

PI 628380. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 74; AGS 74; CH-87 177#; Ames 12835.
Collected 1987 in Aguascalientes, Mexico.

PI 628381. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 76; AGS 76; CH-87 179#; Ames 12836.
Collected 1987 in Aguascalientes, Mexico.

PI 628382. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 78; AGS 78; CH-87 180#; Ames 12837.
Collected 1987 in Aguascalientes, Mexico.

PI 628383. *Zea mays* L. subsp. *mays*

Landrace. Population. Aguascalientes 91; AGS 91; CH-88 219#; Ames 12838.
Collected 1987 in Aguascalientes, Mexico.

- PI 628384. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chiapas 45; CHIS 45; MEX 275 (INIFAP ACC NO); NRC 1363; B-88 115#; Ames 12839. Collected 01/01/1944 in Chiapas, Mexico. Latitude 16° 59' N. Longitude 92° 52' W. Elevation 1127 m. Bochil.
- PI 628385. *Zea mays* L. subsp. *mays***
 Landrace. Population. CIMMYTMA-000791; Chiapas 174; CHIS 174; NRC 1492; MEX 406 (INIFAP ACC NO); Chiquihua Blanco; IG-87 24#; Ames 12840. Collected 01/01/1946 in Chiapas, Mexico. Latitude 15° 22' N. Longitude 92° 15' W. Elevation 1100 m. Motozintla.
- PI 628386. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chiapas 177; CHIS 177; MEX 409 (INIFAP ACC NO); NRC 1495; IG-87 2#; Ames 12841. Collected 01/01/1946 in Chiapas, Mexico. Latitude 15° 22' N. Longitude 92° 13' W. Elevation 1872 m. Juarez Chimale.
- PI 628387. *Zea mays* L. subsp. *mays***
 Landrace. Population. CIMMYTMA-001747; CHIS 241; Chiapas 241; MEX 475 (INIFAP ACC NO); Pinto; IG-87/88AR 61#; Ames 12842. Collected 01/01/1944 in Chiapas, Mexico. Latitude 15° 23' N. Longitude 92° 10' W. Elevation 1400 m. Rancho Granados Talcanaq, Mazapa de Madero.
- PI 628388. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chiapas 250; CHIS 250; MEX 484 (INIFAP ACC NO); IG-87 58#; Ames 12843. Collected 1987 in Chiapas, Mexico.
- PI 628389. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chiapas 253; CHIS 253; MEX 487 (INIFAP ACC NO); IG-87 57#; Ames 12844. Collected 1987 in Chiapas, Mexico. Latitude 16° 7' N. Longitude 92° 3' W. Santa Rita, La Trinitaria.
- PI 628390. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chiapas 301; CHIS 301; MEX 535 (INIFAP ACC NO); Grueso; B-88 80#; Ames 12845. Collected 1987 in Chiapas, Mexico. Latitude 16° 33' N. Longitude 92° 28' W. Elevation 1800 m. Teopisca.
- PI 628391. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chiapas 313; CHIS 313; MEX 547 (INIFAP ACC NO); Marillo Precoz; IG-87 26#; Ames 12846. Collected 1987 in Chiapas, Mexico. Latitude 16° 30' N. Longitude 92° 30' W. El Paraiso.
- PI 628392. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chiapas 706; CHIS 706; MEX 9280 (INIFAP ACC NO); Criollo; IG-87/88 47#; Ames 12847. Collected 01/01/1978 in Chiapas, Mexico. Latitude 16° 20' N. Longitude 92° 34' W. Elevation 790 m. Retiro de La Union, Venustiano Carranza.
- PI 628393. *Zea mays* L. subsp. *mays***
 Landrace. Population. Chihuahua 48; CHIH 48; MEX 983 (INIFAP ACC NO); NRC 1599; Maiz Cobre; B-88 74#; Ames 12848. Collected 02/09/1943 in Chihuahua, Mexico. Latitude 26° 56' N. Longitude 105° 25' W. Elevation 1480 m. Molinares, Valle de Allende.

- PI 628394. *Zea mays* L. subsp. *mays***
Landrace. Population. Chihuahua 81; CHIH 81; B-88 3#; Ames 12849.
Collected 1987 in Chihuahua, Mexico. Latitude 26° 45' N. Longitude
105° 10' W. Elevation 1700 m. Villa Coronado.
- PI 628395. *Zea mays* L. subsp. *mays***
Landrace. Population. Chihuahua 42; CHIH 42; MEX 977 (INIFAP ACC NO);
NRC 1593; Pepitilla; CH-88 83#; Ames 12850. Collected 02/10/1943 in
Chihuahua, Mexico. Latitude 26° 56' N. Longitude 105° 25' W.
Elevation 1480 m. La Campera, Valle de Allende.
- PI 628396. *Zea mays* L. subsp. *mays***
Landrace. Population. Chihuahua 92; CHIH 92; MEX 1027 (INIFAP ACC NO);
CH-87 22#; Ames 12851. Collected 01/01/1954 in Chihuahua, Mexico.
Latitude 28° 38' N. Longitude 106° 5' W. Elevation 2100 m. Ejido
Pena Blanca, Chihuahua.
- PI 628397. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 13; COAH 13; MEX 1297 (INIFAP ACC NO);
NRC 1655; Maiz de 90 Daiz; B-88 23#; Ames 12852. Collected 01/01/1946 in
Coahuila, Mexico. Latitude 25° 27' N. Longitude 100° 50' W.
Elevation 1707 m. La Gloria, Arteaga.
- PI 628398. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 23; COAH 23; MEX 1307 (INIFAP ACC NO);
NRC 1665; Maiz de Temporal; B-88 168#; Ames 12853. Collected 01/01/1952
in Coahuila, Mexico. Latitude 24° 57' N. Longitude 101° 27' W.
Elevation 1610 m. Santa Elena, San Pedro.
- PI 628399. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 29; COAH 29; MEX 1313 (INIFAP ACC NO);
NRC 1671; Blanco; B-88 122#; Ames 12854. Collected 02/05/1952 in
Coahuila, Mexico. Latitude 26° 59' N. Longitude 102° 3' W.
Elevation 1300 m. Ejido Cuatro Cienegas.
- PI 628400. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 48; COAH 48; MEX 1332 (INIFAP ACC NO);
NRC 1690; Lagunero; B-88 173#; Ames 12855. Collected 01/01/1952 in
Coahuila, Mexico. Latitude 25° 32' N. Longitude 103° 14' W.
Elevation 1600 m. Santo Nino de Aguanaval, Matamoros.
- PI 628401. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 70; COAH 70; MEX 1354 (INIFAP ACC NO);
NRC 1712; Pinto; B-88 25#; Ames 12856. Collected 02/02/1952 in Coahuila,
Mexico. Latitude 25° 25' N. Longitude 101° 0' W. Elevation 1700
m. La Puerta de Santa Teresa, Saltillo.
- PI 628402. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 75; COAH 75; MEX 1359 (INIFAP ACC NO);
NRC 1717; Pepitilla; B-88 26#; Ames 12857. Collected 02/02/1952 in
Coahuila, Mexico. Latitude 25° 25' N. Longitude 101° 0' W.
Elevation 1700 m. La Trinidad, Saltillo.
- PI 628403. *Zea mays* L. subsp. *mays***
Landrace. Population. Coahuila 77; COAH 77; MEX 1361 (INIFAP ACC NO);
NRC 1719; Pepitilla; B-88 90#; Ames 12858. Collected 02/01/1952 in

Coahuila, Mexico. Latitude 25° 17' N. Longitude 101° 5' W.
Elevation 1800 m. La Encantada, Saltillo.

PI 628404. *Zea mays* L. subsp. *mays*

Landrace. Population. Coahuila 86; COAH 86; MEX 1370 (INIFAP ACC NO); B-88 125#; Ames 12859. Collected 1987 in Coahuila, Mexico. Francisco Imadero.

PI 628405. *Zea mays* L. subsp. *mays*

Landrace. Population. Coahuila 87; COAH 87; MEX 1371 (INIFAP ACC NO); B-88 165#; Ames 12860. Collected 1987 in Coahuila, Mexico. Francisco Imadero.

PI 628406. *Zea mays* L. subsp. *mays*

Landrace. Population. Coahuila 96; COAH 96; MEX 1379 (INIFAP ACC NO); Precoz; B-88 27#; Ames 12861. Collected 1987 in Coahuila, Mexico. Latitude 25° 27' N. Longitude 100° 50' W. Elevation 1610 m. Sierra de Arteaga, Arteaga.

PI 628407. *Zea mays* L. subsp. *mays*

Landrace. Population. Durango 52; DGO 52; MEX 1512 (INIFAP ACC NO); B-88 4#; Ames 12862. Collected 01/01/1950 in Durango, Mexico. Latitude 24° 44' N. Longitude 104° 39' W. Elevation 1720 m. Ocampo.

PI 628408. *Zea mays* L. subsp. *mays*

Landrace. Population. Durango 55; DGO 55; MEX 1515 (INIFAP ACC NO); B-88 11#; Ames 12863. Collected 01/01/1950 in Durango, Mexico. Latitude 24° 44' N. Longitude 104° 39' W. Elevation 1720 m. Ocampo.

PI 628409. *Zea mays* L. subsp. *mays*

Landrace. Population. Durango 56; DGO 56; MEX 1516 (INIFAP ACC NO); CH-87 134#; Ames 12864. Collected 01/01/1950 in Durango, Mexico. Latitude 24° 32' 55" N. Longitude 103° 57' 48" W. Luis Moya.

PI 628410. *Zea mays* L. subsp. *mays*

Landrace. Population. Durango 60; DGO 60; MEX 1520 (INIFAP ACC NO); CH-87 135#; Ames 12865. Collected 01/01/1950 in Durango, Mexico. Latitude 25° 56' N. Longitude 105° 22' W. Santa Maria del Oro.

PI 628411. *Zea mays* L. subsp. *mays*

Landrace. Population. Durango 65; DGO 65; MEX 1525 (INIFAP ACC NO); B-88 14#; Ames 12866. Collected 01/01/1950 in Durango, Mexico. Latitude 24° 44' N. Longitude 104° 39' W. Ocampo.

PI 628412. *Zea mays* L. subsp. *mays*

Landrace. Population. Durango 77; DGO 77; MEX 1537 (INIFAP ACC NO); Temporal; CH-87 137#; Ames 12867. Collected 01/01/1951 in Durango, Mexico. Latitude 24° 46' N. Longitude 104° 28' W. Elevation 1800 m. Rancho Viborillas, San Juan del Rio.

PI 628413. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-006914; Durango 187; DGO 187; MEX 1647 (INIFAP ACC NO); Cosecha Segura; B-88 86#; Ames 12868. Collected 01/01/1968 in Durango, Mexico. Latitude 23° 28' N. Longitude 104° 21' W. Elevation 1440 m. Mezquital. tipo hibrido, 12 hileras olote rigido raquisrosado 1.6cm. diametro de pedunculo (LAMP 95 CD, INIFAP DB).

- PI 628414. *Zea mays* L. subsp. *mays***
Landrace. Population. Durango 236; DGO 236; MEX 1696 (INIFAP ACC NO); Azul; B-88 #1; Ames 12869. Collected 01/17/1974 in Durango, Mexico. Latitude 24° 31' N. Longitude 104° 46' W. Elevation 2000 m. Arnulfo R. Yanez, Canatlan. RESISTENTE A LA SEQUIA Y LA MUCHA HUMEDAD (LAMP 95 CD, INIFAP DB).
- PI 628415. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-010606; Durango 268; DGO 268; MEX 1728 (INIFAP ACC NO); Amarillo; CH-88 24#; Ames 12870. Collected 01/10/1974 in Durango, Mexico. Latitude 24° 32' N. Longitude 104° 20' W. Lazaro Cardenas, Panuco de Coronado.
- PI 628416. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-000279; Guanajuato 2; GTO 2; NRC 1782; MEX 1732 (INIFAP ACC NO); Baquereno; B-88 51#; Ames 12871. Collected 01/01/1943 in Guanajuato, Mexico. Latitude 21° 8' N. Longitude 101° 40' W. Elevation 1885 m. San Nicolas, Leon.
- PI 628417. *Zea mays* L. subsp. *mays***
Landrace. Population. Guanajuato 10; GTO 10; MEX 1740 (INIFAP ACC NO); NRC 1790; B-88 52#; Ames 12872. Collected 01/01/1943 in Guanajuato, Mexico. Latitude 20° 31' N. Longitude 100° 49' W. Elevation 1768 m. Celaya.
- PI 628418. *Zea mays* L. subsp. *mays***
Landrace. Population. Guanajuato 11; GTO 11; MEX 1741 (INIFAP ACC NO); NRC 1791; B-88 53#; Ames 12873. Collected 01/01/1943 in Guanajuato, Mexico. Latitude 20° 34' N. Longitude 101° 12' W. Elevation 1752 m. Salamanca.
- PI 628419. *Zea mays* L. subsp. *mays***
Landrace. Population. Guanajuato 17; GTO 17; MEX 1747 (INIFAP ACC NO); NRC 1797; Prieto; B-88 54#; Ames 12874. Collected 01/01/1945 in Guanajuato, Mexico. Latitude 20° 41' N. Longitude 101° 21' W. Elevation 731 m. Las Animas, Irapuato.
- PI 628420. *Zea mays* L. subsp. *mays***
Landrace. Population. Guanajuato 21B; GTO 21B; MEX 1754 (INIFAP ACC NO); B-88 113#; Ames 12875. Collected 01/01/1945 in Guanajuato, Mexico. Latitude 20° 39' N. Longitude 100° 59' W. Elevation 1799 m. Santa Cruz de Juventino Rosas.
- PI 628421. *Zea mays* L. subsp. *mays***
Landrace. Population. Guanajuato 46; GTO 46; MEX 1779 (INIFAP ACC NO); NRC 1826; Prieto; B-88 57#; Ames 12876. Collected 01/26/1945 in Guanajuato, Mexico. Latitude 20° 31' N. Longitude 100° 49' W. Elevation 1798 m. San Juan de La Vega, Celaya.
- PI 628422. *Zea mays* L. subsp. *mays***
Landrace. Population. Guanajuato 48; GTO 48; MEX 1781 (INIFAP ACC NO); NRC 1828; Blanco; B-88 59#; Ames 12877. Collected 01/27/1945 in Guanajuato, Mexico. Latitude 20° 43' N. Longitude 100° 45' W. Elevation 1828 m. Ejido La Palma, Comonfort.

- PI 628423. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guanajuato 58; GTO 58; MEX 1791 (INIFAP ACC NO);
 NRC 1838; Prieto; B-88 58#; Ames 12878. Collected 01/31/1945 in
 Guanajuato, Mexico. Latitude 20° 38' N. Longitude 101° 40' W.
 Elevation 1798 m. Cueramaro.
- PI 628424. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guanajuato 59; GTO 59; MEX 1792 (INIFAP ACC NO);
 NRC 1839; Maizon Temporal; B-88 63#; Ames 12879. Collected 01/01/1945 in
 Guanajuato, Mexico. Latitude 20° 31' N. Longitude 100° 49' W.
 Elevation 1798 m. San Juan de La Vega, Celaya.
- PI 628425. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guanajuato 76; GTO 76; MEX 1810 (INIFAP ACC NO);
 NRC 1856; Blanco; B-88 96#; Ames 12880. Collected 01/01/1945 in
 Guanajuato, Mexico. Latitude 20° 13' N. Longitude 101° 7' W.
 Elevation 1767 m. Loma Zempoala, Yuriria.
- PI 628426. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guanajuato 89; GTO 89; MEX 1824 (INIFAP ACC NO);
 NRC 1869; Criollo; B-88 100#; Ames 12881. Collected 01/01/1945 in
 Guanajuato, Mexico. Latitude 20° 23' N. Longitude 101° 12' W.
 Elevation 1798 m. San Nicolas Parangueo, Valle de Santiago.
- PI 628427. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guanajuato 90; GTO 90; MEX 1825 (INIFAP ACC NO);
 NRC 1870; Rojo; B-88 65#; Ames 12882. Collected 01/01/1945 in
 Guanajuato, Mexico. Elevation 1885 m. Urquiza, Queretaro.
- PI 628428. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guanajuato 181; GTO 181; MEX 1912 (INIFAP ACC NO);
 Dulce; CH-88 140#; Ames 12883. Collected 04/03/1974 in Guanajuato,
 Mexico. Latitude 20° 57' N. Longitude 101° 25' W. Elevation 1900
 m. Ejido El Capulin, Silao.
- PI 628429. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guerrero 28; GRO 28; MEX 2102 (INIFAP ACC NO); NRC
 1906; Rojo; IG-87 7#; Ames 12884. Collected 01/01/1946 in Guerrero,
 Mexico. Latitude 17° 28' N. Longitude 99° 29' W. Elevation 1311
 m. Mazatlan, Chilpancingo.
- PI 628430. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guerrero 138; GRO 138; MEX 2214 (INIFAP ACC NO);
 NRC 2629; Rojito; IG-87/88AR 101#; Ames 12885. Collected 01/01/1947 in
 Guerrero, Mexico. Latitude 17° 35' N. Longitude 99° 25' W.
 Elevation 1300 m. Tixtla.
- PI 628431. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guerrero 228; GRO 228; MEX 2307 (INIFAP ACC NO);
 IG-87 322#; Ames 12886. Collected 01/01/1944 in Guerrero, Mexico.
 Latitude 17° 29' N. Longitude 99° 28' W. Tepechicotlan,
 Mochitlan.
- PI 628432. *Zea mays* L. subsp. *mays***
 Landrace. Population. Guerrero 234; GRO 234; MEX 2313 (INIFAP ACC NO);
 Pinto Cebu; IG-87 6#; Ames 12887. Collected 01/01/1950 in Guerrero,

Mexico. Latitude 18° 28' N. Longitude 100° 34' W. Elevation 263 m. La Joya, Cutzamala de Pinzon.

PI 628433. *Zea mays* L. subsp. *mays*

Landrace. Population. Guerrero 341; GRO 341; MEX 2420 (INIFAP ACC NO); Itzihuini Blanco; IG-87 98#; Ames 12888. Collected 12/11/1973 in Guerrero, Mexico. Latitude 18° 18' N. Longitude 99° 29' W. Elevation 1005 m. Tepecoacuilco.

PI 628434. *Zea mays* L. subsp. *mays*

Landrace. Population. Guerrero 348; GRO 348; MEX 2427 (INIFAP ACC NO); Colorado; IG-87 147#; Ames 12889. Collected 06/01/1973 in Guerrero, Mexico. Latitude 17° 36' N. Longitude 99° 11' W. Elevation 1300 m. Chilapa.

PI 628435. *Zea mays* L. subsp. *mays*

Landrace. Population. Guerrero 352; GRO 352; MEX 2431 (INIFAP ACC NO); Negro; IG-87 76#; Ames 12890. Collected 06/01/1973 in Guerrero, Mexico. Ajacayan.

PI 628436. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 14; HGO 14; MEX 2475 (INIFAP ACC NO); NRC 2725; Jileno Pinto; B-88 159#; Ames 12891. Collected 01/01/1944 in Hidalgo, Mexico. Latitude 20° 39' N. Longitude 98° 39' W. Elevation 1700 m. Zacualtipan.

PI 628437. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 28; HGO 28; NRC 2739; MEX 2489 (INIFAP ACC NO); B-88 147#; Ames 12892. Collected 01/01/1946 in Hidalgo, Mexico. La Selva.

PI 628438. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 42; HGO 42; MEX 2503 (INIFAP ACC NO); NRC 2753; Amarillo; B-88 140#; Ames 12893. Collected 01/19/1952 in Hidalgo, Mexico. Latitude 20° 32' N. Longitude 98° 38' W. Elevation 1650 m. San Isidro, Metzquititlan.

PI 628439. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 67; HGO 67; MEX 2528 (INIFAP ACC NO); Tabloncillo; B-88 150#; Ames 12894. Collected 01/01/1968 in Hidalgo, Mexico.

PI 628440. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 73; HGO 73; MEX 2534 (INIFAP ACC NO); CH-88 85#; Ames 12895. Collected 1987 in Hidalgo, Mexico. Latitude 20° 5' N. Longitude 98° 22' W. Elevation 2200 m. Rancho San Vidal, Tulancingo.

PI 628441. *Zea mays* L. subsp. *mays*

Landrace. Population. Hidalgo 188; HGO 188; MEX 2649 (INIFAP ACC NO); Largo; CH-88 12#; Ames 12896. Collected 01/01/1972 in Hidalgo, Mexico. Latitude 20° 14' N. Longitude 98° 20' W. Elevation 2130 m. Tortugas, Metepec.

- PI 628442. *Zea mays* L. subsp. *mays***
Landrace. Population. Hidalgo 221; HGO 221; MEX 2682 (INIFAP ACC NO); Criollo Blanco; CH-88 39#; Ames 12897. Collected 1987 in Hidalgo, Mexico. Latitude 19° 53' N. Longitude 98° 49' W. Elevation 2350 m. Tezontepec.
- PI 628443. *Zea mays* L. subsp. *mays***
Landrace. Population. Jalisco 1A; JAL 1A; MEX 2698 (INIFAP ACC NO); Tabloncillo; B-88 110#; Ames 12898. Collected 01/01/1943 in Jalisco, Mexico. Latitude 20° 34' N. Longitude 104° 4' W. Elevation 1221 m. Ejido La Canteria, Ameca.
- PI 628444. *Zea mays* L. subsp. *mays***
Landrace. Population. Jalisco 88; JAL 88; MEX 2790 (INIFAP ACC NO); NRC 2859; Amarillo; IG-87 75#; Ames 12899. Collected 01/01/1945 in Jalisco, Mexico. Latitude 21° 11' N. Longitude 102° 51' W. Elevation 1889 m. Yahualica.
- PI 628445. *Zea mays* L. subsp. *mays***
Landrace. Population. Jalisco 131; JAL 131; MEX 2836 (INIFAP ACC NO); NRC 2902; Amarillo Breve; CH-88 212#; Ames 12900. Collected 01/01/1946 in Jalisco, Mexico. Latitude 19° 56' N. Longitude 103° 44' W. Elevation 1800 m. Tapalpa.
- PI 628446. *Zea mays* L. subsp. *mays***
Landrace. Population. Jalisco 133; JAL 133; MEX 2838 (INIFAP ACC NO); NRC 2904; Amarillo; CH-88 213#; Ames 12901. Collected 01/01/1946 in Jalisco, Mexico. Latitude 19° 56' N. Longitude 103° 44' W. Elevation 1800 m. Tapalpa.
- PI 628447. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-005911; Jalisco 212; JAL 212; MEX 2923 (INIFAP ACC NO); NRC 2983; CH-88 31#; Ames 12902. Collected 01/01/1952 in Jalisco, Mexico. Latitude 21° 53' N. Longitude 101° 35' W. Elevation 1951 m. Ojuelos.
- PI 628448. *Zea mays* L. subsp. *mays***
Landrace. Population. Jalisco 328; JAL 328; MEX 3043 (INIFAP ACC NO); B-88 7#; Ames 12903. Collected 04/04/1974 in Jalisco, Mexico. Latitude 21° 22' N. Longitude 101° 55' W. Elevation 1930 m. Rancho Verde Vista Hermosa, Lagos de Moreno.
- PI 628449. *Zea mays* L. subsp. *mays***
Landrace. Population. Mexico 342; MEX 3742 (INIFAP ACC NO); Chalqueno; CH-88 69#; Ames 12904. Collected 01/01/1950 in Mexico, Mexico.
- PI 628450. *Zea mays* L. subsp. *mays***
Landrace. Population. Mexico 421; MEX 421; MEX 3821 (INIFAP ACC NO); Pozolero de Patz; CH-88 59#; Ames 12905. Collected 1987 in Mexico, Mexico. Latitude 19° 17' N. Longitude 99° 39' W. Elevation 2620 m. Toluca.
- PI 628451. *Zea mays* L. subsp. *mays***
Landrace. Population. Mexico 701; MEX 701; MEX 4102 (INIFAP ACC NO); Criollo Temporal; CH-88 71#; Ames 12906. Collected 01/01/1972 in Mexico, Mexico. Latitude 19° 43' N. Longitude 98° 58' W. San Jeronimo, Tecamac.

- PI 628452. *Zea mays* L. subsp. *mays***
Landrace. Population. Michoacan 46; MICH 46; MEX 4170 (INIFAP ACC NO); NRC 3194; Amarillo; CH-88 135#; Ames 12907. Collected 01/01/1944 in Michoacan, Mexico. Latitude 19° 51' N. Longitude 102° 8' W. Elevation 1570 m. Tanaquillo, Chilchota.
- PI 628453. *Zea mays* L. subsp. *mays***
Landrace. Population. Michoacan 396; MICH 396; MEX 4526 (INIFAP ACC NO); B-88 154#; Ames 12908. Collected 1987 in Michoacan, Mexico. Latitude 19° 13' N. Longitude 102° 4' W. Tequecaran.
- PI 628454. *Zea mays* L. subsp. *mays***
Landrace. Population. Michoacan 397; MICH 397; MEX 4527 (INIFAP ACC NO); B-88 157#; Ames 12909. Collected 1987 in Michoacan, Mexico. Jasbateas.
- PI 628455. *Zea mays* L. subsp. *mays***
Landrace. Population. Morelos 138; MOR 138; MEX 4718 (INIFAP ACC NO); Tzihuini; IG-87 321#; Ames 12910. Collected 1987 in Morelos, Mexico. Latitude 18° 37' N. Longitude 99° 19' W. Elevation 1000 m. Tilzapotla, Puente de Ixtla.
- PI 628456. *Zea mays* L. subsp. *mays***
Landrace. Population. Morelos 162; MOR 162; MEX 4742 (INIFAP ACC NO); B-88 79#; Ames 12911. Collected 01/01/1972 in Morelos, Mexico.
- PI 628457. *Zea mays* L. subsp. *mays***
Landrace. Population. Nayarit 104; NAY 104; MEX 4848 (INIFAP ACC NO); Pepitillo; IG-87 10#; Ames 12912. Collected 01/01/1951 in Nayarit, Mexico. Latitude 21° 21' N. Longitude 104° 35' W. Elevation 500 m. La Labor, Santa Maria del Oro.
- PI 628458. *Zea mays* L. subsp. *mays***
Landrace. Population. Nayarit 112; NAY 112; MEX 4856 (INIFAP ACC NO); Chino; IG-87 97#; Ames 12913. Collected 01/01/1951 in Nayarit, Mexico. Latitude 21° 21' N. Longitude 104° 35' W. Elevation 1200 m. Chapalilla, Santa Maria del Oro.
- PI 628459. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-007058; Nayarit 183; NAY 183; MEX 4927 (INIFAP ACC NO); Ahuacatlan; IG-87 31#; Ames 12914. Collected 01/01/1968 in Nayarit, Mexico. Latitude 21° 4' N. Longitude 104° 29' W. Elevation 1000 m. Ahuacatlan.
- PI 628460. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-007060; Nayarit 185; NAY 185; MEX 4929 (INIFAP ACC NO); Tablilla Chino; Goodman F-485-20; B-88 38#; Goodman F-485-20; Goodman 16 (76-77); Goodman 16 (76-77); Ames 12915. Collected 01/01/1968 in Nayarit, Mexico. Latitude 20° 42' N. Longitude 104° 5' W. Elevation 1100 m. Puente de Comatlan, Mpio. La Yesca.
- PI 628461. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-007083; NAY 232; Nayarit 232; MEX 4976 (INIFAP ACC NO); Perla; IG-87 4#; Ames 12916. Collected 11/26/1968 in Nayarit, Mexico. Latitude 22° 39' N. Longitude 105° 20' W. Elevation 50 m. Ejido La Higuera, Huajicori.

- PI 628462. *Zea mays* L. subsp. *mays***
 Landrace. Population. Nayarit 284; NAY 284; MEX 5028 (INIFAP ACC NO);
 Amarillo; IG-87 145#; Ames 12917. Collected 1987 in Nayarit, Mexico.
 Latitude 21° 49' N. Longitude 105° 12' W. Santiago Ixcuintla.
 Esta coleccion se encuentra en CIMMYT pero no es la misma semilla que
 hay en inia. (LAMP 95 CD, INIFAP DB).
- PI 628463. *Zea mays* L. subsp. *mays***
 Landrace. Population. Nayarit 318; NAY 318; MEX 5062 (INIFAP ACC NO);
 B-88 146#; Ames 12918. Collected 01/01/1975 in Nayarit, Mexico. Latitude
 21° 7' N. Longitude 104° 25' W. Elevation 1100 m. Jomulco, Jala.
- PI 628464. *Zea mays* L. subsp. *mays***
 Landrace. Population. Nuevo Leon 32; NL 32; MEX 5112 (INIFAP ACC NO);
 B-88 141#; Ames 12919. Collected 01/01/1955 in Nuevo Leon, Mexico.
- PI 628465. *Zea mays* L. subsp. *mays***
 Landrace. Population. Nuevo Leon 41; NL 41; MEX 5121 (INIFAP ACC NO);
 Temporal; B-88 33#; Ames 12920. Collected 01/01/1944 in Nuevo Leon,
 Mexico. Latitude 23° 26' N. Longitude 100° 7' W. Elevation 1700
 m. Rancho San Isidro, Mier y Noriega.
- PI 628466. *Zea mays* L. subsp. *mays***
 Landrace. Population. Nuevo Leon 84; NL 84; MEX 5164 (INIFAP ACC NO);
 Del Aire; IG-87 192#; Ames 12921. Collected 01/01/1977 in Nuevo Leon,
 Mexico. Latitude 25° 12' N. Longitude 99° 48' W. Elevation 600
 m. Tierras Coloradas, Montemorelos.
- PI 628467. *Zea mays* L. subsp. *mays***
 Landrace. Population. Oaxaca 38; OAX 38; MEX 5238 (INIFAP ACC NO); NRC
 3519; B-88 132#; Ames 12922. Collected 01/01/1945 in Oaxaca, Mexico.
 Latitude 16° 17' N. Longitude 96° 35' W. Tamazula.
- PI 628468. *Zea mays* L. subsp. *mays***
 Landrace. Population. CIMMYTMA-000253; Oaxaca 41; OAX 41; MEX 5241
 (INIFAP ACC NO); NRC 3522; IG-87 193#; Ames 12923. Collected 01/01/1945
 in Oaxaca, Mexico.
- PI 628469. *Zea mays* L. subsp. *mays***
 Landrace. Population. Oaxaca 43; OAX 43; MEX 5243 (INIFAP ACC NO); NRC
 3524; IG-87 71#; Ames 12924. Collected 01/01/1945 in Oaxaca, Mexico.
 Latitude 17° 10' N. Longitude 96° 47' W. Elevation 1645 m. Etla.
- PI 628470. *Zea mays* L. subsp. *mays***
 Landrace. Population. Oaxaca 55; OAX 55; MEX 5255 (INIFAP ACC NO); NRC
 3536; Zapalote chico; IG-87 73#; Ames 12925. Collected 01/01/1946 in
 Oaxaca, Mexico. Latitude 16° 35' N. Longitude 94° 36' W.
 Elevation 100 m. Niltepec.
- PI 628471. *Zea mays* L. subsp. *mays***
 Landrace. Population. Oaxaca 64; OAX 64; MEX 5264 (INIFAP ACC NO); NRC
 3545; Guelatabo; IG-87 198#; Ames 12926. Collected 01/01/1946 in Oaxaca,
 Mexico. Latitude 16° 54' N. Longitude 96° 43' W. Elevation 1524
 m. Reyes Mantecon.

- PI 628472. *Zea mays* L. subsp. *mays***
Landrace. Population. Oaxaca 67; OAX 67; MEX 5267 (INIFAP ACC NO); NRC 3548; IG-87 70#; Ames 12927. Collected 01/01/1946 in Oaxaca, Mexico. Santa Maria Coyotepec.
- PI 628473. *Zea mays* L. subsp. *mays***
Landrace. Population. Oaxaca 73; OAX 73; MEX 5273 (INIFAP ACC NO); NRC 3554; Tepecintle; IG-87 113#; Ames 12928. Collected 01/01/1947 in Oaxaca, Mexico. Latitude 15° 56' N. Longitude 96° 26' W. Elevation 1200 m. Pluma Hidalgo.
- PI 628474. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-000117; Oaxaca 89; OAX 89; MEX 5290 (INIFAP ACC NO); NRC 3570; Tecomachi; IG-87 155#; Ames 12929. Collected 01/01/1946 in Oaxaca, Mexico. Latitude 16° 20' N. Longitude 98° 2' W. Elevation 120 m. Pinotepa Nacional.
- PI 628475. *Zea mays* L. subsp. *mays***
Landrace. Population. Oaxaca 91; OAX 91; MEX 5292 (INIFAP ACC NO); NRC 3572; Tecomachi; IG-87 79#; Ames 12930. Collected 01/01/1947 in Oaxaca, Mexico. Latitude 16° 20' N. Longitude 98° 2' W. Elevation 120 m. Pinotepa Nacional.
- PI 628476. *Zea mays* L. subsp. *mays***
Landrace. Population. Oaxaca 104; OAX 104; MEX 5305 (INIFAP ACC NO); NRC 3585; Amarillo; B-88 75#; Ames 12931. Collected 01/24/1952 in Oaxaca, Mexico. Latitude 17° 48' N. Longitude 97° 47' W. Elevation 1550 m. Huajuapán de León.
- PI 628477. *Zea mays* L. subsp. *mays***
Landrace. Population. Oaxaca 204; OAX 204; MEX 5407 (INIFAP ACC NO); Negro; B-88 18#; Ames 12932. Collected 01/01/1951 in Oaxaca, Mexico. Elevation 1900 m.
- PI 628478. *Zea mays* L. subsp. *mays***
Landrace. Population. CIMMYTMA-010506; Oaxaca 205; OAX 205; MEX 5408 (INIFAP ACC NO); Amarillo; B-88 12#; Ames 12933. Collected 01/01/1951 in Oaxaca, Mexico. Oyoquexco.
- PI 628479. *Zea mays* L. subsp. *mays***
Landrace. Population. Oaxaca 210; OAX 210; MEX 5413 (INIFAP ACC NO); B-88 13#; Ames 12934. Collected 01/01/1951 in Oaxaca, Mexico. Latitude 17° 2' N. Longitude 96° 42' W. Elevation 1584 m. Esc. Practic. Agrícola, San Antonio de La Cal.
- PI 628480. *Zea mays* L. subsp. *mays***
Landrace. Population. Puebla 27; PUE 27; NRC 3653; MEX 5793 (INIFAP ACC NO); Blanco; Goodman 1179 (70-71); IG-87 25#; Goodman 485 (5); Ames 12935. Collected 01/01/1943 in Puebla, Mexico. Latitude 20° 8' N. Longitude 97° 12' W. Elevation 152 m. San Jose Acateno.
- PI 628481. *Zea mays* L. subsp. *mays***
Landrace. Population. Puebla 216; PUE 216; MEX 5987 (INIFAP ACC NO); NRC 3842; Criollo Blanco; CH-88 14#; Ames 12936. Collected 02/01/1952 in Puebla, Mexico. Latitude 18° 58' N. Longitude 97° 54' W. Elevation 2180 m. Tepeaca.

- PI 628482. *Zea mays* L. subsp. *mays***
 Landrace. Population. CIMMYTMA-001436; Puebla 223; PUE 223; NRC 3849;
 MEX 5994 (INIFAP ACC NO); Delgado Blanco; IG-87 317#; Ames 12937.
 Collected 01/04/1952 in Puebla, Mexico. Latitude 18° 31' N.
 Longitude 98° 35' W. Elevation 1100 m. Chietla.
- PI 628483. *Zea mays* L. subsp. *mays***
 Landrace. Population. Puebla 234; PUE 234; MEX 6005 (INIFAP ACC NO); NRC
 3860; Blanco Rojo; B-88 163#; Ames 12938. Collected 01/21/1952 in
 Puebla, Mexico. Latitude 18° 43' N. Longitude 98° 27' W.
 Elevation 1400 m. Tepeojuma San Cristobal, Matamoros.
- PI 628484. *Zea mays* L. subsp. *mays***
 Landrace. Population. Puebla 290; PUE 290; MEX 6049 (INIFAP ACC NO);
 CH-88 158#; Ames 12939. Collected 01/01/1949 in Puebla, Mexico. Latitude
 18° 57' N. Longitude 98° 1' W. La Boquilla, Cuautinchan.
- PI 628485. *Zea mays* L. subsp. *mays***
 Landrace. Population. CIMMYTMA-001654; Queretaro 36; QRO 36; NRC 3900;
 MEX 6641 (INIFAP ACC NO); Maiz de Los Espinos; CH-88 54#; Ames 12940.
 Collected 01/28/1952 in Queretaro, Mexico. Latitude 20° 42' N.
 Longitude 99° 48' W. Elevation 2032 m. Los Espinos, Mpio. Cadereyta.
- PI 628486. *Zea mays* L. subsp. *mays***
 Landrace. Population. Queretaro 60; QRO 60; MEX 6665 (INIFAP ACC NO);
 NCR 3924; Prieto; B-88 17#; Ames 12941. Collected 1987 in Queretaro,
 Mexico. Latitude 20° 42' N. Longitude 99° 48' W. Elevation 2042
 m. Cadereyta.
- PI 628487. *Zea mays* L. subsp. *mays***
 Landrace. Population. Queretaro 82; QRO 82; MEX 6687 (INIFAP ACC NO);
 B-88 47#; Ames 12942. Collected 03/27/1974 in Queretaro, Mexico.
 Latitude 21° 3' N. Longitude 99° 48' W. Elevation 1500 m. San
 Miguel de Las Palmas, Penamiller.
- PI 628488. *Zea mays* L. subsp. *mays***
 Landrace. Population. Queretaro 93; QRO 93; MEX 6698 (INIFAP ACC NO);
 Negro; CH-88 55#; Ames 12943. Collected 04/01/1974 in Queretaro, Mexico.
 Latitude 20° 48' N. Longitude 100° 3' W. Elevation 2000 m.
 Ajuchitlan, Colon.
- PI 628489. *Zea mays* L. subsp. *mays***
 Landrace. Population. Quintana Roo 44; QROO 44; MEX 6760 (INIFAP ACC NO);
 Xnucnal; IG-87 65#; Ames 12944. Collected 01/01/1974 in Quintana Roo,
 Mexico. Latitude 19° 35' N. Longitude 88° 3' W. Ejido Tabi,
 Felipe Carrillo Puerto.
- PI 628490. *Zea mays* L. subsp. *mays***
 Landrace. Population. Quintana Roo 52; QROO 52; MEX 6768 (INIFAP ACC NO);
 De 3 Meses y Medio; IG-87 14#; Ames 12945. Collected 02/20/1974 in
 Quintana Roo, Mexico. Latitude 19° 35' N. Longitude 88° 3' W.
 Ejido Chan Santa Cruz, Felipe Carrillo Puerto.
- PI 628491. *Zea mays* L. subsp. *mays***
 Landrace. Population. Quintana Roo 83; QROO 83; MEX 6799 (INIFAP ACC NO);
 Cubano; IG-87 23#; Ames 12946. Collected 03/08/1974 in Quintana Roo,

Mexico. Latitude 19° 35' N. Longitude 88° 3' W. Ejido Piedras Negras, Felipe Carrillo Puerto.

PI 628492. *Zea mays* L. subsp. *mays*

Landrace. Population. Quintana Roo 90; QROO 90; MEX 6806 (INIFAP ACC NO); Xnucnal Blanco; IG-87 66#; Ames 12947. Collected 01/01/1974 in Quintana Roo, Mexico. San Jose Segundo.

PI 628493. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 1; SLP 1; MEX 6849 (INIFAP ACC NO); NRC 3931; Blanco; B-88 102#; Ames 12948. Collected 01/01/1943 in San Luis Potosi, Mexico. Tamasado.

PI 628494. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 2; SLP 2; MEX 6850 (INIFAP ACC NO); NRC 3932; Rojo; B-88 103#; Ames 12949. Collected 01/01/1943 in San Luis Potosi, Mexico. Latitude 23° 39' N. Longitude 100° 38' W. Elevation 1615 m. Matehuala.

PI 628495. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 4; SLP 4; MEX 6853 (INIFAP ACC NO); NRC 3934; Apastillado Blanco; B-88 105#; Ames 12950. Collected 01/01/1943 in San Luis Potosi, Mexico. Latitude 23° 8' N. Longitude 101° 7' W. Elevation 2072 m. Charcas.

PI 628496. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 10; SLP 10; MEX 6859 (INIFAP ACC NO); NRC 3940; Blanco; IG-87 100#; Ames 12951. Collected 01/01/1944 in San Luis Potosi, Mexico. Latitude 22° 32' N. Longitude 101° 48' W. Elevation 2133 m. El Conejillo, Penon Blanco.

PI 628497. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 13; SLP 13; MEX 6862 (INIFAP ACC NO); NRC 3943; Blanco; B-88 70#; Ames 12952. Collected 01/01/1944 in San Luis Potosi, Mexico. Chichimixtitlan.

PI 628498. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 44; SLP 44; MEX 6896 (INIFAP ACC NO); NRC 3974; Breve; B-88 76#; Ames 12953. Collected 01/12/1952 in San Luis Potosi, Mexico. Latitude 21° 42' N. Longitude 99° 29' W. Elevation 1270 m. Santa Catarina.

PI 628499. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 53; SLP 53; MEX 6905 (INIFAP ACC NO); NRC 3983; Breve; B-88 72#; Ames 12954. Collected 01/13/1952 in San Luis Potosi, Mexico. Latitude 22° 2' N. Longitude 100° 12' W. Elevation 1300 m. San Jose de Gallinas, Ciudad Fernandez.

PI 628500. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-001665; San Luis Potosi 137; SLP 137; NRC 4067; MEX 6989 (INIFAP ACC NO); Maiz Blanco; B-88 35#; Ames 12955. Collected 01/09/1952 in San Luis Potosi, Mexico. Elevation 2550 m. San Antonio de Guia.

PI 628501. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 140; SLP 140; MEX 6992 (INIFAP ACC NO); Criollo 3 Meses; B-88 19#; Ames 12956. Collected 1987 in San Luis

Potosi, Mexico. Latitude 21° 48' N. Longitude 100° 55' W. Elevation 1700 m. Potrero del Gato, Villa de Reyes.

PI 628502. *Zea mays* L. subsp. *mays*

Landrace. Population. San Luis Potosi 145; SLP 145; MEX 6997 (INIFAP ACC NO); Gigante Gordo; B-88 117#; Ames 12957. Collected 1987 in San Luis Potosi, Mexico. Latitude 21° 50' N. Longitude 99° 39' W. Elevation 1100 m. Obregon, Rayon.

PI 628503. *Zea mays* L. subsp. *mays*

Landrace. Population. Tamaulipas 92; TAMS 92; MEX 7518 (INIFAP ACC NO); Tardio; IG-87 33#; Ames 12958. Collected 1987 in Tamaulipas, Mexico. Latitude 23° 18' N. Longitude 99° 1' W. Elevation 291 m. Llera, Llera de Canales.

PI 628504. *Zea mays* L. subsp. *mays*

Landrace. Population. Tamaulipas 140; TAMS 140; MEX 7567 (INIFAP ACC NO); Olote Colorado; IG-87 272#; Ames 12959. Collected 01/01/1977 in Tamaulipas, Mexico. Latitude 24° 28' N. Longitude 99° 29' W. Elevation 374 m. Conrrado Castillo, Villagran.

PI 628505. *Zea mays* L. subsp. *mays*

Landrace. Population. Tamaulipas 144; TAMS 144; MEX 7571 (INIFAP ACC NO); Olote Colorado; IG-87 146#; Ames 12960. Collected 01/01/1977 in Tamaulipas, Mexico. Latitude 24° 35' N. Longitude 98° 56' W. Elevation 432 m. San Miguel, San Carlos.

PI 628506. *Zea mays* L. subsp. *mays*

Landrace. Population. Tamaulipas 148; TAMS 148; MEX 7575 (INIFAP ACC NO); Olote Delgadito; IG-87 199#; Ames 12961. Collected 01/01/1977 in Tamaulipas, Mexico. Latitude 24° 35' N. Longitude 98° 56' W. Elevation 432 m. El Roble, San Carlos.

PI 628507. *Zea mays* L. subsp. *mays*

Landrace. Population. Tlaxcala 273; TLAX 273; MEX 7848 (INIFAP ACC NO); B-88 48#; Ames 12962. Collected 1987 in Tlaxcala, Mexico. Latitude 19° 17' N. Longitude 98° 12' W. Elevation 2200 m. San Pedro Munoxtla, Chiautempan.

PI 628508. *Zea mays* L. subsp. *mays*

Landrace. Population. Tlaxcala 330; TLAX 330; MEX 7905 (INIFAP ACC NO); B-88 22#; Ames 12963. Collected 01/01/1970 in Tlaxcala, Mexico. Latitude 19° 18' N. Longitude 97° 46' W. Elevation 2483 m. Pocitos, Cuapixtla.

PI 628509. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-000704; Veracruz 48; VER 48; NRC 4240; MEX 7956 (INIFAP ACC NO); Long Eare Cyd; IG-87 30#; VERA 48; Ames 12964. Collected 01/01/1947 in Veracruz, Mexico.

PI 628510. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-000680; Veracruz 66; VER 66; NRC 4258; MEX 7975 (INIFAP ACC NO); Chico Dentado Laksukuse; IG-87 92#; Ames 12965. Collected 01/01/1948 in Veracruz, Mexico. Latitude 20° 28' N. Longitude 97° 20' W. Elevation 100 m. El Tajin, Papantla.

PI 628511. *Zea mays* L. subsp. *mays*

Landrace. Population. Veracruz 112; VER 112; MEX 8021 (INIFAP ACC NO); NRC 4304; Colorado; B-88 156#; Ames 12966. Collected 02/05/1952 in Veracruz, Mexico. Latitude 19° 8' N. Longitude 96° 55' W. Elevation 1320 m. La Cuchilla, Huatusco.

PI 628512. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-000708; VER 181; Veracruz 181; MEX 8090 (INIFAP ACC NO); Amarillo; IG-87 20#; Ames 12967. Collected 07/06/1959 in Veracruz, Mexico. Latitude 20° 47' N. Longitude 97° 34' W. Elevation 80 m. Tecomate, Tihuatlan.

PI 628513. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-000465; Veracruz 208; VER 208; MEX 8117 (INIFAP ACC NO); Criollo Blanco; IG-87 182#; Ames 12968. Collected 07/09/1959 in Veracruz, Mexico. Latitude 21° 17' N. Longitude 97° 58' W. Elevation 190 m. El Naranjal, Chontla.

PI 628514. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-000838; YUCA 135; NRC 4466; MEX 8631 (INIFAP ACC NO); Xnuc-nal 8 Hileras; FN83016071; IG-87 93#; Yucatan 135; Ames 12969. Collected 01/01/1948 in Yucatan, Mexico. Latitude 19° 52' N. Longitude 89° 13' W. Elevation 100 m. Becanthen, Tekax.

PI 628515. *Zea mays* L. subsp. *mays*

Landrace. Population. Yucatan 141; YUC 141; MEX 8637 (INIFAP ACC NO); NRC 4472; Gigante; IG-87 94#; Ames 12970. Collected 01/01/1948 in Yucatan, Mexico. Latitude 20° 17' N. Longitude 89° 27' W. Elevation 30 m. Oxkutzcab.

PI 628516. *Zea mays* L. subsp. *mays*

Landrace. Population. Yucatan 180; YUC 180; MEX 8676 (INIFAP ACC NO); Xnucnal Blanco; IG-87 82#; Ames 12971. Collected 01/01/1968 in Yucatan, Mexico.

PI 628517. *Zea mays* L. subsp. *mays*

Landrace. Population. Zacatecas 11; ZAC 11; MEX 8756 (INIFAP ACC NO); NRC 4496; Tempranero; CH-88 230#; Ames 12972. Collected 01/01/1944 in Zacatecas, Mexico. Latitude 21° 21' N. Longitude 102° 51' W. Elevation 1950 m. Nochistlan de Mejia.

PI 628518. *Zea mays* L. subsp. *mays*

Landrace. Population. Zacatecas 28; ZAC 28; MEX 8772 (INIFAP ACC NO); NRC 4513; Maiz Amarillo; CH-87 161#; Ames 12973. Collected 01/20/1952 in Zacatecas, Mexico. Latitude 22° 20' N. Longitude 102° 53' W. Elevation 1933 m. Malpaso, Villanueva.

PI 628519. *Zea mays* L. subsp. *mays*

Landrace. Population. CIMMYTMA-006976; Zacatecas 174; ZAC 174; MEX 8921 (INIFAP ACC NO); Dulce; B-88 36#; Ames 12974. Collected 01/01/1968 in Zacatecas, Mexico. Latitude 22° 46' N. Longitude 103° 33' W. Elevation 2090 m. Ejido Las Pomas, Valparaiso.

The following were donated by N.I. Vavilov Research Institute of Plant Industry, 44, B. Morskaya Street, St. Petersburg, Leningrad 190000, Russian Federation. Received 04/1990.

PI 628520. *Arachis hypogaea* L.
K-478; Grif 249. Collected in China.

PI 628521. *Arachis hypogaea* L.
K-1562; Grif 272. Collected in Former Soviet Union.

PI 628522. *Arachis hypogaea* L.
K-1667; Grif 274. Collected in Hungary.

The following were donated by Bartolak Zoltan, Ontozesi Kutato Intezet, Szarvas, Bekes, Hungary. Received 06/04/1990.

PI 628523. *Arachis hypogaea* L.
65/5; Grif 327. Pedigree - *Arachis hypogaea* subsp. *hypogaea* x *Arachis hypogaea* subsp. *fastigiata*.

The following were donated by Int. Crops Res. Inst. for the Semi-Arid Tropics, Patancheru P.O., Andhra Pradesh 502 324, India. Received 03/03/1990.

PI 628524. *Arachis hypogaea* L.
ICG 11520; Grif 336.

The following were donated by Biological Division, Bahbba Atomic Research Centre, Trombay, Maharashtra, India. Received 08/05/1991.

PI 628525. *Arachis hypogaea* L.
Grif 1171; BARCG-1.

PI 628526. *Arachis hypogaea* L.
Grif 1172; TG-19A.

PI 628527. *Arachis hypogaea* L.
Grif 1174; TG-S-1.

PI 628528. *Arachis hypogaea* L.
Grif 1175; TG-22.

PI 628529. *Arachis hypogaea* L.
Grif 1176; TAG-24.

The following were donated by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; Roy N. Pittman, USDA, ARS, Plant Genetic Resources Conservation Unit, 1109 Experiment Street, Griffin, Georgia 30223-1797, United States; David E. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 01/27/1993.

PI 628530. *Arachis hypogaea* L.
487; US 1558; Grif 7360. Collected in Brazil.

The following were donated by D. Morris Porter, USDA, ARS, Peanut Production, Diseases and Harvesting Research Unit, 6321 Holland Road, Suffolk, Virginia 23437, United States. Received 03/03/1994.

PI 628531. *Arachis hypogaea* L.

"69 B"; II-1-373; Grif 12350. Collected in Hungary.

PI 628532. *Arachis hypogaea* L.

"43 B"; II-1-374; Grif 12352. Collected in Hungary.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador; David E. Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia. Received 11/17/1995.

PI 628533. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1316; rosita; Grif 12509. Collected 10/16/1995 in Pichincha, Ecuador. Latitude 0° 14' S. Longitude 78° 30' W. Canton Quito, Quito. Plaza San Francisco. Purchased in store. Mixture of medium size purple seeds and small black seeds. Many seeds flat sided.

PI 628534. *Arachis hypogaea* var. *aequatoriana* Krapov. & W. C. Greg.

Landrace. WWT-1330; mani; Grif 12521. Collected 10/24/1995 in Sucumbios, Ecuador. Latitude 0° 23' 36" S. Longitude 76° 37' 46" W. Elevation 382 m. Canton Shushifindi, Parroquia Limoncocha, Comunidad Limoncocha. Playa Yacu. Farm. Rough pods, 3-4 seeded. Mixed seed.

PI 628535. *Arachis hypogaea* L.

Landrace. WWT-1334; mani negro; yana inchi; Grif 12531. Collected 10/26/1995 in Napo, Ecuador. Latitude 1° 2' 29" S. Longitude 77° 35' 39" W. Elevation 458 m. Provincia Napo, Canton Tena, Parroquia Misahualli, Localidad Pusuno. One hour downstream from Puerto Misahualli. Farmer's house. Pedigree - Selection from a mixture with Grif 12530 based on seed coat color. Pods with strong reticulation. Seed red.

PI 628536. *Arachis hypogaea* var. *aequatoriana* Krapov. & W. C. Greg.

Landrace. WWT-1335; mani blanco; yura inchi; Grif 12533. Collected 10/26/1995 in Napo, Ecuador. Latitude 1° 2' 20" S. Longitude 77° 34' 57" W. Elevation 470 m. Prov. Napo, Canton Tena, Parroq. Misahualli, Localidad Pusuno. House on riverbank of Rio Napo. Pedigree - Selection from a mixture with Grif 12532 based on seed coat color. Pods with marked reticulation, 2-4 seeded. Seeds purple.

PI 628537. *Arachis hypogaea* var. *aequatoriana* Krapov. & W. C. Greg.

Landrace. WWT-1343; mani de la zona; Grif 12540. Collected 10/28/1995 in Pastaza, Ecuador. Latitude 1° 29' 11" S. Longitude 78° 0' 3" W. Elevation 987 m. Prov. Pastaza, Canton Puyo, Localidad Puyo. Market. Mixed seed.

- PI 628538. *Arachis hypogaea* var. *aequatoriana*** Krapov. & W. C. Greg.
Landrace. WWT-1344; mani de la zona; Grif 12550. Collected 10/29/1995 in Pastaza, Ecuador. Latitude 1° 29' 11" S. Longitude 78° 0' 3" W. Elevation 987 m. Prov. Pastaza, Canton Puyo, Localidad Puyo. Market. Pedigree - Selection from Grif 12544 based on seed coat color. Seed purple.
- PI 628539. *Arachis hypogaea* L. subsp. *hypogaea***
Landrace. WWT-1347; mani; Grif 12554. Collected 10/29/1995 in Ecuador. Latitude 2° 18' 56" S. Longitude 78° 7' 32" W. Elevation 1078 m. Provincia Morona Santiago, Canton Macas, Parroquia Macas. Sunday market. Seeds large, purple.
- PI 628540. *Arachis hypogaea* subsp. *fastigiata*** Waldron
Landrace. WWT-1350; nuse (Achuar); Grif 12560. Collected 10/30/1995 in Ecuador. Latitude 2° 27' 42" S. Longitude 78° 10' 16" W. Elevation 890 m. Prov. Morona Santiago, Canton Sucua, Parroquia Sucua, Localidad Sucua. Programs de Comercializacion de la Federacion Shuar. Pedigree - Selected from a mixture with Grif 12561 based on seed coat color. Seeds large, elongate, tan with purple stripes. Plants said to be erect.
- PI 628541. *Arachis hypogaea* var. *aequatoriana*** Krapov. & W. C. Greg.
Landrace. WWT-1359; blanco; Grif 12580. Collected 11/01/1995 in Loja, Ecuador. Latitude 3° 59' 2" S. Longitude 79° 39' 51" W. Elevation 1220 m. Provincia Loja, Canton Paltas, Parroquia San Antonio, Localidad San Antonio. Farmer's house. Pedigree - Selection from mixture with Grif 12579 based on seed coat color. Seeds red. Plants said to be erect. Fruits strongly reticulated, humps, no beak, straight, little constriction containing 4 seeds.
- PI 628542. *Arachis hypogaea* var. *aequatoriana*** Krapov. & W. C. Greg.
Landrace. WWT-1362; boliche; Grif 12582. Collected 11/17/1995 in Loja, Ecuador. Latitude 3° 48' 38" S. Longitude 79° 34' 34" W. Elevation 860 m. Provincia Loja, Canton Chaguarpamba, Parroquia Rosario, Localidad Cochapamba, 44.2 km from Las Chinchas towards Portovelo. Farmer's house. Plants erect. Fruits with marked reticulation, humps, beak, containing 3 purple seeds. Said to produce 100 pods per plant. Regarded as the best yielding variety in the region.
- PI 628543. *Arachis hypogaea* var. *aequatoriana*** Krapov. & W. C. Greg.
Landrace. WWT-1365; huasquillo; Grif 12588. Collected 11/02/1995 in El Oro, Ecuador. Latitude 3° 42' 59" S. Longitude 79° 37' 9" W. Elevation 775 m. Prov. El Oro, Canton Portovelo, Parroquia Portovelo, Localidad Portovelo. Store. Pedigree - Selection from mixture with Grif 12587 based on seed coat color. Seed red.
- PI 628544. *Arachis hypogaea* var. *fastigiata*** (Waldron) Krapov. & W. C. Greg.
Cultivar. WWT-1367; colorado; Grif 12592. Collected 11/03/1995 in El Oro, Ecuador. Latitude 3° 41' 32" S. Longitude 79° 36' 27" W. Elevation 1265 m. Provincia El Oro, Canton Zaruma, Parroquia Zaruma, Localidad Zaruma. Market. Seed red.
- PI 628545. *Arachis hypogaea* var. *aequatoriana*** Krapov. & W. C. Greg.
Landrace. WWT-1368; huasquillo; Grif 12593. Collected 11/03/1995 in El Oro, Ecuador. Latitude 3° 41' 32" S. Longitude 79° 36' 27" W.

Elevation 1265 m. Provincia El Oro, Canton Zaruma, Parroquia Zaruma, Localidad Zaruma. Market. Seed dark purple.

PI 628546. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1376; mani; Grif 12599. Collected 11/04/1995 in Manabi, Ecuador. Latitude 0° 50' 26" S. Longitude 80° 29' 26" W. Elevation 10 m. Provincia Manabi, Canton Portoviejo, Parroquia Charapoto, Localidad Charapoto. Market. Mixed seed.

PI 628547. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1376; mani; Grif 12602. Collected 11/04/1995 in Manabi, Ecuador. Latitude 0° 50' 26" S. Longitude 80° 29' 26" W. Elevation 10 m. Provincia Manabi, Canton Portoviejo, Parroquia Charapota, Localidad Charapoto. Market. Pedigree - Selection from Grif 12599 based on seed coat color. Seed purple to dark purple.

PI 628548. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1380; charapoto; Grif 12603. Collected 11/04/1995 in Manabi, Ecuador. Latitude 1° 3' 6" S. Longitude 80° 27' 41" W. Elevation 15 m. Provincia Manabi, Canton Portoviejo, Parroquia Portoviejo, Localidad Portoviejo. Market. Seed deep purple.

PI 628549. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1382; mani; Grif 12604. Collected 11/04/1995 in Manabi, Ecuador. Latitude 1° 3' 6" S. Longitude 80° 27' 41" W. Elevation 15 m. Provincia Manabi, Canton Portoviejo, Parroquia Portoviejo, Localidad Portoviejo. Market. Mixed seeds.

PI 628550. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1382; mani; Grif 12607. Collected 11/04/1995 in Manabi, Ecuador. Latitude 1° 3' 6" S. Longitude 80° 27' 41" W. Elevation 15 m. Provincia Manabi, Canton Portoviejo, Parroquia Portoviejo, Localidad Portoviejo. Market. Pedigree - Selection from Grif 12604 based on seed coat color. Seed dark purple.

PI 628551. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WWT-1382; mani; Grif 12609. Collected 11/07/1995 in Manabi, Ecuador. Latitude 1° 3' 6" S. Longitude 80° 27' 41" W. Elevation 15 m. Provincia Manabi, Canton Portoviejo, Parroquia Portoviejo, Localidad Portoviejo. Market. Pedigree - Selection from Grif 12604 based on seed coat color. See tannish light purple.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 10/07/1996.

PI 628552. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WTS-8; mani; Grif 13798. Collected 08/24/1996 in Carchi, Ecuador. Latitude 0° 50' 2" N. Longitude 78° 3' 18" W. Elevation 2490 m. Canton Tulcan, Parroquia Maldonado, Localidad El Laurel. Store. Seeds purple, tips tan, size medium, a few red and red-white mottled seeds mixed in.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 10/07/1996.

PI 628553. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WTS-21; mani; Grif 13805. Collected 08/27/1996 in Esmeraldas, Ecuador. Latitude 0° 8' 9" N. Longitude 79° 24' 16" W. Elevation 340 m. Canton Quininde, Parroquia La Union, Localidad La Union. Store. Seeds tan with purple stripes, size medium.

PI 628554. *Arachis hypogaea* L. var. *hypogaea*

Landrace. WTS-24; caramelo; Grif 13808. Collected 08/28/1996 in Esmeraldas, Ecuador. Latitude 0° 15' 9" N. Longitude 79° 26' 10" W. Elevation 240 m. Canton Quininde, Parroquia Rosa Zacrata, Localidad Km.222. Farm. Seeds round, red and white striped, size medium to large. Pods typical of 'painted' peanut, smooth, 2-seeded, light reticulation, beak minimal (<3).

PI 628555. *Arachis hypogaea* var. *peruviana* Krapov. & W. C. Greg.

Landrace. WTS-25; caramelo; Grif 13809. Collected 08/28/1996 in Esmeraldas, Ecuador. Latitude 0° 7' 48" N. Longitude 79° 25' 38" W. Elevation 260 m. Canton Quininde, Parroquia La Union, Localidad Pambula. Farm. Soil loam. Gentle slope. Plants erect, diameter 40 cm. Mainstem straight, height 35 cm. Lateral branches 4-6 some with 8. Flowers pure orange with pronounced red through throat. Petioles and leaf margins pubescent. Seeds tan with purple stripes, size medium to large. Pods strongly reticulated, 3-4 seeds per pod. Late leaf spot. Leaf miner damage.

PI 628556. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WTS-28; mani; Grif 13812. Collected 08/28/1996 in Esmeraldas, Ecuador. Latitude 0° 7' 42" N. Longitude 79° 28' 31" W. Elevation 260 m. Canton Quininde, Parroquia La Union, Localidad Cucaracha. Small store. Seeds purple, tips tan. Pod and seed size medium. Pods strongly reticulated (approx. 5), beak minimal, 2-4 seeds per pod. One tan seed in sample. Probably var. *peruviana*.

PI 628557. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WTS-30; chiray; Grif 13814. Collected 08/28/1996 in Pichincha, Ecuador. Latitude 0° 3' 31" S. Longitude 79° 26' 40" W. Elevation 350 m. Canton Santo Domingo de los Colorados, Parroquia La Concordia, Localidad Las Villegas. Store. Seeds purple, some with tan tips, size small. Pods strongly reticulated, beak moderate, 2-4 seeds per pod.

PI 628558. *Arachis hypogaea* subsp. *fastigiata* Waldron

Landrace. WTS-34; caramelo; Grif 13817. Collected 08/28/1996 in Pichincha, Ecuador. Latitude 0° 6' 36" S. Longitude 79° 26' 48" W. Elevation 360 m. Canton Santo Domingo de los Colorados, Localidad Mocache 1. House. Seeds tan with purple stripes, size medium to large. Pods strongly reticulated, beak pronounced (approx. 5), 3 to 4 (maybe 5) seeds per pod.

- PI 628559. *Arachis hypogaea* subsp. *fastigiata* Waldron**
 Landrace. WTS-37; mani; Grif 13819. Collected 08/28/1996 in Manabi, Ecuador. Latitude 0° 16' 26" S. Longitude 79° 27' 49" W.
 Elevation 400 m. Canton El Carmen, Parroquia El Carmen, Localidad El Carmen. Store. Seeds purple, some with tan tips, size medium to large. At least 3 seeds in some pods.
- PI 628560. *Arachis hypogaea* subsp. *fastigiata* Waldron**
 Landrace. WTS-38; mani; Grif 13820. Collected 08/28/1996 in Manabi, Ecuador. Latitude 0° 16' 26" S. Longitude 79° 27' 49" W.
 Elevation 400 m. Canton El Carmen, Parroquia El Carmen, Localidad El Carmen. Store. Seeds tan with purple stripes, size medium.
- PI 628561. *Arachis hypogaea* subsp. *fastigiata* Waldron**
 Landrace. WTS-42; mani; Grif 13823. Collected 08/28/1996 in Manabi, Ecuador. Latitude 0° 20' 20" S. Longitude 79° 45' 29" W.
 Elevation 590 m. Canton Flavio Alfaro, Localidad La Cresta. Store. Seeds purple, most with tan tips, size medium to large.
- PI 628562. *Arachis hypogaea* var. *fastigiata* (Waldron) Krapov. & W. C. Greg.**
 Landrace. WTS-49; rosita; Grif 13830. Collected 08/29/1996 in Manabi, Ecuador. Latitude 1° 2' 23" S. Longitude 80° 21' 14" W.
 Elevation 180 m. Canton Portoviejo, Parroquia Calderon, Localidad Maconta Fuera. Farm. Seeds red, size medium. Pods smooth, 2-4 seeds per pod.

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- PI 628563. *Arachis hypogaea* L. var. *hypogaea***
 Landrace. WTS-55; pepon; Grif 13836. Collected 08/29/1996 in Manabi, Ecuador. Latitude 0° 50' 51" S. Longitude 80° 9' 54" W.
 Elevation 180 m. Canton Bolivar, Parroquia Calceta, Localidad Calceta. Store. Seeds pink, size large.
- PI 628564. *Arachis hypogaea* subsp. *fastigiata* Waldron**
 Landrace. WTS-59; mani; Grif 13840. Collected 08/29/1996 in Manabi, Ecuador. Latitude 0° 50' 51" S. Longitude 80° 9' 54" W.
 Elevation 180 m. Canton Bolivar, Parroquia Calceta, Localidad Calceta. Store. Seeds tan with purple streaks or stripes, size medium to large.
- PI 628565. *Arachis hypogaea* subsp. *fastigiata* Waldron**
 Landrace. WTS-63; mani; Grif 13844. Collected 08/29/1996 in Manabi, Ecuador. Latitude 0° 50' 51" S. Longitude 80° 9' 54" W.
 Elevation 180 m. Canton Bolivar, Parroquia Calceta, Localidad Calceta. Store. Seeds tan with purple stripes, size medium.

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PI 628566. *Arachis hypogaea* L.

Landrace. WTS-72; mani; Grif 13853. Collected 08/31/1996 in Los Rios, Ecuador. Latitude 1° 33' 22" S. Longitude 79° 45' 7" W. Elevation 110 m. Canton Vinces, Localidad Vinces. Market. Seeds purple, size medium.

PI 628567. *Arachis hypogaea* var. *fastigiata* (Waldron) Krapov. & W. C. Greg.

Landrace. WTS-73; mani; Grif 13854. Collected 08/31/1996 in Los Rios, Ecuador. Latitude 1° 33' 22" S. Longitude 79° 45' 7" W. Elevation 110 m. Canton Vinces, Localidad Vinces. Market. Seeds red, shiny, size medium.

PI 628568. *Arachis hypogaea* L. var. *hypogaea*

Landrace. WTS-90; caramelo; Grif 13871. Collected 09/01/1996 in Los Rios, Ecuador. Latitude 1° 12' 26" S. Longitude 79° 18' 53" W. Elevation 320 m. Canton Ventanas, Parroquia Quinsaloma, Localidad Quinsaloma. Store. Seeds red-and-white, rounded, size medium to large.

The following were collected by Jeffrey T. Williams, Smithsonian Institution, National Museum of Natural History, Div. of Fishes, NHB WG-12, MRC-159, Washington, District of Columbia 20560, United States. Received 08/13/1997.

PI 628569. *Arachis hypogaea* var. *peruviana* Krapov. & W. C. Greg.

Landrace. JTW-2a; Grif 13980. Collected 05/12/1997 in Vanuatu. Latitude 15° 32' S. Longitude 167° 10' E. Luganville, Espiritu Santo Island. Farmer's market. Pods with pronounced reticulation, beaked. Seeds 2-3 per pod, tan, small.

PI 628570. *Arachis hypogaea* var. *fastigiata* (Waldron) Krapov. & W. C. Greg.

Landrace. JTW-2b; Grif 13981. Collected 05/12/1997 in Vanuatu. Latitude 15° 32' S. Longitude 167° 10' E. Luganville, Espiritu Santo Island. Farmer's market. Pods smooth. Seeds 2-3 per pod, red, small.

PI 628571. *Arachis hypogaea* var. *peruviana* Krapov. & W. C. Greg.

Landrace. JTW-3; Grif 13982. Collected 05/20/1997 in Vanuatu. Latitude 17° 44' S. Longitude 168° 19' E. Port Vila, Efate Island. Farmer's market. Pods with pronounced reticulation, 2-3 seeded. Seeds tan, small.

The following were collected by Karen A. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 402, BARC-West, Beltsville, Maryland 20705-2350, United States; Cesar Azurdia, Instituto de Investigaciones Agronomicas, Universidad de San Carlos de Guatemala, Ciudad Universitaria, Zona 12, Guatemala City, Guatemala, Guatemala; David E. Williams, Internat'l Plant Genetic Resources Inst., Regional Office for the Americas, c/o CIAT, Int'l Ctr. for Tropical Agric., Cali, Valle, Colombia. Received 01/23/1998.

- PI 628572. *Arachis hypogaea* var. *peruviana*** Krapov. & W. C. Greg.
Landrace. WWA-1402; capullo; NGRL 222; Grif 14052. Collected 11/20/1997 in Huehuetenango, Guatemala. Latitude 15° 46' 2" N. Longitude 91° 50' 57" W. Elevation 767 m. La Laguna, Jacaltenango. Poptic native community. Plants erect. Fruits short, with 2-3 small tan seeds, reticulation pronounced with longitudinal veins outstanding, humps, slight beak, no constriction, strong keel. Said to be resistant to pod rot.
- PI 628573. *Arachis hypogaea* L. var. *hypogaea***
Landrace. WWA-1403; mania criolla; NGRL 223; Grif 14053. Collected 11/20/1997 in Huehuetenango, Guatemala. Latitude 15° 46' 2" N. Longitude 91° 50' 57" W. Elevation 767 m. La Laguna, Jacaltenango. Poptic native community. Runner plant, produces in 3 1/2 to 4 months. Fruits 2-seeded, constricted, no humps, slight beak. Seeds tan. Variety nearly abandoned because of difficulty of harvest, production too spread out, fragile pegs.
- PI 628574. *Arachis hypogaea* var. *peruviana*** Krapov. & W. C. Greg.
Landrace. WWA-1405; capullo; NGRL 224; Grif 14054. Collected 11/20/1997 in Huehuetenango, Guatemala. Latitude 15° 46' 2" N. Longitude 91° 50' 57" W. Elevation 767 m. La Laguna, Jacaltenango. Poptic community. Pods short, no constriction, marked longitudinal reticulation, with keel, humps, no beak. Seeds 3, light purple. Produces in 4 months.
- PI 628575. *Arachis hypogaea* var. *vulgaris*** Harz
Landrace. WWA-1406; mania china; NGRL 225; Grif 14055. Collected 11/20/1997 in Huehuetenango, Guatemala. Latitude 15° 46' N. Longitude 91° 50' W. Elevation 767 m. La Laguna, Jacaltenango. Poptic native community. Pods small, slight constriction, no beak, medium reticulation, 2 seeds per pod. Seeds pink. Plants said to be erect. Produces in 2 1/2 to 3 months. Seeds germinate if not harvested soon.
- PI 628576. *Arachis hypogaea* var. *fastigiata*** (Waldron) Krapov. & W. C. Greg.
Landrace. WWA-1407; mania jamaica; NGRL 226; Grif 14056. Collected 11/20/1997 in Huehuetenango, Guatemala. Latitude 15° 42' N. Longitude 91° 48' 49" W. Elevation 932 m. Buxup, Jacaltenango. Poptic native community. Valencia fruit type, straight, fairly smooth, slight constriction, no humps, slight beak, 4 seeds per pod. Seeds red.
- PI 628577. *Arachis hypogaea* var. *peruviana*** Krapov. & W. C. Greg.
Landrace. WWA-1409; capullo; NGRL 228; Grif 14058. Collected 11/20/1997 in Huehuetenango, Guatemala. Latitude 15° 42' 35" N. Longitude 91° 48' 49" W. Elevation 932 m. Buxup, Jacaltenango. Poptic native community. Pods short, with marked reticulation, outstanding longitudinal veins, humps, sharp keel, little or no beak, 2-3 seeds per pod. Seeds dark purple, size medium.
- PI 628578. *Arachis hypogaea* var. *hirsuta*** J. Kohler
Landrace. WWA-1411; mania criolla; NGRL 230; Grif 14060. Collected 11/21/1997 in Huehuetenango, Guatemala. Latitude 15° 24' 24" N. Longitude 91° 52' 35" W. Elevation 1283 m. Chejoj, Cuilco. Plant runner-type. Pods small, with deep reticulation, humps, beak, 2-3 seeds per pod. Seeds purple. Plant and pegs said to be purple. Said to produce in 5 months.

- PI 628579. *Arachis hypogaea* L. var. *hypogaea***
 Landrace. WWA-1412; cuilca; mania china; NGRL 231; Grif 14061. Collected 11/22/1997 in San Marcos, Guatemala. Latitude 14° 54' 38" N. Longitude 92° 3' 21" W. Elevation 500 m. Malacatan, Malacatan. Market. Pods small, little or no constriction, marked reticulation, 2 seeds per pod. Seeds pink.
- PI 628580. *Arachis hypogaea* L. var. *hypogaea***
 Landrace. WWA-1413; grande; mania charola; NGRL 232; Grif 14062. Collected 11/22/1997 in San Marcos, Guatemala. Latitude 14° 54' 38" N. Longitude 92° 3' 21" W. Elevation 500 m. Malacatan, Malacatan. Market. Pods large, Virginia-type with moderate reticulation, moderate constriction, slight beak, 2 seeds per pod. Seeds tan.
- PI 628581. *Arachis hypogaea* var. *vulgaris* Harz**
 Landrace. WWA-1417; mania china; NGRL 234; Grif 14064. Collected 11/23/1997 in Suchitepequez, Guatemala. Latitude 14° 31' 24" N. Longitude 91° 34' 56" W. Elevation 380 m. Chacalte Sis, Cuyotenango. Plant bunch-type, producing in 3 months. Pods small, marked reticulation, slight constriction and beak, 2 seeds per pod. Seeds pink.
- PI 628582. *Arachis hypogaea* var. *vulgaris* Harz**
 Landrace. WWA-1419; mania olmeca; NGRL 235; Grif 14065. Collected 11/23/1997 in Suchitepequez, Guatemala. Latitude 14° 34' 45" N. Longitude 91° 27' 42" W. Elevation 710 m. Samayac, Samayac. Pods small, thin, 2 seeds per pod. Seeds brown. Said to be very oily, becoming rancid if stored too long.
- PI 628583. *Arachis hypogaea* var. *vulgaris* Harz**
 Landrace. WWA-1421; china; mania bieve; NGRL 237; Grif 14067. Collected 11/24/1997 in Escuintla, Guatemala. Latitude 14° 17' 27" N. Longitude 91° 25' 49" W. Elevation 155 m. El Arisco, Tequisate. Plant erect, flowers on mainstem. Leaflets large, light green. Pods small, moderate reticulation, slight constriction, no humps or beak, 2 seeds per pod. Seeds tan. Said to produce in 3 months.
- PI 628584. *Arachis hypogaea* L. var. *hypogaea***
 Landrace. WWA-1424; mania criolla; NGRL 239; Grif 14069. Collected 11/25/1997 in Sacatepequez, Guatemala. Latitude 14° 31' N. Longitude 90° 45' W. Elevation 1540 m. Ciudad Vieja, Ciudad Vieja. Pods Virginia-type, fairly smooth reticulation, strong constriction, slight beak, 2 seeds per pod. Seeds pink. Said to produce in 6 months. Planted June, harvested Nov.
- PI 628585. *Arachis hypogaea* L. var. *hypogaea***
 Landrace. WWA-1425b; mania grande; Grif 14071. Collected 11/26/1997 in Baja Verapaz, Guatemala. Latitude 15° 5' 40" N. Longitude 90° 23' 34" W. Elevation 985 m. San Miguel Chicaj, San Miguel Chicaj. Plant runner-type, producing in 4 months. Pods Virginia-type, marked reticulation, slight beak, constriction, 2 seeds per pod. Seeds pink. Mixture with WWA-1425a. Sold for oil production.
- PI 628586. *Arachis hypogaea* L. var. *hypogaea***
 Landrace. WWA-1426; mania de tres pepitas; NGRL 242; Grif 14072. Collected 11/26/1997 in Baja Verapaz, Guatemala. Latitude 15° 5' 40" N. Longitude 90° 23' 34" W. Elevation 985 m. San Miguel Chicaj, San

Miguel Chicaj. Plant runner type, producing in 4 months. Pods Virginia-type, marked reticulation, moderate beak, slight constriction, no humps or keel, 2-3 seeds per pod. Seeds tan.

PI 628587. *Arachis hypogaea* L. var. *hypogaea*

Landrace. WWA-1428; mania criolla; NGRL 244; Grif 14074. Collected 11/27/1997 in Chiquimula, Guatemala. Latitude 14° 46' 12" N. Longitude 89° 34' 25" W. Elevation 600 m. Xororagua, Chiquimula. Plant runner-type. Pods medium size, Virginia-type, moderate reticulation, with beak, constriction, 2 seeds per pod. Seeds tan. Produces in 4 months.

PI 628588. *Arachis hypogaea* L. var. *hypogaea*

Landrace. WWA-1431; mania; NGRL 245; Grif 14075. Collected 11/30/1997 in Jutiapa, Guatemala. Latitude 14° 19' 43" N. Longitude 89° 44' 7" W. Elevation 610 m. San Juan, Asuncion Mita. Plant said to be runner type. Pods Virginia-type, moderate to smooth reticulation, constriction, beak, 2 seeds per pod. Seeds tan. Produces in 3 months. Plant in May, harvest in August.

PI 628589. *Arachis hypogaea* L. var. *hypogaea*

Landrace. WWA-1432; mania lerda; NGRL 246; Grif 14076. Collected 11/30/1997 in Jutiapa, Guatemala. Latitude 14° 17' 16" N. Longitude 89° 42' 39" W. Elevation 590 m. Valle Nuevo, Asuncion Mita. Plants said to be runner type. Pods Virginia-type with constriction, beak, marked reticulation, 2 seeds per pod. Seeds tan. Produces in 3 months 20 days. Mixture with WWA-1433.

PI 628590. *Arachis hypogaea* L. var. *hypogaea*

Landrace. WWA-1435; mania rosada; NGRL 249; Grif 14079. Collected 12/01/1997 in Guatemala, Guatemala. Latitude 14° 29' 45" N. Longitude 90° 38' 49" W. Elevation 1392 m. Las Trojes, Amatitlan. Plant said to be runner-type. Pods small Virginia-type, moderate reticulation, strong constriction, small beak, two seeds per pod. Seeds light brown. Said to produce in 6 months.

PI 628591. *Arachis hypogaea* var. *fastigiata* (Waldron) Krapov. & W. C. Greg.

Landrace. WWA-1437; mania de aceite; NGRL 251; Grif 14081. Collected 12/01/1997 in Guatemala, Guatemala. Latitude 14° 29' 45" N. Longitude 90° 38' 49" W. Elevation 1392 m. Las Trojes, Amatitlan. Plant said to be runner-type. Pods valencia-type, fairly straight, some constriction, smooth reticulation, very slight beak, 3-4 seeds per pod. Seeds red. Said to produce in 3 months.

PI 628592. *Arachis hypogaea* L. var. *hypogaea*

Landrace. WWA-1438; blanca; mania grande; NGRL 252; Grif 14082. Collected 12/01/1997 in Guatemala, Guatemala. Latitude 14° 29' 45" N. Longitude 90° 38' 49" W. Elevation 1392 m. Las Trojes, Amatitlan. Plant said to be runner type. Pods with moderate reticulation, some constriction, slight beak, 2-3 seeds per pod. Seeds large, pink. Said to produce in 6 months.

PI 628593. *Arachis hypogaea* var. *fastigiata* (Waldron) Krapov. & W. C. Greg.

Landrace. WWA 1434; Grif 14111. Collected 11/30/1997 in Jutiapa, Guatemala. Latitude 14° 17' 16" N. Longitude 89° 42' 39" W. Elevation 590 m. Valle Nuevo, Asuncion Mita. Pedigree - Selection from Grif 14078. Selection from Grif 14078.

The following were collected by Jeffrey T. Williams, Smithsonian Institution, National Museum of Natural History, Div. of Fishes, NHB WG-12, MRC-159, Washington, District of Columbia 20560, United States. Received 10/30/1998.

PI 628594. *Arachis hypogaea* var. *peruviana* Krapov. & W. C. Greg.
Wild. JTW-4; Grif 14247. Collected 10/08/1998 in Solomon Islands. Latitude 9° 26' S. Longitude 159° 57' E. Houiara. Purchased from farmer in Central Market. Local variety grown in the area. Pods with pronounced longitudinal reticulation, 3-4 seeds per pod. Seeds tan, small.

The following were collected by Charles E. Simpson, Texas A&M University, P. O. Box 292, Stephenville, Texas 76401, United States; David E. Williams, USDA, ARS, Natl. Germplasm Resources Laboratory, Building 003, Room 400, BARC-West, Beltsville, Maryland 20705-2350, United States. Received 08/31/1994.

PI 628595. *Arachis hypogaea* L. subsp. *hypogaea*
Landrace. DEW 1264; mani overo; Grif 14272. Collected 05/17/1994 in Santa Cruz, Bolivia. Latitude 17° 48' S. Longitude 63° 11' W. Elevation 375 m. Andres Ibanez. Santa Cruz de la Sierra, Mercado Los Pozos.

The following were collected by Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador; Alvaro Monteros, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos y Biotechnolg, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 11/22/1999.

PI 628596. *Arachis hypogaea* L.
Landrace. TM-004; nuse; NGRL 281; Grif 14297. Collected 09/17/1999 in Napo, Ecuador. Latitude 0° 54' 45" S. Longitude 76° 54' 56" W. Elevation 430 m. Canton Dayuma; Parroquia Ines Arango; Localidad Western, 73.7 km from the bridge at Coca towards San Francisco. Seed cream colored with purple stripes.

PI 628597. *Arachis hypogaea* L.
Landrace. TM-014; mani; NGRL 291; Grif 14307. Collected 09/19/1999 in Morona-Santiago, Ecuador. Latitude 2° 18' 39" S. Longitude 78° 7' 13" W. Elevation 330 m. Canton Morona; Parroquia Macas; Localidad Macas. Seeds creamy-white.

PI 628598. *Arachis hypogaea* L.
Landrace. TM-030; mani caramelo; NGRL 305; Grif 14321. Collected 09/23/1999 in Loja, Ecuador. Latitude 4° 7' 16" S. Longitude 80° 6' 29" W. Elevation 800 m. Canton Celica; Parroquia Pindal; Localidad Pindal; 9.4 km from Celica towards Zapotillo. Seeds red.

The following were collected by Jaime Engelmann, I.N.I.A.P., Estacion Experimental 'Santa Catalina', Casilla Postal 17-01-340, Quito, Pichincha,

Ecuador; Cesar Tapia, Instituto Nacional Autonomo de Investigaciones Agropecuarias, Departamento Nacional de Recursos Fitogeneticos Y Biotecnolog, Estacion Experimental Sta. Catalina, Santa Catalina, Pichincha, Ecuador. Received 11/23/1999.

PI 628599. *Arachis hypogaea* L.

Landrace. TE-001; mani caramelo; NGRL 307; Grif 14323. Collected 09/25/1999 in Loja, Ecuador. Latitude 3° 56' 46" S. Longitude 79° 38' 5" W. Elevation 1730 m. Canton Olmedo; Parroquia Olmedo, Localidad La Y de Olmedo; 10.6 km from Velacruz towards Chaguarpamba. Seeds pinkish-red.

PI 628600. *Arachis hypogaea* L.

Landrace. TE-004; bola negra o charapoto negro; NGRL 310; Grif 14326. Collected 09/25/1999 in Loja, Ecuador. Latitude 3° 52' 35" S. Longitude 79° 38' 38" W. Elevation 1390 m. Canton Chaguarpamba; Parroquia Chaguarpamba; Localidad Chaguarpamba; 32 km from Velacruz towards Chaguarpamba. Seeds purple; 2 to 3 seeds per pod.

PI 628601. *Arachis hypogaea* L.

Landrace. TE-010; mani criollo; NGRL 316; Grif 14332. Collected 09/26/1999 in El Oro, Ecuador. Latitude 3° 46' 58" S. Longitude 80° 3' 49" W. Elevation 490 m. Canton Las Lajas; Localidad La Victoria. Seeds purple.

PI 628602. *Arachis hypogaea* L.

Landrace. TE-014; mani; NGRL 320; Grif 14336. Collected 09/27/1999 in Guayas, Ecuador. Latitude 2° 40' 38" S. Longitude 79° 37' 6" W. Elevation 125 m. Canton Naranjal, Localidad Naranjal. Seeds reddish.

PI 628603. *Arachis hypogaea* L.

Landrace. TE-015; Pepon; NGRL 321; Grif 14337. Collected 09/27/1999 in Guayas, Ecuador. Latitude 2° 38' 13" S. Longitude 80° 23' 16" W. Elevation 0 m. Canton General Villamil; Parroquia Posorja; Localidad General Villamil (Playas). Seeds mottled red and white; "caramelo" type.

PI 628604. *Arachis hypogaea* L.

Landrace. TE-016; mani; NGRL 322; Grif 14338. Collected 09/27/1999 in Guayas, Ecuador. Latitude 2° 13' 46" S. Longitude 80° 51' 32" W. Elevation 80 m. Canton Santa Elena; Localidad Santa Elena. Seeds reddish pink.

PI 628605. *Arachis hypogaea* L.

Landrace. TE-017; mani; NGRL 323; Grif 14339. Collected 09/28/1999 in Guayas, Ecuador. Latitude 1° 47' 55" S. Longitude 80° 45' 30" W. Elevation 0 m. Canton Santa Elena; Parroquia Manglaralto; Localidad Olon. Seeds red.

PI 628606. *Arachis hypogaea* L.

Landrace. TE-20; caramelo; NGRL 326; Grif 14342. Collected 09/28/1999 in Manabi, Ecuador. Latitude 1° 22' 29" S. Longitude 80° 37' 41" W. Elevation 210 m. Canton Jipijapa; Localidad Joa; 21.7 km from Puerto de Callo towards Joa. Seeds mottled white and red.

PI 628607. *Arachis hypogaea* L.

Landrace. TE-021; mani; NGRL 327; Grif 14343. Collected 09/28/1999 in

Manabi, Ecuador. Latitude 1° 21' 12" S. Longitude 80° 34' 47" W.
Elevation 295 m. Canton Jipijapa; Localidad Jipijapa. Seeds light
purple.

PI 628608. *Arachis hypogaea* L.

Landrace. TE-022; charapoto; NGRL 328; Grif 14344. Collected 09/28/1999
in Manabi, Ecuador. Latitude 1° 21' 12" S. Longitude 80° 34' 47"
W. Elevation 295 m. Canton Jipijapa; Localidad Jipijapa. Seeds dark
purple.

PI 628609. *Arachis hypogaea* L.

Landrace. TE-023; mani de confiteria; NGRL 329; Grif 14345. Collected
09/28/1999 in Manabi, Ecuador. Latitude 1° 40' 2" S. Longitude
80° 27' 35" W. Elevation 200 m. Canton Pajan; Parroquia Cascol;
Localidad Cascol. Seeds light pink.

PI 628610. *Arachis hypogaea* L.

Landrace. TE-024; mani morado; NGRL 330; Grif 14346. Collected
09/28/1999 in Guayas, Ecuador. Latitude 1° 49' 2" S. Longitude
80° 14' 2" W. Elevation 90 m. Canton Pedro Carbo; Localidad Pedro
Carbo. Seeds purple.

PI 628611. *Arachis hypogaea* L.

Landrace. TE-026; mani pepon; NGRL 332; Grif 14348. Collected 09/28/1999
in Guayas, Ecuador. Latitude 1° 49' 2" S. Longitude 80° 14' 2"
W. Elevation 90 m. Canton Pedro Carbo; Localidad Pedro Carbo. Seeds
pink.

PI 628612. *Arachis hypogaea* L.

Landrace. TE-034; mani; NGRL 340; Grif 14356. Collected 09/30/1999 in
Esmeraldas, Ecuador. Latitude 0° 58' 6" N. Longitude 79° 39' 8"
W. Elevation 30 m. Canton Esmeraldas; Localidad Esmeraldas. Seeds light
brown.

PI 628613. *Arachis hypogaea* L.

Landrace. TE-035; mani pepon; NGRL 341; Grif 14357. Collected 09/30/1999
in Esmeraldas, Ecuador. Latitude 0° 58' 6" N. Longitude 79° 39'
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628088-628094, 628097-628107, 628109-628130, 628132-628169, 628171,
628175-628182, 628184, 628187-628224, 628226-628236, 628240-628242,
628246-628260, 628268, 628343-628344, 628363)

Triticum aestivum subsp. *spelta* (615233-615320)

Triticum sp. (625148, 625320, 625842, 625856, 626352, 626616, 626618, 626646,
627370, 627479, 627595, 627970, 627980, 628019, 628131, 628174)

Triticum turgidum subsp. *dicoccon* (624903-624904, 624908, 626391, 626468)

Triticum turgidum subsp. *durum* (620885, 620888, 620890-620892, 620900-620901,
620907, 620909-620910, 620912, 620915, 620921-620924, 620930, 620945,
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621370-621371, 621373, 621375, 621377-621381, 621410, 621414-621418,
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621505-621509, 621512-621517, 621519, 621521-621535, 621554, 621564,
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621598-621600, 621602, 621605, 621607-621609, 621611, 621620,
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622051-622052, 622070, 622075-622076, 622086-622097, 622100,
622102-622104, 622178, 622213, 622230, 622240, 622261, 622263, 622358,
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623292, 623297, 623341, 623388, 623461-623462, 623465-623466,
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628237-628239, 628243-628245, 628261-628267, 628269-628270,
628368-628369)

Triticum turgidum subsp. *turanicum* (623629, 623641, 623656, 624207-624209,
624217, 624420-624422, 624429, 624892-624893, 625164, 625187, 625189,
625214, 625401, 627211)

Triticum turgidum subsp. *turgidum* (620943-620944, 620972-620973,
623927-623928, 623956, 624057, 624457, 624691, 624726-624727, 628173)

Vaccinium angustifolium (618170, 618229-618230)

Vaccinium arboreum (618088, 618118-618120)

Vaccinium arctostaphylos (618127)

Vaccinium boreale (618159)

Vaccinium cespitosum (618080, 618101, 618216)

Vaccinium chunii (618190)

Vaccinium corymbodendron (618122-618123)

Vaccinium corymbosum (618023-618024, 618032-618035, 618065, 618097-618100,
618116, 618147, 618151-618154, 618163, 618166, 618168, 618181, 618262)

Vaccinium crassifolium (618186, 618267)

Vaccinium cylindraceum (618121, 618215)

Vaccinium darrowii (618125)

Vaccinium delavayi (618257)

Vaccinium deliciosum (618217-618218, 618238-618239, 618243)

Vaccinium dependens (618148)

Vaccinium elliottii (618183)

Vaccinium floribundum (618263-618265)

Vaccinium hybrid (618066-618071, 618117, 618161-618162, 618164-618165, 618167, 618192-618195, 618207, 618232-618235, 618259-618261, 618270-618271)
Vaccinium koreanum (618160)
Vaccinium macrocarpon (618009, 618012-618016, 618018, 618020, 618022, 618025-618030, 618039-618064, 618086, 618114, 618145, 618171, 618231)
Vaccinium membranaceum (618197, 618204-618205, 618219-618221, 618237, 618240-618242, 618244, 618247, 618252, 618268)
Vaccinium moupinense (618258)
Vaccinium myrtilloides (618269)
Vaccinium myrtilillus (618077, 618085, 618096, 618144, 618209-618212)
Vaccinium neilgherrense (618082)
Vaccinium oldhamii (618182)
Vaccinium ovalifolium (618074, 618102, 618146, 618198-618199, 618222-618226, 618236, 618266)
Vaccinium ovatum (618200-618203, 618245-618246)
Vaccinium oxycoccos (618017, 618019, 618021, 618036-618038, 618087, 618103-618104, 618206, 618208, 618213-618214)
Vaccinium padifolium (618126, 618175)
Vaccinium pallidum (618188)
Vaccinium parvifolium (618174, 618180)
Vaccinium praestans (618075)
Vaccinium reticulatum (618078, 618083)
Vaccinium retusum (618076)
Vaccinium scoparium (618227, 618250)
Vaccinium simulatum (618115)
Vaccinium sp. (618007, 618072, 618081, 618142-618143, 618249)
Vaccinium stamineum (618124, 618155-618158, 618172-618173)
Vaccinium tenellum (618184-618185, 618187, 618189)
Vaccinium uliginosum (618079, 618105-618109, 618149, 618178, 618248, 618253-618256)
Vaccinium virgatum (618128-618141, 618169, 618251)
Vaccinium vitis-idaea (618008, 618010-618011, 618031, 618073, 618084, 618089-618095, 618110-618113, 618150, 618176-618177, 618179, 618196)
Vaccinium vitis-idaea subsp. minus (618228)
Vicia amoena (628330-628332)
Vicia articulata (628311)
Vicia costata (628302)
Vicia cracca (628328-628329)
Vicia ervilia (628280-628281, 628291-628298, 628300, 628310, 628320, 628322)
Vicia hirsuta (628303-628304)
Vicia michauxii (628301)
Vicia pannonica (628308)
Vicia sativa (628289-628290, 628299, 628305-628307, 628312, 628318-628319, 628325)
Vicia sativa subsp. amphicarpa (628313-628316)
Vicia sativa subsp. nigra (628282-628287, 628323-628324)
Vicia sativa subsp. sativa (628288)
Vicia villosa (619630, 628309, 628317, 628326-628327)
Vicia villosa subsp. varia (628321)
Vigna mungo var. mungo (619180-619181)
Vigna unguiculata (617097, 619432)
Vigna unguiculata subsp. sesquipedalis (615413)
Vigna unguiculata subsp. unguiculata (615171-615189)
X Triticosecale sp. (615414, 615529, 620762-620763)
Zea mays (615567, 619053)
Zea mays subsp. mays (615190, 615526, 615531, 615544, 618590-618594, 618810, 619054-619070, 619185-619189, 619193, 619403-619407, 619410,

619414-619417, 619420-619425, 619429-619431, 619435-619436,
619594-619597, 619600-619601, 620767-620868, 628333-628334,
628347-628350, 628370-628519)

Zea nicaraguensis (615697)

Zoysia japonica (619081)