

©2008 Native Seeds/SEARCH

Planting Man logo is a registered trademark of Native Seeds/SEARCH



#### **Board of Directors**

ChairBarney T. BurnsVice-chairRonald Austin WellsSecretarySusan KunzTreasurerJanos Wilder

Jacob Bernal, Mary Ann Clark, Mahina Drees, Lois Ellen Frank, Mary Irish, Robert Martin, Linda McKittrick, Pat Reid, Bob Sanderson, Bruce Symonds, David Tiers, Ofelia Zepeda

#### Mailing Address & Store Location:

**526 N. 4th Ave., Tucson, AZ 85705** Toll-free orders **866.622.5561** Fax orders **520.622.5591** 

Retail Hours (MST): Monday–Wednesday 10am–5pm Thursday–Saturday 10am–6pm Sunday 12pm–4pm; except: closed Sundays June–August

Mail Order Hours: Monday–Friday 9:30am–5:00pm or order online 24 hours/day

**Business Hours:** Monday–Friday 9am–5:00pm

For more information or to order online, visit our secure website at **www.nativeseeds.org** 

www.mativeseeus.org

or email info@nativeseeds.org

#### Help us get the word out:

Bulk quantities of this 2008 Seedlisting are available from Native Seeds/SEARCH at 30 cents each (or \$25 per 100). Minimum order 10 catalogs. Feel free to resell them for the \$1 cover price at nurseries, garden shops, crafts booths, general stores, bookstores, pow-wows, and other public events and places.

### Ancient Seeds for Modern Needs...

Native Seeds/SEARCH (Southwest Endangered Aridlands Resource Clearing House) conserves, distributes and documents the adapted and diverse varieties of agricultural seeds, their wild relatives and the role these seeds play in cultures of the American Southwest and northwest Mexico. We promote the use of these ancient crops and their wild relatives by gathering, safeguarding, and distributing their seeds to farming and gardening communities. We also work to preserve knowledge about their uses.

Join us in the important work of saving seeds and helping to preserve the crop heritage passed on to us by native peoples, settlers, and explorers of the Greater Southwest. Become involved in our efforts by joining or donating to Native Seeds/SEARCH. Members receive a 10% discount on purchases in our gift shop, catalog or online. In addition, members receive our quarterly newsletter, the Seedhead News. Each issue contains gardening tips, recipes, previews of workshops and other special events, book reviews and feature articles on our projects and crops. Please use the form on page 38 to join or give a gift membership.



#### Native Seeds/SEARCH Staff, 2008

SEATED, LEFT TO RIGHT Betsy Armstrong, Fulfillment Coordinator; Chris Lowen, Field Technician; Suzanne Nelson, Director of Conservation; Sandy Paris, Membership & Development Associate.

STANDING, LEFT TO RIGHT Diana Peel, Community Relations Coordinator; Carolyn Owens, Development Associate; Sanjeev Pandey, Conservation Technician; Julie Kornmeyer, Director of Distribution; Inga Simmonds, Bookkeeper; Chris Bertrand, Collections Assistant; Bryn Jones, Executive Director; Julie Evans, Director of Marketing & Operations; Crecencio Elenes, Conservation Farm Supervisor.

NOT PICTURED Alex Sando, Native American Program Coordinator; Kelly Johnson, Administrative Assistant; Jane Brown, Store Manager; Carolyn Hartzell, Production Specialist; Benito Gutierrez, Conservation Farm Operations Technician.

On our cover, clockwise from top left: **sunflower**, **wheat**, **watermelon**, **tomatillo**, **a variety of harvested beans**, **squash and chapalote**. See **pages 20–21 for more beautiful photos of our crops** *that you can grow! Photos courtesy NS/S staff*.

### Dear Seed Savers....

#### New this year! Check out our new catalog format!

This year marks our 25th anniversary — a good time to evaluate and reflect. As part of that process, we are trying a new format for our annual *Seedlisting*. For starters, you'll notice there are far fewer heirloom varieties listed this year. This does not mean we have far fewer items available. Instead, based on information from the past 3–5 years, we are using the printed *Seedlisting* to focus on the items that **you** seem to prefer. However, we still want to make available as many of our 'regular' varieties as possible, so we've made them available exclusively on our website (**www.nativeseeds.org**). Those items that are still available but **only** through the website are listed in shaded boxes throughout the *Seedlisting*. Thus, the website has all of the varieties available this year, while the *Seedlisting* has those most often requested.

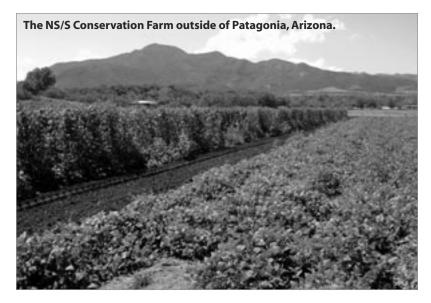
A second change in the *Seedlisting* this year involves the addition of a new symbol next to individual varieties. The



addition of a new symbol next to individual varieties. The ladybug identifies varieties as 'eco-friendly'. Eco-friendly refers to those varieties that we can guarantee were either grown without the use of any chemical pesticides or when pesticides were used, they are listed as organic by the OMRI (Organic Materials Research Institute) Products List. The OMRI list is "a directory of all products OMRI has determined are allowed for use in organic production, processing, and handling." In other words, certified or not, we only used products that would be acceptable in a certified organic system.

Obviously, it's the beginning of a new era for Native Seeds/SEARCH. It's been quite a ride over the first 25 years — lots of hard work, fun times and blessings of all manner and shape. From the beginning, your support has made the difference — something that we continue to look forward to in the next 25 years!

Blessings for a bountiful harvest! Suzanne





About Native Seeds/SEARCH...

About Mative Seeus/S	LANCI
About us	2
About this Seedlisting	4
Becoming a member	8
Gorgeous crop photos	20-21
Growing & seedsaving	5
Placing an order	37-38
Seed policy for	
Native Americans	7
The original seedsavers	7
Seeds	
Amaranth	12
Bean	13-17
Black-eyed Pea	17
Chile	18 & 23
Corn/Maize	24-26
Cotton	26
Devil's Claw	26
Garbanzo	27
Gourd	27-28
Greens	28
Herbs	28-29
Lentil	29
Melon	29-30
Okra	30
Onion	30
Panic Grass	31
Pea	31
Sorghum	31-32
Squash	32-34
Sunflower	34
Tobacco	34-35
Tomatillo & Tomato	35
Watermelon	35-36
Wheat	36
Wildflowers	36-37
Other goodies	
Books 6, 12	, 23
Foods 9-11, 19	9 & 22
Baking mixes	11
Beans	9
Chiles	9-10
Jams, Jellies & Syrups	19
Natural Body Care	22
NS/S accessories	39
	of

For a complete array of unique, handmade crafts, foods, books and gift items, please visit our website: www.nativeseeds.org

About this Seedlisting

Until May 1, 2008, all seed packets — except bulk — are \$2.75 each, when the price will go up to \$3.00 each. If a seed is available in bulk is price will be listed at the introduction of the seed's group (e.g., Chiles).

#### How to use this seedlisting

This catalog represents our continuing effort to offer and distribute seeds adapted to the desert environments within our region. You will find planting instructions provided for each crop. General guidelines have been developed for both low desert (<3500 ft.) and high desert (>3500 ft.) conditions, based on our experience in Tucson and at the Conservation Farm (4000 ft.).

In the low desert, summer rains come in July or early August, summer temperatures regularly exceed 100°F and remain high during the night, and planting for the cool season can be anytime from September to November. In the high desert, summer rains can begin in June, summer temperatures often reach 100°F but cool off considerably during the night, and planting for the cool season usually begins in February. For warm weather crops, the low desert has eight frost-free months, which include extremely hot and dry conditions. The Conservation Farm sits in a cold air drainage and has about six frost-free months. Gardeners in other climates will need to adjust their planting times. It is helpful to know your average last frost dates; ask experienced gardeners or the agricultural extension agent in your area. The visual keys (top right) are provided to guide your selection of crops that have been grown successfully in the low desert, high desert or both.

We are not sure how crops will do outside their area of origin, but we regularly send seeds to gardeners across the U.S. Please write to us about your successes and failures.

#### **Our Seed Policy**

When placing an order for seeds, please remember that Native Seeds/

SEARCH is a non-profit conservation organization, not a commercial seed company. We have a limited quantity of some seeds. Because of high demand, we must limit orders to six packets of each variety. An order, for example, may include up to six packets of Cochiti Popcorn, six packets of Hopi Red Watermelon and so on. Group exceptions can be considered. Please contact us at 520.622.5561 or our toll-free order line at 866.622.5561. We have a special seed policy for Native American farmers and gardeners (see page 7). On occasion it may be necessary to substitute seed due to lack of availability.

We encourage everyone to grow and keep pure seed lines and to contribute surplus seeds to fellow gardeners. Be aware that some plants cross-pollinate, which should be a concern for gardeners who wish to save seed (see pages 5–6).

All Native Seeds/SEARCH seeds offered here have passed germination tests. Most of them are hand cleaned and naturally grown. They are not treated. They are stored in cool dry conditions. Freezing is the only method of pest control.

#### Safe Seed Pledge

Along with more than 80 seed companies, both large and small, NS/S is a member of the Safe Seed Initiative, urging a cautious stance regarding genetically engineered (GE) seeds and promoting alternatives to GE seeds for interested consumers. The Safe Seed Pledge is as follows:

"Agriculture and seeds provide the basis upon which our lives depend. We must protect this foundation as a safe and genetically stable source for future generations. For the benefit of



all farmers, gardeners and consumers who want an alternative, we pledge that we do not knowingly buy or sell genetically engineered seeds or plants. The mechanical transfer of genetic material outside of natural reproductive methods and between genera, families or kingdoms, poses great biological risks as well as economic, political, and cultural threats. We feel that genetically engineered varieties have been insufficiently tested prior to public release. More research and testing are necessary to further assess the potential risks of genetically engineered seeds. Further, we wish to support agricultural progress that leads to healthier soils, genetically diverse agricultural ecosystems and ultimately people and communities."

For more information, please contact The Safe Seed Initiative, c/o Council for Responsible Genetics, 5 Upland Road, Suite 3, Cambridge, MA 02140; phone 617.868.0870; www.gene-watch.org.

## About the seeds we steward...

#### Is our seed "hybrid"?

No and yes. No, our seeds are not "hybrid" in the sense of being produced through controlled pollination — often with highly inbred lines — by modern plant breeders, typically for large-scale high-input agricultural production systems. However, hybridization the crossing of genetically distinct parents, both within and between populations, varieties, and species has been important in the evolution of crop diversity. It is a natural process, resulting from open-

# About this Seedlisting continued

pollination, and one that farmers have often used to their advantage. Thus, hybridization is likely reflected in the genetic make-up of much of our seed, making them "hybrids."

The seeds we offer in our catalog and store were all originally collected from subsistence and small-scale farmers and gardeners. These are the food crops that have sustained traditional communities for decades to millennia. They have been selected and nourished by farmers over generations, becoming adapted to local environmental conditions and cropping systems, and their individual flavors, odors, and textures have infused local culinary and ceremonial practices. They are the result of much open-pollination, hybridization, and subsequent selection (both natural

and human-imposed). We celebrate this diversity!

#### Is our seed "organic"?

Our Conservation Farm is not yet certified organic, thus none of the seed we currently grow can be labeled as 'organic'. However, our first method of insect/disease control utilizes products acceptable for use in organic production systems (as listed on the Organic Materials Research List). If these do not provide sufficient remedy, limited and targeted use of some chemicals is allowed under our Integrated Pest Management strategy, to ensure we can maintain these precious seed varieties. Thus, we may occasionally use insecticides or herbicides not approved for organic systems.

We use no nitrogen-based commercial fertilizers relying instead on cover crops, green manures and crop rotations to maintain or improve soil fertility. We are committed to the ecologically-sound stewardship of the Conservation Farm, i.e., managing its soil, water, insect and plant resources in a manner that is rooted in the understanding and application of sound ecological principles. It would not be consistent with our long-term stewardship role to act in a manner that pollutes the water we use to irrigate our crops, or destroys pollinators, beneficial insects or soil microorganisms that provide essential ecosystem services. We seek to leave a small and unobtrusive footprint while stewarding these precious resources.

Growing & Seedsaving Information

Please write to us about your experience, including days to maturity, with any of the crops in this Seedlisting.

#### **Growing healthy seed**

Plant healthy, non-diseased seed. Thin plants to a recommended distance within and between rows most plants simply do better with a little breathing room and good aircirculation can help prevent disease (see individual crops for recommended planting distances). Rogue (remove) plants that are diseased or otherwise unhealthy looking. If you're trying to keep pure seed lines, also rogue out plants that don't appear true-to-type (what you know the plant to look like).

#### **Keeping lines pure**

Growing more than one variety of the same species at a time may result in crossing. Planting the seeds from crosses may produce something entirely different than you're expecting — which is how we got all this wonderful diversity to begin with! However, if you want to get the same crop you did last year, then you may need to prevent cross-pollination from occurring. There are several ways to do this:

**Spacing**. Plant different varieties at a suitable distance to ensure insects or wind cannot effectively carry pollen from one variety to another. See page 6 for recommended standard distances for some crops.

**Timing**. Plant different varieties of the same species at different times so that they are not flowering at the same time. This may involve an early and late planting. Be sure there is enough time at the end of the season for the late planting to mature before the first frost.

**Isolation cages**. Physically prevent insects from visiting one variety or another by constructing screen cages and placing them over one or more varieties. This is best used for nonsprawling crops, such as tomatoes, beans (they can cross-pollinate if insects are abundant), okra, cotton, and chiles. Hand-pollinating. Manually transfer pollen from one flower to another. Hand pollination will differ depending on the crop but essentially you want to be sure that neither the flower being pollinated nor the one used as the pollen source have been previously pollinated.

#### Days to maturity

If you are accustomed to seed catalogs that provide the number of days to maturity for their seeds, you may wonder why we do not provide this data for many of the seeds offered here. Although the number of days can be a guide for selecting varieties suitable to your area, seed companies publish an average number of growing days, using data from different areas and conditions. For example, a 75-day bean may mature in 65 days in California, 85 days in Maine, and 79 days in Missouri.

We do not list days to maturity because we often don't have reliable

# Growing & Seedsaving Information continued

information. Some of our varieties are from isolated regions with varied microclimates. Moreover, many of our crops reach maturity in different lengths of time, depending on when they are planted- e.g., in the spring or with the summer rains.

#### Harvesting

Let seeds mature before harvesting. For most crops, this means leaving them in the field to dry — corn, beans, gourds, okra, devil's claw, peas, chiles, etc. Some crops require after-ripening (e.g., squash) or fermentation (tomatoes).

#### **Cleaning & saving seeds**

Remove all plant material, including chaff, stems, or flesh from seeds and allow to dry thoroughly. Use sealable plastic bags, paper envelopes, jars with good lids or any airtight container to store seed from one year to the next. Spread wet seeds from

A good reference, easy to read and understand, on seed saving and hand pollination is *Seed to Seed* by Suzanne Ashworth.

PB348. Seed to Seed: Seed Saving and Growing Techniques for Vegetable Gardeners by Suzanne Ashworth. This book is a complete seed-

saving guide for 160 vegetable crops, with detailed information about each vegetable, including the botanical classification, flower structure and means of pollination, isolation distance, the need for caging or hand-pollination, and proper methods for harvesting, drying, cleaning, and storing the seeds. Paper 228pp **\$24.95**  squash, melons, tomatoes, etc., on clean dish towels. We do not recommend paper towels (they stick) or newspaper (toxic print). Store seeds in a cool, dry place, such as your hall closet or freezer.

#### Recommended distances to prevent crossing between varieties of species

Appropriate distances to keep between varieties of the same species may vary, depending on the source. In general, wind pollinated crops (e.g., corn) and crops visited by insect

**20-500 ft.** Basil (150 ft.) Beans (20 ft.) Peas (300 ft.), Peppers (500 ft.) 1/2 mile Devil's claw Garbanzo Melons Mustards Scarlet runner beans Squash Sunflower

pollinators capable of traveling some distance (e.g., carpenter bees, honeybees) should be grown a mile or more apart from each other. Selfpollinated crops (e.g., beans) may require as little as 20 ft., depending on what's grown in-between or the abundance of insect pollinators present (the more insects, the more likely pollen may find it's way from one plant to another). The following recommended distances are guidelines for producing pure seed when planting more than one variety of the same species at the same time.

#### 1 or more miles

Amaranth (non-selfing) Corn Fava Gourds Lima beans Okra Tobacco



**PB547. Rainwater Harvesting for Drylands, Volumne I: Guiding Principles to Welcome Rain** by Brad Lancaster. Turn water scarcity into water abundance! This book is the core on how to conceptualize, design, and implement sustainable water-harvesting systems for your home, landscape, and community. This book enables you to assess your on-site resources, gives you a diverse array of strategies to maximize their potential, and empowers you with guiding principles to create an

integrated, multi-functional water-harvesting plan specific to your site and needs. Clearly written with more than 150 illustrations, this volume helps bring your site to life, reduce your cost of living, endow you with skills of self-reliance, and create living air conditioners of vegetation growing beauty, food, and wildlife habitat. Stories of people who are successfully welcoming rain into their life and landscape will invite you to do the same! 183 pp Paper. **\$24.95** 

PB706. Rainwater Harvesting for Drylands and Beyond, Volume 2: Water-Harvesting Earthworks by Brad Lancaster. This second volume, available April 1, 2008, shows you how to plant rain, storm water runoff, and greywater in the soil to sustainably grow beauty, food, shelter, wildlife habitat, and passive heating and cooling, while controlling erosion, increasing soil fertility, reducing downstream flooding, and improving water and air quality. 420 pp with over 460 photographs and illustrations, index, glossary, appendices. Paper. **\$32.95** 



# Seed Policy for Native American Peoples

Native Seeds/SEARCH offers free membership and free seeds, in limited quantities, to Native peoples living in the Greater Southwest region (see map). A Native American living in the Greater Southwest does not have to be an NS/S member to receive free seeds.

**When ordering seeds...** Please check the information in the "Culture" and "Seedsaving" sections under each crop heading in the *Seedlisting* and as well as on pages 4–6 to help with your seed selection. Fill out the order form on page 36 and make certain to identify your tribal affiliation. Please, only one order form per household. Paying the shipping charges for your order would be appreciated. Call us if you need assistance: 520.622.5561 or toll-free at 866.622.5561.

For Native Americans living in the Greater Southwest region or belonging to tribes within the Southwest Region... Free seed on up to 30 regular-price packets; additional seed can be purchased at half price — \$1.50 per packet. Group exceptions may be considered. Please contact us and we will do our best to meet your needs.

**For Native Americans living outside of the Greater Southwest region...** Half-price seed on up to 30 regularprice packets; additional packets can be purchased at regular price.



 $\infty$  Bulk seeds, as available, are offered at half price to Native peoples.  $\infty$ 

The Original Seedsavers

The Sonoran Desert has been home to the O'odham people for centuries. Following in the footsteps of their ancestors, they perfected a system of agriculture — including a palette of crops — suited to the high temperatures and minimal rainfall characteristic of the region. As late as 1925 the Tohono O'odham were cultivating 10,000 acres of their aridland-adapted crops with traditional floodwater methods. In the early 1980s, only a few scattered plots remained. Recognition of this dramatic loss in availability of crops adapted to the harsh environmental conditions of the region resulted in the establishment of Native Seeds/SEARCH (Southwestern Endangered Aridlands Resource

Clearing House) as a regionally-based seed conservation organization.

Early efforts focused primarily on visiting indigenous farming communities in the southwestern US and northwestern Mexico. particularly the Sierra Madre, locating seeds of heirloom crops and making them available to indigenous and other gardeners and farmers. Today, NS/S is a major regional seed bank, dedicated to conserving the seeds of domesticated crops and wild crop relatives utilized by the cultures whose homelands include the arid deserts, coastal deltas, lowland plains, bajadas (lower slopes) and high mountain plateaus comprising the southwestern U.S. and northern

Mexico. Our seed bank maintains more than 1800 different collections representative of traditional crops grown by Apache, Akimel O'odham, Chemehuevi, Cocopah, Guarijio, Havasupai, Hopi, Maricopa, Mayo, Mestizo, Mexican, Mexican-American, Mojave, Mormon, Mountain Pima, Navajo, Paiute, Puebloan, Spanish missionaries and explorers, Tarahumara, Tohono O'odham, Yoeme, and other early inhabitants within the region.

We are grateful for and indebted to these original seedsavers for their contributions in developing and passing on the agricultural biodiversity of our region.

#### ed at half price to Native peoples. $\infty$ ordered of

#### Free seed can now be ordered on our website!



# Sow the Seeds of Conservation

Join Native Seeds/SEARCH, renew your membership, or, give a gift membership and contribute to our work conserving, distributing, and documenting the adapted and diverse varieties of agricultural seeds, their wild relatives and the role these seeds play in cultures of the American Southwest and northwest Mexico.

**Join**, **renew**, or **give** online at **www.nativeseeds.org**, or, fill out the form and mail with payment to Native Seeds/SEARCH, 526 N. Fourth Avenue, Tucson, AZ 85705.

ADDRESS

CITY / STATE / ZIP CODE

EMAIL

PHONE

ACKNOWLEDGEMENT MESSAGE:

### **Payment method**

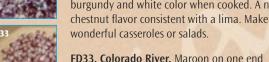
⊖ Check	$\bigcirc$ Money order	$\bigcirc$ Visa	$\bigcirc$ MasterCard	O Discover/Novus
Card no.:				Exp.: /
Cardholder	signature:			

Availability of many of our food products fluctuate with the seasons. For the most up-to date information please check our website, www.nativeseeds.org or call 866-622-5561.



**FD60.** Anasazi<sup>™</sup>. Beautiful maroon and white mottled Jacob's cattle bean. Cooks quickly with a creamy texture and rich flavor. Great in soups and stews, may cook a bit more quickly than other beans.





and stews, may cook a bit more quickly than other beans. FD220. Christmas Lima. This heirloom bean was popular in the early 1900s. They retain their burgundy and white color when cooked. A nutty,

**FD33. Colorado River.** Maroon on one end fading to cream with maroon flecks on the other end. These yummy beans are very adaptable in the garden and kitchen. A staff favorite.

**FD201. Flor de Mayo.** Soft lavender color with cream accents, this is a unique and tasty heirloom bean from Mexico, where it may be called Flor de Junio too.

**FD62. Four Corners Gold.** A rich gold colored bean mottled with a little white, originate in the four corners area. Cooks quickly.



ED62

FD202. Maicoba. Lovely shades of yellow, gold and beige tint these yummy Mexican beans.

**FD72. Ojo de Cabra.** "Eye of the Goat." Favorite in Baja California. Stays firm and richly colored after cooking, with a smooth texture and sweet flavor.

**FD2. Runner Cannellini.** Perfect for minestrone, this classic Italian bean was first grown in this country in the 1820s. This bean has a nutty flavor and is delicious either eaten hot or in a cold, creamy salad.

FD61B. Tepary, Brown. A delicious nutty flavor and firm texture recommend this drought-adapted desert domesticate. Use to make a wonderful salad or paté.

FD61W. Tepary, White. These preferred beans of the Tohono O'odham people, who reside in the Tucson region, have a slightly

sweet flavor. A firm texture makes them wonderful in salads or stews.

**FD117. Yellow Indian Woman.** Originally brought to Montana by a Swedish family, the Yellow Indian Woman Bean is a rare heirloom bean that is now found in Native American communities in Montana. When cooked, it is creamy and resembles the flavor of Pinto and

Black beans. It is ideal for slow-cooked dishes.









**FD105.** Southwest Heirloom Bean Soup Mix. Five varieties of our beans, organic red and green lentils, organic pearl barley, Mexican oregano, a bay leaf and a red chile are packed with an included recipe so anyone outside of Tucson can enjoy NS/S own specialty mix. Enjoy on a cool fall or winter day. \$7/lb



# Whole Chiles

**FD607. Aji Amarillo.** Yellow chiles are from South America, predominantly Peru. This beautiful chile is quite hot with a slightly fruity flavor. Great for use in salsa, ceviche, sauces or pickled. 1.5oz pkg **\$2.50** 

**FD72.** Ancho. "Ancho" means wide and this chile can be 3" across at the shoulders. Called poblano in the fresh stage, this is a mild chile used in sauces, particularly moles. 1.50z pkg **\$2.50** 

**FD150. Catarina.** A pungent chile with flavor tones of wild berry and tobacco. Ideal in salsas, soups, and especially great in tamales. Mild heat level. 1.5oz pkg **\$2.50** 

**FD66. Chipotle Meca.** Dried smoked jalapeño chiles. Soak and blend for delicious salsa. Add to beans for vegetarian barbecue flavor. 1.5oz pkg **\$2.50** 

FD65. Chipotle Morita. These dark purple-red smoked jalapeños come from the state of Chihuahua in Mexico and are said to be smoked longer than the brown chipotles. Mild to medium hot. 1.502 pkg **\$2.50** 

FD107. Costeño Rojo. These shiny red chiles with a subtle heat are used primarily in red moles. 1.5oz pkg **\$2.50** 

**FD106. Del Arbol.** This "tree chile" is a long, thin, red, pungent chile used for salsa, usually very hot. 1.50z pkg **\$2.50**  **FD81. Guajillo.** Called mirasol "looking at the sun" in the green stage, this chile has a smooth, earthy flavor. A favorite for enchilada sauce. Medium Hot. 1.50z pkg **\$2.50** 

**FD99. Mulato.** This long (4–5 inch) dark brown Chile is a type of dried Poblano. It has a light fruity nuance and a much more pronounced smoky character than its relative, the Ancho. The quintessential mole chile.

1.5oz pkg \$2.50

**FD110. Negro Pasilla.** Chile pasilla in western Mexico is sometimes called chile negro. Adds an interesting taste and color to standard red chile enchilada sauce. 1.5oz pkg **\$2.50** 

**FD88. Pasilla de Oaxaca.** Only found in the Oaxaca region, this smoky, dark red chile has a pungent fruit flavor. Excellent with beans and posole. 1.50z pkg **\$4.50** 

Beans All beans are 1 lb. for \$4 Our chiles are packed in either glass bottles or sealed plastic bags. Please specify size or heat where necessary!!

**FD93. Ancho.** A mild, sweet earthy taste, this powder is used mostly in sauces. particularly moles. Very versatile. 2oz bottle **\$3.50** 4oz pkg **\$4.50** 

**FD78. Chimayo.** This flavorful medium-hot chile originated in the New Mexico village of Chimayo. 6oz pkg **\$6** 

**FD76. Del Arbol.** For a truly spicy red chile use the fiery powder from this pungent little chile. 2oz bottle **\$3.50** 4oz pkg **\$4.50** 

**FD87. Guajillo** (*wha-hee-oh*). Called mirasol, "looking at the sun," in the green stage. Flavor is distinct, slightly fruity with a strong piney berry under taste. Used to both flavor and color dishes. Deep brick red color. Preferred by many chefs. Mildly hot. 2oz bottle **\$3.50** 4oz pkg **\$4.50** 

**FD100. Habanero.** This powder is the hottest of the hot. Behind the heat is a fruity flavor that makes these chiles a wonderful way to spark up a dish — but can be used sparingly. You might want to open a window before opening the packet. 20z bottle **\$5** 40z pkg **\$8** 

FD10. Hatch. From the chile capitol of the world, Hatch, New Mexico. Made from the finest red varieties.
A. Mild or B. Hot (*If not specified, we will send mild.*) 20z bottle \$3.50 40z pkg \$4.50

FD29. Jalapeño. For the chile head and the brave, this fiery green powder comes from the intense Jalapeño pepper.20z bottle \$3.50 40z pkg \$4.50

**FD109. Negro Pasilla.** This pasilla has a rich, complex, deep, smoky, herbal, raisin flavor. Used in a variety of dishes, including moles. 2oz bottle **\$3.50** 4oz pkg **\$4.50** 

FD75. Santa Cruz. Grown in Tumacacori, Arizona within sight of our Wild Chile Botanical Reserve from chile varieties unique to Santa Cruz. 2oz bottle \$3.50 4oz pkg \$4.50
A. Mild or B. Hot (*If not specified, we will send mild.*)

**FD20. Chiltepines.** These wild chiles are small, round and very fiery. Crumble 4-5 in hot stir-fry, chili, or anything you want to spice up. A tasty surprise in ice cream! Picked by community members of a small village in the Sierra Madre Mountains of Sonora, Mexico. 1oz bottle **\$5** 

**FD83. Chipotle Chile Flakes.** Great sprinkled on vegetables or pizza or simmered with a pot of your favorite beans. Produced by grinding whole chipotles. Try adding them to favorite cookie or muffin mix for a fiery twist.

2oz bottle \$3.50 4oz pkg \$4.50

FD22. Chipotle Chile Powder. Smoked jalapeños ground into a powder. Heavenly aroma and flavor. Medium hot.20z bottle \$3.50 40z pkg \$4.50

New! FD639. Hot Green Flakes. These chiles are from hot green chiles from New Mexico that are roasted, dried and crushed to produce a very spicy flake. Sprinkle onto a hot or cold dish for a little flare!! 20z pkg only! \$2.50

# Chile Powders & Flakes







These incredible blends of flavor are just what your kitchen needs to easily bring the unique flavors of the Southwest to your cooking. Mole usually refers to a sublime blend of chiles, spices and fruits to make a sauce served over chicken, fish or perhaps, iguana. *Please specify size and price:* 

A. 2oz refillable tin \$8 or B. 4oz bag \$12

**FD137. Verde.** This one contains: pumpkin seed (green), sesame seed, green chiles, cilantro, salt, garlic, spices, onion, parsley, and epazote.

**FD141. Dulce.** Mexican chocolate (sugar, cacao nibs, soy lecithin, cinnamon flavor), raisins, chile, almonds, corn tortilla meal, banana, graham crackers, spices, mexican brown sugar, salt, garlic and onion.

**FD140.** Adobo. Chiles, sesame seed, spices, garlic, corn tortilla meal, mexican brown sugar, onion, salt and mexican oregano.

**FD139. Pipian rojo.** This blend contains: chile, pumpkin seed, almonds, corn tortilla meal, spices, mexican brown sugar, salt, garlic, sesame seed and onion.



**FD40. Mexican Oregano.** Gathered in Sonora, Mexico, these oregano flakes come from a different family than their European counterpart, and they lend dishes a subtle, sweeter flavor. Unlike Mediterranean oregano, Mexican oregano is best if used dry. 1/4oz jar **\$3.50** 

**FD59. Mrs Burns' Lemon Basil.** This incredibly drought-adapted variety of Basil is derived from strains originally brought from Asia. These dried and crushed leaves will impart a deliciously lemony flavor to all your favorite dishes. 1/4oz jar **\$3.50** 





JM2. Bluecorn Blueberry Scone Mix. Made with organic blue cornmeal, organic wheat flour, organic evaporated cane juice, dried blueberries, plus... these delicious, purple/blue scones are low fat with no cholesterol. 12oz **\$7.50** 

JM18. Blue Corn Amaranth Baking Mix

(Pancakes, Crepes or Cornbread). A delicious blend of organic blue cornmeal, organic amaranth and organic evaporated cane juice. No Wheat Flour! This deep blue mix has excellent blue cornmeal flavor laced with a nutty amaranth taste. Includes recipes for coffee cake, savory dinner pancakes and peach citrus crepe filling. 10oz **\$7.50** 

JM3. Blue Corn Poppy Seed Cookies. These crisp, buttery cookies full of poppy seeds have a unique and delightful blue corn flavor, are easy to make and sure to please everyone. 12oz **\$7.50** 

JM4. Chile Chocolate Brownie Mix. Made with premium ground chocolate and cocoa with flavorful chile powder and spices, these easy to make chocolaty brownies laced with chile practically melt in your mouth. 12oz **\$7.50** 

JM20. Chocolate Spice Pancake/Crepe Mix. A delectable blend of premium ground chocolate and cocoa, wheat flour and sugar laced with a hint of spices and a pinch of chile. Delightful with fresh berries and whipped cream or fruit syrups. 10oz **\$7.50** 

JM19. Fiery Habanero Brownie Mix. Hot but not too hot. Made with premium ground chocolate and cocoa, wheat flour and sugar with a hint of chile powder and spices. These easy to make chocolaty brownies, lightly laced with chile, practically melt in your mouth. 12oz **\$7.50** 

#### Native Seed/SEARCH's delicious and versatile baking mixes and hot chocolates will satisfy cravings for the spicy or sweet.

All you need are a few common kitchen ingredients to serve up delightful breakfast or dessert treats. Mixes make one dozen pieces or use a 9" square pan; the 80z. hot chocolate makes 8-10 cups and the 40z. makes 4-5 cups.

JM13. Golden Mesquite Cookie Mix. Used for centuries as a staple food for many desert peoples, we are

once again discovering the delicious and nutritious nature of the mesquite. A special, naturally sweet treat. 10oz **\$7.50** 

JM16. Golden Mesquite Pancake Mix. Mesquite meal, long a staple in the southwest desert, comes to your table in a delicious breakfast form. Delicious with butter and syrup, jam or fruit. 10oz \$7.50

JM6.Mesquite Poppy Seed Scone Mix. Made with mesquite meal from pods of the desert mesquite tree for an unusual, caramel like nutty flavor, these scones are cholesterol free, low fat and incredibly tasty.Mesquite meal is good for diabetics as it helps regulate blood sugar. Its natural sweetness also helps lower the sugar content in desserts. 10oz **\$7.50** 

JM14. Sky Blue Muffin. These fluffy blue corn muffins are made with the best organic blue cornmeal. Their lovely color and light corn flavor make for an excellent addition to any meal. 10oz \$7.50



**FD311. Desert Mint White Sage Tea.** A refreshing blend of peppermint and white sage make for a calming, aromatic tea to soothe away the cares of the day. 8 bags **\$3.50** 

FD601. Ho'Hoysi or Hopi Tea. (*Thelesperma* sp.) Grown on the Colorado plateau and long used by the Hopi to make a tea reputed to have "blood-cleansing" properties. Also used as a dye to produce vibrant orangeyellow. 1.5oz pkg \$4

**FD135. Jamaica.** *Hibiscus* spp. This delicious fruity herb makes a deliciously refreshing drink hot or cold. Wonderful with a squeeze of lime and a dash of sweetening. 20z pkg **\$4** 

JM21. Southwest Pancake Sampler. Three 5oz. bags, one each of Blue Corn Amaranth, Golden Mesquite and Chocolate Spice pancakes here for your sampling pleasure. Top with prickly pear or perhaps chocolate Habanero sauce. 15oz \$11

JM10. Sweet Chipotle Chile Scone Mix. A mouth-watering scone that is both sweet and hot. Perfect with butter or jam, it's also especially good with jalapeño jelly! 12oz \$7

JM11. Spicy Chile Hot Chocolate Mix. A delicious blend of ground chocolate, cocoa, sugar, chile powder and spices for that cold winter night. Also good chilled for a refreshing warm weather drink. 40z \$5.50 80z \$7

JM12. Habanero Hot Chocolate Mix. A delicious, fiery blend of ground chocolate, cocoa, habanero chile powder, sugar and spices. Sip carefully at first to gauge the heat of this drink. 40z \$5.50 80z \$7

FD312. Pomegranate Cranberry. A refreshing blend of rose hips, rose leaves, cranberries, lemon peel, pomegranate. aromatic tea to soothe away the cares of the day. 8 bags \$3.50

FD320. Prickly Pear Cactus Tea. Rosehips, rose leaves, rose petals and prickly pear meld into another desert treat. 8 bags \$3.50

**FD310. Saguaro Blossom Cactus Tea.** Rosehips, rose leaves, strawberries and Saguaro cactus fruit blended in a caffeine-free treat. A unique taste of the southwest. 8 bags **\$3.50** 



### Amaranth

Amaranthus spp.

Grown by the Aztecs and by Southwest Indians for millennia, the small grain is rich in lysine and the young leaves are high in calcium and iron. Approx. 1gm/packet.

#### **Culture:**

Plant in spring or with summer rains by broadcasting and raking in seeds, or plant 1/4 inch deep in basins or rows. Thin the edible seedlings to 10-15" apart.

Seedsaving: As wind- or insectpollinated annuals, amaranth species will readily cross. To prevent this, put paper or cloth bags over flower heads. When ripe, cut off dried heads and lightly beat in a bag to remove seed. Screen or winnow off chaff.

Bulk quantities available for \$7 (14gms)

### Cooking with Amaranth

Leaves: All amaranth leaves can be eaten as raw or cooked greens when small, but some are more palatable. Try mixing the leaves with other greens for a colorful salad.

Grain: Cleaned seeds can be cooked whole as a hot cereal or ground finely in a mill or blender and added to your favorite recipe. Replace the amount of flour called for with one part amaranth flour to three or four parts wheat flour.

Popped: Heat an ungreased steel wok or cast iron skillet over mediumhigh heat. Pour in 1 tablespoon amaranth seeds, and keep them moving with a brush or spoon to prevent burning. As soon as the popping stops, empty the pan. If seeds don't pop well, sprinkle them lightly with water, and try again later when they've had time to absorb the moisture.

C8. Alegria. A. cruentus. Produces blond seed typically used for a traditional confection, alegria, which is made with popped seed and honey in central Mexico.

#### 🕂 🔟 C5. Guarijio Grain. A. hypochondriacus x A. hybridus. "Guegui." From the Rio Mayo in Sonora, Mexico, a white-seeded grain used for tamales, pinole or popping.

🖱 💷 C17. Guatemalan. A. cruentus. Originally collected in San Martin Jilotepeque, Guatemala. The leaves are green as are the "flowers" (bract), though occasional red inflorescences are also produced. Seeds are blond.

C2. Hopi Red Dye. A. cruentus. "Komo." The attractive plant can grow 6ft. tall with a 1-2ft. long scarlet inflorescence. The Hopi make a natural food dye from the flower bract to color "piki" bread. In Hopi land, this readily crosses with wild A. powelli. Black seeds are edible.

C13. Mano de Gato Celosia cristata. "Cat's Paw." Cockscomb-type of ornamental with bright magenta-colored flowers and black seeds. Leaves are bright green with red-tinged edges. From Alamos, Sonora, Mexico. See color photo page 20.

🕂 🛅 C10. Mano de Obispo. Celosia cristata. Also known as cockscomb, this ornamental decorates graves for Dia de los Muertos (All Souls Day) on November 2. Most flowers are vivid magenta, some golden. The black seed is edible.

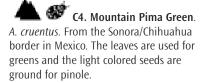
C16. Marbled. A. cruentus. Originally collected in the state of Morelos, Mexico in 1979. The inflorescences are predominantly red but marbled with green. The green leaves have light red venation.

🕂 🐼 🛅 C3. Mayo Grain. A. cruentus. A black-seeded variety from Sonora, Mexico, the leaves are used as quelites (greens). Seeds are used for esquite (parched), pinole and atole.





C18. Moenkopi Mix. A. cruentus x powellii. A possible cross with green leaves and inflorescences. Seeds are black. From Lower Moenkopi.



**C9. Paiute**. A. cruentus. From a garden on the Kaibab Southern Paiute Reservation in southern Utah. Edible seeds and leaves

### 🕂 🔞 💞 c7. Rio San Lorenzo. A.

*hypochondriacus*. From Durango, Mexico. The blond seed is used as a grain.



🕽 🖤 C15. Tarahumara

Okite. A. cruentus. Originally collected from a ranch above Batopilas, an old silver mining town stretched alongside the Rio Batopilas at the bottom of Barranca del Cobre. Black seeds with brilliant red flowers and stems. A showy ornamental but the seeds and young leaves can also be used as food. Approximately 4-6' tall when grown at the Conservation Farm.

PB602. Native Harvest: Authentic Southwestern Gardening by Kevin Dahl. Native Harvest highlights individual plant's cultural history and traditional uses, as well as providing easy-to-follow planting instructions. It's the best first step to your own authentic southwest garden. 64pp Paper \$7.95



### Bean

Phaseolus spp.

Native to the New World, beans are a traditional protein complement to corn, rich in minerals, with a variety of tastes and colors. Members of the legume family, beans fix nitrogen from the air if certain bacteria are present in the soil to infect the roots. Beans also contain soluble fiber helpful in controlling cholesterol and diabetes.

★ Indicates possible day-length sensitivity. Some beans, especially from the southern edges of our region (Sinaloa, Durango, Chihuahua, and southern Sonora) may have day-length requirements; that is, they may require decreasing day length and longer nights to initiate flowering. Because they originate in areas closer to the equator and where climatic cycles are different (dry and rainy seasons with no freezing temperatures), they may not produce seed in the U.S., especially in northern areas or in zones with early frosts. Please let us know how they grow for you.

#### **Common Bean**

Phaseolus vulgaris

Common beans are a diverse and important crop to Native American farmers throughout the Southwest. They are eaten young as green beans or dried and shelled. Plants can be bush, semi-pole, or pole. Approx. 15-28gms/packet, depending on seed size.

**Culture:** Beans need warm soil for best germination. Plant seeds in spring or summer about 1 inch deep and 6 inches apart or in basins. Semi-pole and pole varieties will benefit from a trellis —try intercropping them with corn or sorghum. Overwatering will cause "chlorosis," yellowing in young leaves due to nutrient deficiencies.

**Seedsaving:** An annual that is generally self-pollinating, but can cross with other common bean varieties. Dried pods can be harvested throughout the growing season, or harvest whole plants as described for teparies. Separate varieties by 10 yards (9 meters).



DC12. Amarillo del Norte.

Large golden pole bean from Vadito, New Mexico, 8000'. Early-maturing. Similar in appearance to Tarahumara Frijol Amarillo and Hopi Yellow.

### PC88. Baja Azufrados. From

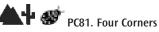
Todos Santos in Baja California Sur, Mexico. These small bright sulfur and beige-colored pole beans are tasty and do well in the low desert.

### Left PC67. Colorado Bolitas.

Pinkish-beige Hispanic heirloom dry farmed at 7000' in the Four Corners area. Early-maturing pole bean with good green beans and colorful pods. Highyielding.

### A Strange PC122. Durango Purple

**Star\***. Large beans with purple star pattern radiating over cream-beige background. Pole bean from the state of Durango, Mexico.



**Jacob's Cattle.** Gold and white Jacob's cattle mottling from New Mexico. Early-maturing, large bush to small pole beans.

#### 🖌 💞 🝈 PC4. Frijol

**Chicharero**\*. Classic vayo bean with light tan and dark brown veins, from Nievas, Durango. Pole bean.

\*Little goat." A yellow Jacob's Cattle Bean from the arid piñon, oak and juniper area of the eastern Tarahumara in Chihuahua. Also known as "Golondrina" or "Cinco Minutos." Color may vary from white with gold mottling to gold with white mottling.

#### PC201. Frijol Colorado\*. Large flattened dark red kidney beans. Late-maturing pole beans when grown at the Conservation Farm. Good as green beans. Watch for occasional red flowers. Originally collected in the central and southern Sierra Tarahumara region in Chihuahua.

Mexican brown and beige pinto collected in Bernalillo. Early-maturing, highyielding bushy-pole bean when grown at the Conservation Farm.

**PC68. Hopi Black.** Small, rounded, black, pole-bean, dry or runofffarmed by Hopi farmers. Can be used for dye. Produces dark lilac flowers and purple mature pods. Early-maturing, prefers monsoon rains.

**PC18. Hopi Black Pinto**. Striking black and white/beige pinto, dry farmed in Hopi fields of northeastern Arizona. Early-maturing bushy-pole beans with colorful mottled pods. High-yielding.

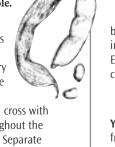
**Yellow**. Large, light yellow-beige beans from Hotevilla collections. Also called "grease beans," plants are somewhat early-maturing pole beans. High-yielding, with good green beans. In the low desert, prefers monsoon rains.

**PC103. Hopi Pinto**. Classic brown and beige pinto bean, dry farmed by Hopi farmers in northeastern Arizona. A bushy-pole bean that matured early when grown at the Conservation Farm.

**PC19. Hopi Yellow**. "Sikya mori." Large bronze seeds, common in Hopi country, may be dry farmed or irrigated. High-yielding pole type, good as a green bean.

**PC73. Mayocoba**\*. Large beige vayo-type bean. Tasty as a green bean. Originally collected from Mayocoba, Sonora. Late-maturing in the Conservation Farm grow-out.

Originally collected in Oaxaca, Mexico. Grown for us at High Desert Research Farm at Ghost Ranch in Abiquiu, New Mexico, at 6,500 ft. elevation. The small pods are edible as a green bean.



#### All seed packets are \$2.75 each til May 1 when they go up to \$3

#### More Common Bean

## 🖤 PC86. Mt. Pima Pintados.

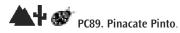
Plum and white Jacob's Cattle type collected in Yecora, Sonora. High-yielding pole bean. Gorgeous.

PC80. Mt. Pima Star. Large black and white star bean from the border of Sonora and Chihuahua, near Mayocoba. Late-maturing pole bean, good green beans, dark lilac flowers.

DC24. New Mexico Bolitas. Pinkish-beige rounded beans grown for centuries by traditional Hispanics of northern New Mexico in irrigated plots. Faster cooking than pintos and earlymaturing too. High-yielding pole.

### PC63. O'odham Pink.

"s-wegi mu:n." A pink bean from desert borderlands of Sonora and Arizona. Fast growing, the plants will sprawl and produce in early spring or late fall in the low desert. Does not tolerate the dry heat of summer.



Extremely early-maturing pole bean from one of the most arid runoff farms in Mexico, in the Sierra El Pinacate Protected Zone. Classic pinto bean brown speckles on beige/gray. A grow-out of a 1982 collection.

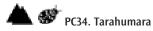
### PC93. Sonoran Azufrado\*.

Rounded sulfur-colored pole beans collected in 1985 in lowland Sonora. Good green beans. Very late-maturing as a summer crop at the Conservation Farm. Possibly a winter bean in frost-free areas.



PC100. Taos Red. Very

large, red with darker maroon mottling/striping. Grown under irrigation in Taos Pueblo at 7,500' elevation. Rare in the Pueblos, although very similar to Hopi Red. Low pole, almost bushy, with outstanding dark red mature pods. Highyielding.



Bakámina. Rare. Semi-pole plants produce tiny, burgundy, kidney-shaped seeds with a black ring around the hilum. Pods are quite long and make excellent green beans. See color photo page 20.

PC94. Tarahumara Black and Blue\*. Pole bean producing mediumlarge black, blue, and purple beans. Blue beans are rare. Late-maturing, highvielding, with dark lilac flowers and purple mature pods. A grow-out of 1984 collections from the heart of the Sierra Tarahumara

PC40. Tarahumara Carpinteros. Striking black and white Jacob's Cattle bean. Originally collected in central and southern Tarahumara country, Chihuahua. This pole bean is prolific with a little shade in Tucson.

💷 PC42. Tarahumara Chókame. Medium-sized shiny black bean from the Sierra Madre of Chihuahua, Mexico. Pole bean producing lilac flowers and colorful mottled pods. Beans have a distinct earthy flavor.

PC95. Tarahumara Ejotero Negro. Bush green beans producing black dry beans at maturity. Very earlymaturing at the Conservation Farm. Dark lilac flowers. Original collections from the southern edge of Tarahumara country in Chihuahua.

### . 🐠 👼 PC47. Tarahumara

Frijol Amarillo\*. Large, gold, highyielding staple. Vigorous pole bean producing flavorful beans with creamy texture.

💞 💷 PC54. Tarahumara Ojo de Cabra\*. "Goat's eye." Highvielding pole bean producing large seeds with dark stripes over a speckled light background. A diversely-colored bean with stripes ranging from brown and tan to blue-gray and black. Occasional red beans, pintos, and gold beans mixed in. Plants produce white and lilac-white flowers, and purple striped pods. A sweet, mild staple of the Sierra Madre.

🛯 💇 👼 PC130. Tarahumara

**Purple.** Medium-high vielding pole bean with gorgeous, large, shiny, deep-purple seeds. Sweet taste, smooth texture. New grow-outs of collections from central (mountainous) and eastern (high mesa) Tarahumara country, Chihuahua.

💷 PC96. Tarahumara Purple Star\*. Large purple and white beans from central and southern Tarahumara country in Chihuahua. Purple pattern radiating outward from the seed "eye" across a white background. Very latematuring pole beans when grown at the Conservation Farm.



O'odham Vayo Amarillo. Large gold beans grown-out from collections from the border region of Arizona and Sonora. A Mexican bean introduced to the Tohono O'odham. Pole bean with sweet flavor and creamy texture.

I PC32. Vadito Bolita. Pinkish-beige bean from Vadito, New Mexico. Good for high elevations and short season areas. High-yielding pole hean

PC66. Yoeme Ojo de Cabra. Small beige bean with golden brown lineation, hence "goat's eye". Can be eaten green or as a dry bean. From Vicam, Sonora, a traditional Yoeme village, where it is planted in January and harvested in May. Late-maturing, highvielding summer pole bean grown at the Conservation Farm.

PC71. Yoeme Purple String. A prolific pole bean that can be eaten green or shelled. Seeds are purple on beige. Plants are heat tolerant.

PC97. Yoeme Vayo. Mediumsized beige seeds with veins collected in a Yoeme village outside of Ures, Sonora. Early-maturing, high-yielding pole bean.

#### Lima Bean

Phaseolus lunatus

Growing as perennial vines in their native tropical environment, lima beans are broad, flat beans eaten green or dried. Plants are tolerant of salt and alkaline soils. Approx. 18 gms/packet.

**Culture:** Plant in spring or with summer rains, 1 inch deep and 6 inches apart or in basins. These long season plants will produce until frost, although production slows in the hot dry months. Trellis vines, or allow room to sprawl.

**Seedsaving:** This annual is mainly self-pollinating. Varieties should be separated by 40 yds. (36 m.) Dried pods can be harvested throughout the growing season, or harvest whole plants.

PL12. Calico. These large, heirloom beans are maroon with creamy white swirls. Originally collected in Wild Horse, Colorado. Prolific producer at the Conservation Farm (4000 ft.).

**PL80. Hopi Gray. "Maasi hatiko".** The light beige beans can be plain or mottled with black. The seeds are sometimes sprouted and used in ceremonies. May have good resistance to Mexican Bean Beetle. *See color photo page* 20.

Selected by the late Hopi artist Fred Kabotie, these limas are prolific in the low desert. Tasty and meaty, beans are solid red, or may be streaked with black.

PL73. Hopi White. "Haatiko". Small, solid white beans. Sprouted and used during Spring ceremonies. PL72. Hopi Yellow.

"Sikya hatiko". Seeds vary from deep yellow to dark orange with black mottling. During Spring ceremonies, seeds are sprouted, attached to katsina dolls, rattles, and bows and given to children. Sprouts are then chopped, boiled and cooked in soup for feasting.

► PL10. Pima Beige. Originally collected from the Gila River Indian Community in Arizona. The light beige beans can be plain or mottled with black.

PL11. Pima Orange. Wonderfully colored orange beans with black mottling. From the Gila River Indian Community in Arizona.

### Scarlet Runner Bean

Phaseolus coccineus

Large and showy flowers make this an attractive garden plant. The large pods can be eaten as green beans or you can use the beans dried. Not suitable for low desert. Approx. 28gms/packet.

**Culture:** Plant 1 inch deep and 6 inches apart in the Spring after danger of frost is past. Plants can be bush or produce long vines which need to be trellised. Flowers may drop with no pod set if daytime temperatures are too high.

**Seedsaving:** An annual that is insect pollinated, so varieties will cross. Harvest dried pods throughout the growing season.

**PS3. Aztec White**. White flowered variety that produces large, white seeds. The fastest maturing scarlet runner at the Conservation Farm (4000 ft.).

## More on the Web

#### **Common Bean**

PC13. Alluvias PC110. Bolas Mayocoba PC83. Chihuahuan Ojo de Cabra PC15. Dolores de Hidalgo Canario PC1. Flor de Rio PC126. Frijol de Cerocahui PC98. Frijol Gringo PC72. Frijol Manzano PC69. Frijol de Sinaloa PC30. Garcia Bolita PC84. Guadalupe y Calvo Negro PC5. Moreno PC116. Mt. Pima Black Pinto PC74. Mt. Pima Burro & Caballito PC6. Mt. Pima Frijol Blanco PC21. Mt. Pima Ojo de Cabra PC115. Mt. Pima Pinto PC117, Mt. Pima Plum PC23. Mt. Pima "Vapai Bavi" PC108. Ojito Bolita PC91. Rio Bavispe Pinto PC28. San Luis Potosi Flor de Mayo PC75. San Luis Potosi Ojo de Cabra PC92. San Luis Potosi Vayo Blanco PC76. Sonoran Pinto PC33. Tarahumara Azufrado PC37. Tarahumara Burro & Caballito PC77. Tarahumara Café PC38. Tarahumara Canario PC39. Tarahumara Capírame PC43. Tarahumara Choliwame PC118. Tarahumara Dark Purple PC46. Tarahumara Flor de Mayo PC204. Tarahumara Frijol Blanco PC70. Tarahumara Frijol Enrayada PC128. Tarahumara Frijol Negro PC119. Tarahumara Gray Star PC51. Tarahumara Manteguilla PC53. Tarahumara Norteño PC14. Tarahumara Purple Ojos PC58. Tarahumara Sitakame PC59. Tarahumara Star PC61. Tarahumara Vayito PC60. Tarahumara Vayo PC111. Tepehuan Beige PC114. Tepehuan Black PC112. Tepehuan Red Kidney PC113. Tepehuan Star PC64. Vayo Blanco PC132. Vayo de Sonora Sur

#### **Tepary Bean**

PT115. Guarijio White PT2. Kickapoo White PT119. Menager's Dam Brown PT99. Paiute Mixed PT113. San Ignacio

#### **Tepary Bean**

All seed packets are \$2.75 each til May 1 when they go up to \$3

0

 $\bigcirc$ 

Phaseolus acutifolius

First cultivated in the Southwest during the time of the Hohokam Indians, teparies mature quickly and are tolerant of the low desert heat, drought and alkaline soils. Soak the dried beans before cooking. Approx. 10gms/packet.

#### Culture: Plant seeds

1/2 inch deep and 4 inches apart with the summer rains. If rains are sparse, irrigate when the plants look stressed. Teparies do not tolerate overwatering.

**Seedsaving:** A self-pollinating annual. Harvest pods as they dry. Be careful; mature pods will pop open and drop seeds if left on the plant. An alternative is to harvest the whole plants when pods are turning brown, allow them to dry on a sheet, then thresh and winnow seeds.

Bulk quantities available for \$7 (56gms)



**Brown.** A typical brown tepary grown by a traditional farmer using flood-water farming methods. Traditionally planted in August and harvested in November.

PT109. Big Fields White. From the Tohono O'odham village of Big Fields. An O'odham farmer maintained this white variety for years, but it is rarely found under cultivation anymore.

**PT79. Blue Speckled**. Tan beans with navy blue speckles. From highland areas of southern Mexico, this variety is a Mayan folkrace. These beans do not tolerate low-desert heat.

#### About Bean Common Mosaic Virus

Bean Common Mosaic Virus (BCMV) is a plant disease that can affect all New World beans (*Phaseolus* spp.), including common beans, tepary beans, lima beans, and scarlet runner beans. It is not harmful to humans or other animals, but can cause decreased yield or death in beans. Tepary beans may be "carriers" of BCMV, as they tolerate the disease with only minor symptoms if grown in arid regions. Because teparies may carry BCMV, do not grow teparies near other species of beans that are more susceptible to the virus — especially those to be saved for seed. Signs of the virus include stunted plants, downward curling and puckering of leaves, and yellow-green mottling of leaves. BCMV is a seed-borne disease, and seeds saved from infected plants can pass the virus on to future crops. Healthy plants can be infected by aphids spreading the virus from diseased to healthy plants, by infected leaves touching healthy ones, or by gardeners handling healthy plants after working with diseased plants. Diseased plants should be carefully rogued (removed) and discarded.

**PT89.** Brown Speckled. Very round beans with beige speckles on light gray, originally separated out of Blue Speckled. High yielding.

**Arrownee Service PT107. Cocopah Brown.** Early-maturing medium-sized flattened orange-tan and orange speckled beans originating from along the lower Colorado River in Sonora. A recent growout of a 1992 collection.

White. "Frijoles Cucupa." Grown in gardens by the Chupa (River People), or Cocopah, living in Sonora, Mexico, just south of San Luis, a U.S. border town.

**PT110. Cumpas White**. From Cumpas, Sonora, where Opata descendants still live. Common in the markets of the region as it is a popular staple food.

**PT101. Hopi White.**\* Very large, white, flattened beans. Traditionally dry-farmed. May not mature in short season/early frost areas. A recent grow-out of collections from Hotevilla.

### PT117. Little

**Tucson Brown.** "Ali Tucson." Very round, burnt-orange seeds, from the Tohono O'odham reservation, Arizona. Earlymaturing. A recent grow-out of a 1979 collection.

### PT86. Pima Beige and Brown.

Original collection from Santan, AZ on the Gila River Indian Reservation. Beans are mixed shades of beige, gold and tan.

**A C D PT74. Pinacate.** These beans are tan and slightly mottled. Originally obtained from the most arid runoff farm in Mexico, in the Sierra El Pinacate Protected Zone.

**A P Solution PT5. Sacaton White.** Early-maturing white rounded beans. A recent grow-out of seed first collected in 1976 from the Gila River Reservation and vicinity.

White. Large white seeds mixed with enormous (for a tepary) light tan, flattened seeds. White and lilac flowers, large leaves. A grow-out of a 1990 collection from 5200' in New Mexico.

**PT98.** San Pablo Balleza. Highyielding black tepary bean collected in an Hispanic colonial town on the eastern slopes of the Sierra Madre in Chihuahua, Mexico.

**PT114. San Pablo Balleza White.** Originally collected in 1985 from the colonial town of San Pablo Balleza, Chihuahua. Similar to San Pable Balleza tepary (PT98) but white. Both are grown locally in the area.

White. An old collection from the Tohono O'odham village of Santa Rosa. White seeds. Drought-hardy.

#### More Tepary Bean

**PT120. Santa Rosa Brown**. Originally collected in 1981 from the Tohono O'odham village of Santa Rosa. Drought-hardy plant with brown seeds.

White. Small to medium sized white

beans from Sonora, Mexico.

### Black-eyed Pea

Vigna unguiculata

An introduced legume from Africa that tolerates high heat and drought — a good producer in the low, hot desert. Peas can be eaten green (immature) or dry. Also known as Southern Peas, Cow Peas, or Crowders.

Approx. 7gms/packet.

**Culture:** Plant 1 inch deep and 6 inches apart, or in basins, in the spring or with summer rains. Plants sprawl.

Seedsaving: An annual that is mainly self-pollinating but will cross with other cowpea varieties. Dried pods should be harvested throughout the growing season. Mature pods will split open if left on the plant.

Bulk quantities available for \$7 (56gms)

### More on the Web

#### **Black-eyed Pea**

V8. Guarijio Frijol Gamuza V16. Mt. Pima Yori Muni V19. Tarahumara V17. Wild Cowpea **H W D PT75. Tohono O'odham Brown**. Medium-sized tan-brown beans from the Tohono O'odham Reservation.

Early maturing.



**O'odham White**. Early-maturing white beans from the Tohono O'odham Reservation, Arizona.

► V1. Bisbee Black. Original seeds came from a Native American in Bisbee, AZ, who gave them to a truck driver, who passed them on to a NS/S member in Missouri. Solid black seeds, a good producer in the low desert.

**V2. Bisbee Red**. Same story as Bisbee Black. Does well in the low desert, producing long pods with dark red seeds.

**V18. Cerocahui.** A typicallooking cowpea, the seeds are cream with a black eye. From Cerocahui in the Barranca del Cobre.

**V13. Corrientes.** Collected in Nayarit, Mexico. Extremely hardy and prolific, with dark red seeds. Excellent as green beans or shelled.

Have The Rest of the Rio Fuerte. The long pods are used as green beans. Dried beans are light beige.

**V7. Guarijio Muni Cafe**. A small white bean with a dark eye. From the Rio Mayo watershed in Sonora, Mexico.

**V3. Mayo Colima**. From Sinaloa, Mexico, the seeds are shades of beige to orange.

V15. Mayo Speckled. The pinto-bean of cowpeas! A colima variety with pinto bean mottling over light chocolatecolored seeds. From Los Capomos, Sinaloa. (formerly "Yoeme"). Colorful mixture of medium-sized tan-brown and pink-brown beans. Early-maturing, with both white and lilac flowers. Originally from a traditional Yoeme village on southern Sonora's coastal plain.

(formerly "Mayo White"). Medium-sized white beans originating from the western flanks of the Sierra Madre along the Sonora-Sinaloa border.

**V4. Sonoran Yori Muni**. From the Rio Mayo watershed in Sonora, Mexico. A small white bean with chocolate brown eyes.

These speckled seeds look like wild beans. They are pea size. From a market in Sonora, Mexico.

**A Constant Series Constant Series Constant Series Series Constant Series Serie** 

**'U'us mu:n**." A black and white bean with variable mottling, may be all black or splotched on white. Excellent for green beans in the low desert. Grown by the San Xavier Agricultural Coop. *See color photo on page 21*.

V14. Yori Cahui. Collected from the village of Ahome, near Los Mochis in Sinaloa. Our demonstration garden growout produced lots of "yard long" beans that thrived in our record breaking heat. Great low desert green bean.

#### Seeds All seed packets are \$2.75 each til May 1 when they go up to \$3



northern NM at 6,300'. A native New Mexico chile that matured earlier than most chiles at the Conservation Farm. Mild-medium heat, with a complex, slightly sweet flavor when red. 4" long. (i)

**D55. Caribe.** "Chile Caribe" from southern Chihuahua. This chile was first collected for NS/S in 1985. Medium-hot, sometimes increasing after a few seconds to hot. (c)



D29. Casados Native. This

Spanish heirloom from El Guique, NM (5,500') matured earlier than most at the CF. When green, slightly sweet and fleshier than other NM native chiles. Also has a good flavor when red. Mild. 4.5" long. (i)

From the farming town in northern NM at 5,900' famous for its local chile. This native NM chile matured earlier than most chiles grown at the CF in 2001. Mild. 3.5-5" long. (i)

**D21. Cochiti.** From Cochiti Pueblo at 5200', where loss of farmland has threatened this and other Cochiti crop varieties. This NM native chile is sweet when green, and flavorful when red. Mild to medium. 3.5-4" long. (i)

**D31. Cuatro Milpas.** Grown in the mountain village of Cuatro Milpas, Sonora. Fleshy and smooth-skinned. Mild heat. 4-4.5" long. (j)

At Market and Arbol.

"Tree chile." A long, thin, red, pungent chile used for salsa. Usually hot. 2.5-4" long. (d, c)

**Constant of the second second** 

**D15. Isleta.** From Isleta Pueblo (4,900'), first collected in 1993. An exceptionally tasty native NM chile. It has broader shoulders and is less fleshy than Isleta Long. Mild-medium. 4-5" long. (i)

## Chile

Capsicum annuum

One of the great Native American contributions to the cuisines of the world. A widely used fruit high in Vitamin C, chiles vary in shape, size, color, pungency and flavor. Approx. 0.3gms/packet (Tabasco) or 0.5gms/packet (all others).

**Culture:** Start seeds inside 8-10 weeks before last frost. Seeds are slow to germinate and need warmth. Sow 1/4 inch deep in sandy soil. Transplant seedlings 12-16 inches apart.

**Seedsaving:** The insect-visited flowers can self-pollinate or cross. Grow only one variety at a time, or isolate flowers by covering branches with cloth bags tied loosely at the bottom, or cover plants with cages made from window screen over a frame. Allow pods to ripen and mature on the plant. Chiles turn red or dark brown when mature. For best seed results, pods should be shriveled and almost dry. Wear gloves, and take care not to touch your eyes when removing seeds from hot chiles.

Bulk quantities available for \$8 (2gms)

### Chile Fruit Shapes

С

a

Letters at the end of descriptions refer to the key. All shapes in the key may not be currently available.

g

h

#### How We Rated Chiles

We grew 59 chile accessions at the NS/S Conservation Farm (CF) in 2001. As a result, we were able to gather lots of information, such as chile size, maturity, and relative heat ratings for each accession, which we thought might be of interest to you. In using our descriptions, please keep in mind that they are *relative ratings*, and were influenced by the specific environmental conditions (water, temperature, nutrients, stress) characterizing the Conservation Farm (i.e., they might mature quicker or later, grow smaller or larger fruit, or be milder or spicier under your care and conditions than ours).

In the following descriptions, "mild," "medium," and "hot" are relative heat ratings, while "sweet" refers to a sugary taste. These are all chiles, however, and even those listed as "mild" may burn the mouth of a non-chile eater. Additionally, individual fruit may vary in heat, and our tasters sampled only a few of each. Thanks to the extended Valdés family for their help in preparing and tasting chiles, and for showing constraint in order to test all 59 of them!

All varieties were tested mature, and blended whole with water to form a paste. Larger-fruited varieties, amenable to roasting and peeling, were tested as chile verde as well. Fruit are red when mature unless

otherwise noted. Average length and a letter corresponding to their general shape follow each description.

*More* on the Web Chile D37. Zia Pueblo

more chiles on page 23



Agave Nectars. While honey has no equal, agave nectar is a wonderful alternative sweetener which is slightly less viscous, lending to its ease of use. The "Light" has a wonderfully pleasant flavor that will enhance anything it sweetens; "Amber" has a natural flavor best described as maple-like; and "Raw" is heated to less than 115°F to maintain its raw state and has a neutral flavor somewhere between Light and Amber. Each is ideal as an all-purpose sweetener, great for cereals, lemonade, tea, coffee and smoothies to name a few. *Please specify:* 

 FD122. Light

 A.11.75oz
 \$5.75
 B. 23.5oz
 \$9

 FD123. Amber

 A.11.75oz
 \$5.75
 B. 23.5oz
 \$9

 FD124. Raw

 A.17oz
 \$6.75
 B. 23oz
 \$9

 C. 46oz
 \$17

**Butters.** An Arizona company makes these butters using honey or fruit sugars and fresh cactus fruit and pumpkin. 12oz jar **\$6.50** 

**FD120.** Prickly Pear Butter. **FD121.** Pumpkin Butter.

**Cheri's Desert Harvest.** These jellies are handcrafted using the best fresh chiles, mesquite beans, cactus fruit, and more. Wonderful on hot toast or for using as a glaze. *Select from*:

FD303. Heavenly Habanero Jelly. 5oz jar \$3.75 FD304. Jalapeño Jelly. 5oz jar \$3.75 FD314. Mesquite Jelly. 5oz jar \$3.75 FD302. Prickly Pear Cactus Jelly. 5oz jar \$3.75 FD304. Red Chile Pepper Jelly. 5oz jar \$3.75

**FD317. Chocolate Habanero Sauce.** A delicious blend of fiery spice and milky chocolate. Use as a heated sauce over ice cream, fruit or crepes. 11oz jar **\$7.50** 

Heidi's Raspberry Jams. Four organically grown raspberry varieties have been blended with red chiles or ginger to produce a tart, spicy, low-sugar jam which is just divine. It has quickly become a staff favorite.

10oz jar **\$8.50** Select from: FD611. Red Chile Raspberry FD612. Raspberry FD625. Red Chile Ginger Raspberry **FD315.Mesquite Syrup.** Made from extracting the juice from the mesquite bean pods that grow abundantly in our southwestern desert. Slice a baking apple, pour Cheri's Mesquite Bean Syrup on top and bake until soft. Also, serve over ice cream, crepes and pancakes! *Please specify*: 7oz bottle **\$5.25** 12oz. bottle **\$8.25** 

FD74. Prickly Pear Nectar. Made from 100% pure, concentrated prickly pear cactus fruit with no sugar or preservatives added, an excellent source of vitamins and chromium. Research studies show that sugar-free prickly pear has high levels of antioxidants. Wonderful as a drink mixer or poured onto yogurt. 12oz bottle **\$22** 

FD304. Prickly Pear Syrup. The naturally beautiful magenta-colored syrup made from prickly pear cactus juice is customarily used over pancakes and desserts, but is also used to make exceptionally flavorful Cactus Margaritas, Wine Coolers, Spritzers, and Prickly Pear Lemonade. *Please specify:* A. 7oz bottle **5.25** 

B. 12oz bottle \$8.25

Salsas & Pastes

**FD419. Five Chile Salsa.** Thick and chunky. We use roasted tomatoes and a blend of jalapenos, chipotle, green chile, chile pequin, and a touch of habanero chile. It's great with chips or smothering fish before baking. Medium Heat. 12oz jar **\$6.95** 

**FD77. Green Chile Paste.** More and more, in Mexican restaurants you hear the questions, "red or green sauce?" To answer that question, Santa Cruz Chili & Spice Company makes quality chili paste from roasted green chiles. Green chiles picked at the peak of flavor and create a thick, flavorful paste, easy to use in many recipes. 10oz jar **\$6.50** 

**Organic Harvest Pepper Sauces.** 100% organic sauces to spice up your favorites! Select from three distinctly flavored varieties. 5oz bottle **\$4** 

*Please specify:* **FD414.** Jalapeño **FD415.** Habanero **FD416.** Chipotle Habanero

**FD98. Prickly Pear Salsa.** A tomato-based salsa with onions, red wine vinegar, peppers and prickly pear juice. Thick, chunky and very good with chips, burros or calabacitas. Mild to medium heat. 12oz jar **\$6.50** 

FD95. Pueblo Indian Summer Salsa. From Laguna Pueblo in New Mexico, this tasty salsa is excellent with chips. Ingredients include green and yellow chiles, yellow squash and tomatoes. Recipe included. 16oz jar \$7

**FD96. Pueblo Roasted Red Chile Sauce.** From Laguna Pueblo in New Mexico, this is a smooth, versatile sauce. Use it straight from the jar with chips or for enchiladas and huevos rancheros. Specify medium or hot. Recipes included. 16oz jar **\$7** *Please specify:* **A.** Medium or **B.** Hot.

**FD76. Red Chile Paste.** If you have never tasted Santa Cruz Original Chili Paste, you are in for a treat! Picked at the peak of flavor and quickly processed into a rich red paste, much like tomato paste. You will first notice the wonderful aroma of fresh chiles when you open the jar and, with your first taste, discover one of the unique flavors of southwest and Mexican cooking. 10oz jar **\$6.50** 

**FD102. Roasted Garlic and Olive Salsa.** The finest fresh herbs and spices blend with tomatoes, garlic, green & black olives, and chiles for a smoky roasted salsa. 16oz jar **\$6.95** *Please specify:* **A.** Mild or **B.** Hot.



### Amaranth

**C13. Mano de Gato** *Celosia cristata.* "Cat's Paw." Cockscomb-type of ornamental with bright magenta-colored flowers and black seeds. Leaves are bright green with red-tinged edges. From Alamos, Sonora, Mexico.



### Popcorn

**ZP90. Chapalote.** "Pinole Maiz." One of the four most ancient corns, it is small kerneled with slender ears. The only brown corn. Makes a sweet meal excellent for pinole. Originally collected in Sinaloa, Mexico.





### Bean

**PC34. Tarahumara Bakámina.** Rare. Semipole plants produce tiny, burgundy, kidneyshaped seeds with a black ring around the hilum. Pods are quite long and make excellent green beans.



### Gourd

**M42. Acoma Dipper.** Typical dippershaped gourd with handles occasionally up to 2 ft. long. From Acoma Pueblo in New Mexico.

### Tobacco

**N10. Mt. Pima.** Collected in the Mt. Pima region of western Chihuahua. It is commonly grown in plots or gardens around the house and used for smoking. Delicate pink-tinged flowers and huge leaves!

### Tomatillo

TM3. Zuni Tomatillo. Physalis philadelphica var. philadelphica. The small sweet fruit have been semi-cultivated by the Zuni of northern New Mexico for more than a century. Can be roasted in an oven, blended with garlic, onion, chile and cilantro as a hot sauce.



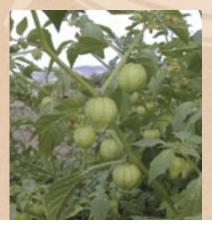
### Lima Bean

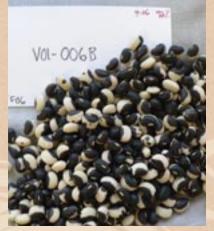
**PL80. Hopi Gray. "Maasi hatiko".** The light beige beans can be plain or mottled with black. The seeds are sometimes sprouted and used in ceremonies. May have good resistance to Mexican Bean Beetle.



### Greens

**GR12. "Chichiquelite."** *Solanum melanocerasum.* From Piedras Verdes, a Mayo community in Sonora, Mexico. Commonly called the garden huckleberry, the leaves are cooked for greens and the shiny black berries are edible. Do not eat the leaves raw. Found in the tropics of western Africa.





### Black-eyed Pea

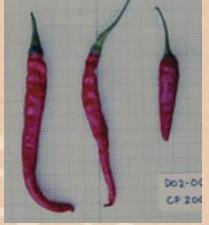
**V6. Tohono O'odham. "U'us mu:n."** A black and white bean with variable mottling, may be all black or splotched on white. Excellent for green beans in the low desert. Grown by the San Xavier Agricultural Coop.



### Herbs

HB14. Corrales Azafrán. Carthamus tinctorius. This red/orange thistle-like flower was used in cooking as a saffron substitute. A sunflower relative, azafrán can be grown as an annual flower and keeps well as a dry flower (though very prickly). Collected in Corrales, NM.





### Chile

**DF1. Tabasco.** *C. frutescens.* Hot, prolific, and hardy, this is the ingredient in the famous hot sauce. Narrow 1"-long fruits are yellow or orange maturing to red. Good for container gardening.



### Corn

**ZL81. Tarahumara Maiz Colorado**. A beautiful corn with a mix of blue, white, purple and red colored kernels on the same cob or as single-colored cobs. Mostly flour with some flinty kernels. From a remote location in the Sierra Tarahumara.



### Melon

F18. Santo Domingo Native. Collected from Santo Domingo Pueblo, these are typical of the "native" melons grown for hundreds of years in the pueblos of New Mexico. The fruit are oblong, ribbed, and have predominantly smooth skin. Some netting or "cracking" occurs. The flesh is orange and tasty.

### Watermelon

**G3. Tohono O'odham Yellow Meated.** A high yielder of green oval fruit with sweet and crisp yellow to orange flesh. Fruit can be up to 35 lb. Originally collected at Queenswell, Arizona.

#### Tomato

**TM7. Punta Banda Tomato.** *Lycopersicon esculentum.* Collected on the Punta Banda Peninsula in Baja California. Plants produce hundreds of red meaty, thick-skinned fruits despite heat, water stress and poor soil. Great paste tomato.



### Squash

**EA31. Batopilas**. Large, bilobal to necked fruit are mostly green and white striped with somewhat thickened stems and occasional corky ribs. From the bottom of Batopilas Canyon in the Sierra Tarahumara. Not yet tested in the low desert of Tucson, but grows at low elevation in hot, deciduous forest zones.





**FD80. Chia Seeds.** A nutritious seed that contains fiber, helpful in blood sugar regulation. A fabulous source of omega-3s, you'll notice how much more energy you have with regular use. Traditionally used in the southwest mixed with water to extend endurance. Can be used to "gel" fruit salad or to thicken salad dressings. *Please specify:* 

4oz **\$3.50** 8oz **\$7** 1lb **\$12** 

**FD9. Cornmeal, Blue Corn.** Finely ground cornmeal flour produced and packaged by Santa Ana Pueblo in New Mexico; they also grew the corn! 12oz pkg **\$3.75** 

FD25. Cornmeal, Roasted Atole Pueblo Blue Corn. Called atole, this cornmeal is toasted and finely ground for cooking like creamed wheat. It can also be used in any cornmeal recipe for a toasted flavor.

12oz pkg \$3.75



FD11. Hopi Cornmeal. Grown, roasted, dried and ground by Millie & Jeff Polewytewa from Hopi blue and white corn varieties used by her family for generations. Use as any other corn meal, the blue imparts an exquisite color and a slightly sweet flavor. The white may be flecked with red and yellow and has a mildly sweet flavor. *Please specify:* **A**.White Meal **B**. Blue Meal 120z pkg **\$4.50** 

FD17. Mesquite Meal. This mesquite meal is finely ground with a fruity, caramel-like flavor. It's a good source of calcium, manganese, potassium, iron, and zinc. A great food for diabetics because of its ability to assist in stabilizing blood sugar. Recipe sheet included. Our current source for this incredible food is Peru. *Please specify*: 80z \$7 160z \$13 FD5. Organic Amaranth, Popped.

Organic grain Amaranth is heated in a little oil until popped. Great as a snack or as a topping for salads. May also be added to pancakes, muffins, breads or other baked goods. 402 pkg **\$5** 

**FD1. Organic Amaranth, Whole Grain.** Ancient grain of the Aztecs and greater southwestern peoples. Delicious nutty taste. Contains significant amounts of protein, iron, calcium, and phosphorus while being low in fat. Can be ground to produce a gluten-free meal. Recipes included. **\$4.50/lb** 

FD69. Parched Corn. Made from yellow, blue and red corns grown by the people of Santa Ana Pueblo in Bernalillo, New Mexico. Parched in a cast-iron kettle without oil for a healthy, crunchy and uniquely southwestern snack. 4oz pkg \$2.50

FD47. Posole, Blue Corn. Treated with lime to remove the hulls, this posole comes from a small farm in New Mexico. Delicious with beans or alone and you won't believe the color of the broth! \$4.50/lb

FD43. Posole, White Corn. Treated with lime to remove the hulls, this posole is actually more yellow in color and is delicious in stews, soups or on its own. \$4.50/lb





# Natural Soaps & Body (are

**These soaps have been made of the finest ingredients.** Select from an aromatic array. All bars are 4oz. for **\$6.50** 

SS407. Cedar wood SS408. Desert/French Lavender SS409. Horsemint SS402. Mesquite SS405. Mrs. Burns' Lemon Basil SS501. Mustang Grape SS403. Prickly Pear SS406. Sunflower SS401. Wildflower SS500. Yucca Root **SS501.** Choose one of the six small goat milk soaps. Made of soybean, olive, safflower, coconut & canola oils; goat's milk; sodium hydroxide; honey; and natural herbs. 1oz. bar **\$2** 

e

A. Piñon	D. Lavender Lac
B. Sweet Grass	E. Sacred Spirit
C. Yucca Root	F. Sage

#### More Chile

**D57. Isleta Long.** Collected in 1988 from Isleta Pueblo at 4,900'. This New Mexico Long type chile has smooth skin and is fleshy when green. Flavorful, sweet and fruity when red. Mild-medium to medium. 7" (j)

Jemez Pueblo in northern New Mexico at 6,000'. Among the earlier maturing chiles grown at CF in 2001. Mild to medium-hot. 4-4.5" long. (i)

**D5. Mirasol.** "Looking at the Sun", yet these chiles hang down on the branches. From southern Chihuahua. Used in soups, stews, and chicken dishes. Mild to medium. 1" wide and 5" long. (g)

**D58. Nambe "Supreme".** From Nambe Pueblo in New Mexico, about 6,000'. A farmer in the Pueblo selected this cross between native and commercial varieties. Smooth-skinned and slightly triangular. Medium, slightly sweet when red. 5.5" long. (i)

**D2. Negro.** "Black" or rich brown. From Chihuahua. Sweet and flavorful when mature. May contain an occasional plant bearing red or differently shaped fruit. Mild heat. 4.5-5" (b) 📥 💣 👼 D59. Patagonia. An

Hispanic heirloom grown in Patagonia, AZ. The cone-shaped chiles stand up on the plants, and are yellow with some purple mottling, ripening to orange then red. Used to make a thin hot sauce by blending with vinegar. Medium-hot. 1" long. (f)

**Approximate Pajaro.** "Bird's beak." From Yecora, Sonora. The knobby fruit are often curved. Mild in heat. Almost 1" wide and 5-5.5" long. (a)

**D7.** San Felipe. Planted in mid-May by many farmers at San Felipe Pueblo (5,200') in New Mexico. Medium to medium-hot. 3-4" long. (i j)

A native New Mexico type chile still grown by elder farmers in San Juan Pueblo north of Española, NM. Matured early at our growout at the CF in 2001. Mild to medium-hot. 3.5-5" long. (i)

**Criginally from Santo Domingo**. Originally from Santo Domingo Pueblo in northern NM (5,200'). This chile matured early at our CF in 2001. Mild to medium. 3.5-5" long. (i) **D6. Sinahuisa.** This serrano chile originally collected from a Yoeme weaver in Sonora, grew prolifically at our CF in 2001. The fleshy fruit are excellent *en escabeche* (pickled). Medium heat. 2" long. (e)

► DF1. Tabasco. *C. frutescens.* Hot, prolific, and hardy, this is the ingredient in the famous hot sauce. Narrow 1"–long fruits are yellow or orange maturing to red. Good for container gardening. (c) See color photo on page 21.

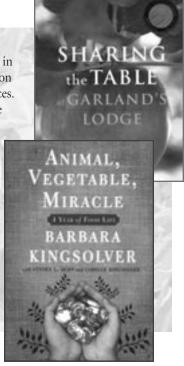
**D20. Vallero.** Originally from Buenaventura, Chihuahua, it was first collected in 1990. Used by Barney and Mahina's favorite chile colorado restaurant. Fleshy when green. Rich brownish-black to reddish-brown when mature. Medium heat, but can vary. 6" long. (j)

New Mexico chile from Velarde, A native Mexico, 6,300'. One of the first to mature at the CF in 2001. Mild to mild-medium in heat. 3.5-4" long. (i)

**D60. Zia Pueblo Mix.** From the same farmer as our other Zia Pueblo chile, but a cross between the local chile and a larger, fleshier chile from Ignacio, Colorado, which it resembles. Medium heat. 6.5-7"(j)

**PB675.** Sharing the Table at Garland's Lodge by Amanda Stine and Mary Garland. Gorgeous enough to be a coffee table book, but keep this exquisite cook book handy in the kitchen. Thirty years of preparing meals at the famed Garland's Oak Creek Canyon Lodge in Sedona, Arizona, are artfully brought together with stories and reminiscences. An endlessly versatile collection of 275 recipes for breakfast, soup, salad, entrees, side dishes and dessert are highlighted by 150 color photographs. Hardcover 264pp. **\$34.95** 

**PB672.** Animal, Vegetable, Miracle by Barbara Kingsolver. Novelist Barbara Kingsolver once wrote, "If we can't, as artists, improve on real life, we should put down our pencils and go bake bread." In *Animal, Vegetable, Miracle*, she manages to do both, applying her literary skills to a new food environment. In her seamless diary narrative, Kingsolver tells how she and her family relocated to southern Appalachia after suffering through years of drought in Arizona. The purpose of the move was simple: "live in a place that could feed us" by growing their own food and living among a community of local organic growers. A truly wonderful book for anyone who eats, buys food or wonders where their sustenance comes from. Hardcover. 270pp **\$26.95** 





#### **Dent Corn**

Mature kernels are dented due to flour heart and flint sides. Used for elote (roasted), tamales, tortillas, corn beer & animal feed.

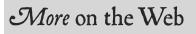
**ZD84.** Dia de San Juan. An allpurpose white corn used for everything by the Mayo. From north of Alamos, Sonora. Planted on the Dia de San Juan (June 24) when Southwestern folks traditionally celebrate the coming of the summer rains.

Control Contro

**ZD83.** Mayo Tuxpeño. A recent growout of a 1985 collection from Saneal, Sonora, Mexico. Large fat ears on 10-12 ft. high plants, with yellow, blue and yellow, or pink kerneled ears.

**CD86.** Pepitillo. Originally collected in southern Chihuahua in 1985. Medium-large, thick ears that taper toward the tip. Kernels are mostly dented and white or yellow with occasional purple.

**Control Control Contr** 



**Dent Corn** ZD81. Mayo Batchi ZD67. Tarahumara Conico ZD90. Tarahumara Tuxpeño

### Corn/Maize

Zea mays

Domesticated along the Rio Balsas of Mexico about 2000 B.C. by Meso-Americans, corn is a staple food and has many ritual uses. Various kernel colors are selected for ceremonies and feast foods, and pollen is collected for ceremonial and medicinal purposes. Approx. 10-28gms/packet, depending on seed size.

**Culture:** In early spring just before last frost, or with summer rains in the low desert, plant seeds 1 inch deep in rows, clumps, or basins. If saving seeds, a minimum of 100 plants is desirable to maintain genetic diversity. Corn needs rich soil and moisture to produce a crop. Drought stress, high winds, heat and low humidity can all reduce pollination.



**Seedsaving:** An annual, corn is wind pollinated, and all varieties will cross easily. A distance of at least 1/4 mile or staggered planting times is necessary to keep seeds pure. Hand pollinating can ensure full ears of kernels. Allow ears to mature on the plant; check for ear worms to prevent damage. Ideally, ears should be field dried before harvesting. However, sweet corns allowed to dry on

ears should be field dried before harvesting. However, sweet corns allowed to dry on the stalk during high temperatures can ferment, ruining the seed. Dry seeds thoroughly before storing. For long-term storage, we recommend storing whole ears.

Bulk quantities available for \$9 (84gms)

### **Flour Corn**

Soft grinding corn used for cornmeal, elote (roasting corn or fresh tamale corn) and hominy (masa or nixtamal).

White kernels. Most crops from Cochiti Pueblo are endangered due to the loss of agricultural fields resulting from an irrigation project.

**CF37. El Seis Maiz Azul.** Deep blue kernels. A good basic flour corn used for tortillas. Collected from a Mt. Pima village on the eastern side of the Sierra Madre.

**ZF139. Escondida Blue.** Dark to light blue kernels on medium-sized ears. From Escondida in south central New Mexico.

**CF39.** Guarijio Maiz Azul. A unique blue corn with kernels ranging from light blue to deep blue to lavender and purple on thick cobs. Prominent denting. Grown at lower elevations than most maiz azul races.

**Wiekte.**" Often planted early by Hopi farmers so the harvest can be used for the Home Dance ceremony in July. Plumcolored kernels on 10-12 inch ears. **A (W) (D) ZF7. Hopi Yellow.** "Sikyaqa'o" or "Dakuji." Soft yellow kernels used for grinding.

**ZF6. Isleta White**. From the NM Pueblo south of Albuquerque. Medium length ears (11") have white (and a few red) kernels.

**TF36. Maiz Concho.** Sent to NS/S from El Oro in northern Chihuahua, west of the Gavilán river. Also known as *maiz gordo*, this is a tasty flour corn used for posole and tortillas, ground into flour and used in breads or toasted and used in atole and pinole. A very productive corn.

**Arrow Tosabatchi**. Blando de Sonora landrace from Sinaloa, Mexico. The white kernels are ground to make a soft flour/meal for cookies. 70-75 days for elote; 90 days for dry.

Colorado River Indians used this fastgrowing corn for boiling and cornmeal. Similar to Tohono O'odham 60-Day.

**Transform ZF38. Mt. Pima Maiz Azul.** Among some of our earliest collections of maize in the Sierra Madre. Deep to lighter blue kernels with occasional white and yellow ones. Ground into flour and used for tortillas.

#### More Flour Corn

## 📥 🐲 👼 ZF14. Navajo White.

Small kernels on slender ears of this dryfarmed corn.

**A ZF52. San Felipe Pueblo Blue**. Small kernels on long slender ears. Grown with irrigation in New Mexico's Rio Grande valley.

**A ZF54. Santo Domingo Blue.** Large ears with deep blue kernels from Santo Domingo Pueblo.

**Negro.** Originally from northern Maiz it has also been grown at low elevation in Sinaloa. A'Maiz Azul' landrace, it produces

dark blue kernels. Used for tortillas.

**ZF34. Taos Blue**. Deep blue kernels on medium-sized ears. From Taos Pueblo, NM.

**Arr (iii) ZF21. Tarahumara Maiz Azul.** Large blue/black kernels on medium large ears, this corn is widely used in the barrancas. During first harvest ceremonies, tortillas and tamales are made from it.

**A ZF11. Tarahumara Rósari**. A more colorful version of the basic Tarahumara Gordo (ZF20). These beautiful kernels are white with plum/lavender speckles, solid rose to blue and white. A good grinding flour for tortillas and flour.

Extremely fast desert-adapted corn traditionally grown by the Tohono O'odham with the summer rains in floodwater fields. Short (6-10") ears with white kernels on short plant stalks.

**EXAMPLE ZF124. Vadito Blue.** A short season corn grown at 8,000' in northern NM. Kernels are pale to dark blue, used for grinding.

**CF56. Zia Pueblo Mixed.** Large colorful ears with a mix of white, yellow, blue, burgundy and chinmark-colored kernels from this NM Pueblo.

### Flour/FlintCorn

These kernels may be of either a hard, flinty texture or soft and floury. When dry, flints generally store better and have greater resistance to insect damage.

**ZL59.** Conico Elote. This variety was collected in Tamaulipas, Mexico, though it was originally from Michoacan. It is an all-purpose corn, used for tamales de elote (green corn tamales), nixtamal (lime-soaked corn kernels that are ground to make "masa"), tortillas, and gorditas. Grew over 3 meters tall at the Conservation Farm, excluding the tassel!

\*A:al Hu:ñ." Cream-colored and clear kernels on smallish cobs. Matures quickly and with minimal irrigation. From the Gila River Pima Reservation in central Arizona.

**Amarillo.** Collected in 1986 from a Guarijio farmer in Sonora. A dry-farmed, semi-flint corn with yellow and some white kernels. Used for tamales, atole, pinole and as elote. Plants were over 8' tall when grown at the Conservation Farm!

Apache Concho. Pearl white kernels on 6-8 inch ears; 3-5 foot stalks tolerant of cool, high elevations. Approx. 75-80 days from planting to dry seed.

**Posole**. Large white, flat kernels, used for posole (hominy). Grown in the pueblo in northern NM. Hefty ears.

**ZT33. Tarahumara Apachito**. One of the most common types of corn grown by the Tarahumara. Kernels are typically a pearly light pink to dark rose and occasionally pearly white or yellow.

**Colorado.** A beautiful corn with a mix of blue, white, purple and red colored kernels on the same cob or as single-colored cobs. Mostly flour with some flinty kernels. From a remote location in the Sierra Tarahumara. *See color photo on page 21*.

**CT110. Tarahumara Maiz Pinto**. Grown at lower elevations in the Barranca del Cobre, this lovely mix of blue, white and purple kernels includes both flour and flint types. **Arr b c THAL Tarahumara Serape**. This Cristalino de Chihuahua land race has beautiful long slender ears, pearly

white, red and striped kernels.

**ZL151. Truchas Lumbroso.** Predominantly pearly white kernels with some pink-tinged ones. From Truchas, New Mexico, at 8000 ft. Increasingly difficult to find.

### More on the Web

#### Flour Corn

ZF27. Cochito Blue ZF120. Hopi White ZF58. Mt. Pima Blando de Sonora ZF121. Navajo Mix ZF201. New! Polanco Blue ZF53. San Felipe Pueblo White ZF123. Santo Domingo White ZF123. Santo Domingo White ZF18. Tarahumara Blando de Sonora ZF20. Tarahumara Gordo ZF57. Tarahumara Harinoso de Ocho ZF41. Tepehuan Elote ZF107. Texas Shoepeg ZF59. Vadito White

#### Flour/Flint Corn

ZL73. Hernandez Red Mix ZT53. Maiz Caliente ZL51. Mt. Pima Bola ZT30. Mt. Pima Cristalino de Chihuahua ZL52. Mt. Pima Lloron ZL56. Mt. Pima Maiz Ancho ZL79. Nambe White ZL74. Rio Lucio Concho ZL150. San Felipe Pueblo Mix ZL126. Santo Domingo Posole ZL58. Southern Maiz Blanco ZT100. Tarahumara Cacareño ZT41. Tarahumara "Chiquita" ZT35. Tarahumara Chomo ZL57. Tarahumara Conico Amarillo ZT47. Tarahumara Gileño ZT38. Tarahumara Golden Cristalino ZL36. Tarahumara Pepitillo ZT43. Tarahumara Rosácame ZL54. Tarahumara Serrano ZT36. Tarahumara Yellow Apachito ZL49. Tepehuan Maiz Colorado ZT50. Tepehuan Maiz Rosero ZT48. Tepehuan Serrano ZL78. Vadito Concho



#### Popcorn

Used for pinole (toasted and ground) and as popped corn. Popcorns are flint corns.

ZP90. Chapalote. "Pinole Maiz." One of the four most ancient

corns, it is small kerneled with slender ears. The only brown corn. Makes a sweet meal excellent for pinole. Originally collected in Sinaloa, Mexico. See color photo on page 20.

### Wild Corn **Relatives**

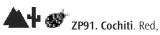
Zea spp.

Teosinte is currently believed to be the wild progenitor of modern corn. Native to Mexico, wild Zea species are shorteningday plants: flowering is initiated as day length begins to shorten in the 🐚 fall. Plants produce tassels and small spikelets of seeds. Approx. 2gms/packet.

Culture: Seeds have hard seed coats, which need to be scarified (soaked, filed or sanded) so water can be absorbed. Plant as corn.

**Seedsaving:** Plants will not flower until Fall, making it difficult to harvest mature seeds unless you have a late frost or frost-free environment.

Z121. Northern Tepehuan Maizillo-Annual Teosinte. Zea mays ssp. mexicana. Found in Nabogame, southern Chihuahua, where the plants begin to flower in September. Native farmers say growing this near cultivated corn makes their crops "stronger." Native wild stands are prolific producers of seed. Plants tend to tiller more in the northern United States. Green stems are chewed for the sweet juices.



vellow, brown or striped kernels on small ears (4-6 inches). Fast maturing. Great as "ornamental" corn during the fall holiday season. Originally from Cochiti Pueblo in northern New Mexico



"Chapalote." A flinty, yellow corn, often ground and used to make an especially flavorful pinole. From the remote Rancho Camacho, near Piedras Verdes.

ZP97. Onaveño. Flinty, cream colored kernels. An ancient grinding corn used for pinole. From the Rio Mayo in Sonora.

ZP99. Palomero de Chihuahua. White pointy kernels on small cobs typical of many popcorns.

ZP92. Reventador. Old fashioned pinole corn with translucent white kernels once grown in Arizona with irrigation. Obtained from central Sonora, Mexico. A good, hardy, crunchy popcorn when popped.

Cotton Gossypium spp.

Cultivated since ancient times, people have utilized the lint for spinning and weaving. In frost free areas, cotton can be a perennial shrub or small tree. Approx. 2.5gms/packet.

**Culture:** Plant in spring after last frost, 1/2 inch deep, 12 inches apart. Wild cotton seeds need to be presoaked or scarified. Plants need a long season for bolls to mature.

Seedsaving: An annual, mainly self-pollinating but with large showy flowers that attract insects which will cross varieties. Harvest dried pods as they mature. Remove bad seeds and cotton fiber before storing.

#### Sweet Corn

Used for pinole, roasted and reconstituted, or fresh boiled. Kernel colors develop when the corn is past milk stage.



### zs100. Cocopah. Red,

white, and some blue kernels on medium-sized ears. Originally collected in 1868-1869 from the Colorado River Indians and saved by prospectors in northern Arizona. Sweet and fastgrowing, white kernels in the milk (eating) stage.

ZS106. Guarijio Red. Maiz Dulce landrace. Slender cobs with red kernels and an occasional yellow ear. From Sonora, Mexico. Grow only with midsummer rains in the low desert due to day-lenth requirements.

### More on the Web

#### Popcorn ZP100. Tarahumara Palomitas

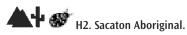
ZP96. White "Chapalote"

Sweet Corn ZS102. Mt. Pima Maiz Dulce ZS114, Mt. Pima Yellow

**Devil's Claw R5.** Paiute

#### Cotton seeds can only be shipped to AZ, NM, TX and OK addresses.

H1. Hopi Short Staple. G. hirsutum var. punctatum. Originating in Central America and traded north, this variety was prehistorically grown by the Hopi. It has a short growing season (100 days). Our original seed came from a USDA research geneticist.



G. hirsutum var. punctatum. Grown by the Pimans for food and fiber until 1900. Padre Kino noted the extensive cotton fields and use of the fiber for weaving into clothing and blankets. This variety, related to Hopi cotton, was maintained by the Field Station in Sacaton, AZ, for many years under the name "Sacaton Aboriginal." Pimans planted cotton "when the mesquite began to leaf out."

### Garbanzo

Cicer arietinum

This Old World legume was introduced by the Spanish. Native Americans and Hispanics historically ate the beans green and dried. Approx. 2 gms/packet.

**Culture:** A cool season plant that should be sown in fall or winter. Plant 1/2 inch deep and 6 inches apart. Plants tend to bush, and will produce over a long season.

**Seedsaving:** A self pollinating annual. The small pods contain 1 or 2 seeds and should be allowed to mature before harvesting.

**WHY U2. Dolores del Hidalgo**. From Guanajuato in central Mexico, the plants are prolific in the low desert winters, producing small beans. **WHY U3. Tarahumara**. Dry farmed in the fall at the bottom of the Barranca del Cobre (Copper Canyon) in Chihuahua, Mexico.



Lagenaria siceraria

The earliest known domesticated plant. The dried fruit is used for ladles, rattles, canteens or containers, as well as musical instruments. Can be carved, wood burned, painted or pierced. Approx. 2-2.75gms/packet.

**Culture:** Sow seeds 1 inch deep in the warm spring (presoak for better germination). Plants make long climbing vines, so allow plenty of room. Plant next to a fence or trellis, or in basins under a tree. Requires plenty of water throughout the long growing season.

Seedsaving: Annual. All Lagenaria strains will cross-pollinate, so if a certain shape is desired plant only those pure seeds. The nightblooming white flowers are pollinated by moths and bees. Fruits should mature on the plant until the stems are brown and the fruit lightweight, or until frost. Dry until the gourds are beige and the seed can be loosened by shaking or lightly tapping. Drill holes or saw open the fruit to remove seeds. Pebbles added through drill holes may help loosen the seeds. Winnow to remove chaff.

Bulk quantities available for \$7 (14gms) M42. Acoma Dipper. Typical dipper-shaped gourd with handles occasionally up to 2 ft. long. From Acoma Pueblo in New Mexico. (g) See color photo on page 20.

**M1. Alamos.** Originally collected in 1984 in Alamos, Sonora. The gourds are large and banana-shaped with occasional teardrops. (d, i)

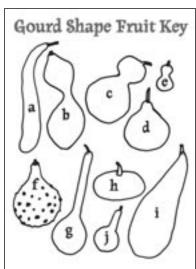
**M23.** Apache Dipper. Originally collected in Peridot, Arizona, on the San Carlos Reservation. The neck handle can be up to 12" long. (g)

**M58. Canyon Mix.** An older collection, the gourds are bilobal, canteen and teardrop shaped. Originally collected in 1984 from La Bufa at the bottom of the Barranca del Cobre. (c, d)

M64. Hernandez Dipper. Purchased in Hernandez, New Mexico, these gourds have long handles and somewhat elongated bases. (g)

Mathematical and a set of the Hopi. Large ones may also be used to make women's rasp instruments for Home Dance. (h)

M2. Mayo Bilobal. Medium to large gourds with small upper chamber. Collected in the Mayo River Valley in southern Sonora, Mexico. Used as canteens. Often strung with ixtle (agave fiber) for carrying. (c)



Letters at the end of descriptions refer to the key. All shapes in the key may not be currently available.

**M7.** Mayo Canteen. Slightly bilobal to short-necked bilobal gourds. From the Mayo region of southern Sonora. (d, j)

**M40. Mayo Teardrop Bule.** Teardrop to slight bilobal shaped gourds. Used to make deer dance rattles. (c, d)

M31. Mayo/Yoeme Deer Dancer. Teardrop to canteen-shaped gourds used to make ceremonial rattles for the Deer Dance. (g)

M20. O'odham Dipper. A large growout took place at our Sylvester gardens where we had gourds hanging in the mesquite trees! This was our first dipper gourd collection made in 1982 at Topawa on the Tohono O'odham Nation. Gourds vary from 8" to 18" long. (g)

**Ceremonial.** A small (2-4") bilobal or dipper gourd used for crafts and as rattles by the Native American Church. (e)

**M56. San Juan Mix.** A mixture of dipper, teardrop, canteen and banana- shaped gourds. From San Juan Pueblo, New Mexico. (d, g, i)

**M34. Tepehuan Canteen.** Teardrop-shaped fruits originally collected at Santa Rosalia, Chihuahua, a Tepehuan village in a remote area of the Sierra Madre of Mexico. (g)



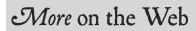
#### Seeds All seed packets are \$2.75 each til May 1 when they go up to \$3

#### More Gourd



M12. Wild Luffa. Luffa

operculata. From dooryard gardens in terraces along the Rio Mayo in Onavas, Sonora, Mexico. Plants produce 2-3 inch egg-shaped fruit. Removing the thin, papery skin reveals the small "luffa sponge" which can be used as a kitchen or bath scrubber. In the low desert, plant with the summer rains.



#### Gourd

M62. Dolores de Hidalgo Bilobal M52. San Juan Dipper

**Greens** GR5. Tarahumara Mostasas/Mocoasali.

### Greens

Greens are an excellent source of vitamins, calcium and iron. Originally gathered from the wild, they will readily self-seed and can give urban gardeners plenty of potherbs. Approx. 0.3-0.5gms/packet.

**Culture:** The small seeds should be broadcast or raked in. **Seedsaving:** These annuals are insect pollinated; do not grow different varieties of the same species if saving seed. Seed pods form along the flower stalk. Allow to mature and dry before harvesting. Place dried seed heads in a paper or cloth sack, strip off seeds, and winnow out chaff.

💷 Bulk quantities available for \$8 (5gms)



"Chichiquelite." Solanum melanocerasum. From Piedras Verdes, a Mayo community in Sonora, Mexico. Commonly called the garden huckleberry, the leaves are cooked for greens and the shiny black berries are edible. Do not eat the leaves raw. Found in the tropics of western Africa. See color photo on page 20.

**GR7. Chual**. *Chenopodium berlandieri*. Grown by a Mayo gardener near Piedras Verdes, Sonora, Mexico. Leaves are eaten raw or cooked.



*Chenopodium berlandieri*. The young, succulent leaves are steamed like spinach and eaten as *quelite*. Collected near Nuevo Casas Grandes at Colonia Dublan.

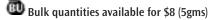
**GR8. Mostaza Roja. "Mequasare."** *Brassica spp.* A wild mustard with tender, mild flavored leaves. Use in salads or as cooked greens. Plant in fall in the low desert.

### Herbs

Some of these herbs are native, while others were introduced by the Spanish. The flavors are distinct additions to regional dishes, and their healing properties are known to local peoples. They can be grown in containers as well as gardens. Approx. 0.5-1gms/packet, depending on seed size.

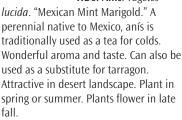
**Culture:** Except where noted, plant seed with the summer rains about 1/4 inch deep.

**Seedsaving:** Herbs are insect pollinated so members of the same species will cross. Harvest dried seed stalks, and hang upside down for complete drying. Crush to remove seeds, and winnow off chaff.





HB6. Anís. Tagetes





*Chenopodium berlandieri* var. *nuttalie*. Originally collected from Tarascan Indian farmers in Michoacan, southern Mexico. Formerly grown by the historic Pima. The pink seed is toasted and used as pinole and atole. Leaves can also be eaten.





**Azafrán**. *Carthamus tinctorius*. This red/orange thistle-like flower was used in cooking as a saffron substitute. A sunflower relative, azafrán can be grown as an annual flower and keeps well as a dry flower (though very prickly). Collected in Corrales, NM. *See color photo on page 21*.

**HB15. Epazote.** *Chenopodium ambrosioides.* A commonly used herb in southern Mexico. Aromatic foliage has a distinct flavor used to season beans. Believed to reduce flatulence caused by beans.

### 📥 🕂 🎯 HB8. Guarijío

**Conivari**. *Hyptis suaveolens*. A cooling drink is made from the jelled, chia-like seed which has high-fiber mucilage. Mayo Indians use it for an eye remedy and to control diarrhea. For summer gardens.

**HB10. Hinojo.** Anethum graveolens. This collection is from a Mayo garden in Piedras Verdes, Sonora, Mexico. Mild dill flavor.

#### More Herbs



**Basil.** *Ocimum basilicum.* A strong smelling medicinal plant commonly grown in Sonora, Mexico. Good for cooking and flavoring vinegars and oils. The white and pink flowers make it an attractive garden plant. Do not grow with other basils if saving seed. Plant in spring and summer.

### HB3. Mrs. Burns'

Famous Lemon Basil. Ocimum basilicum. This variety has been grown for 60 years in southeastern New Mexico. It is an Old World introduction and readily self-seeds. Great lemon flavor. Plant in spring and summer.

HB16. Swain Family Heirloom. Anethum graveolens. This dill may have arrived in Paradox Valley, Colorado with immigrants from England who homesteaded the area. Good for pickling. Freely seeding, once you plant it, you're likely to always have it in your garden. Large aromatic heads.



**Chia.** *Salvia tiliafolia.* A native plant from southeastern Arizona to South America. The blue flowers and foliage makes attractive landscape plants for summer gardens. Gathered and used medicinally by the Tarahumara.

**HB13. Yoeme "Alvaaka" Basil.** *Ocimum basilicum.* A small seed sample was collected from a woman at New Pascua who uses the foliage to make a tea which is "Good for the stomach and as a general tonic." The plants have a strong licorice aroma. Plant in spring and summer.



A Spanish introduction, especially good in soups. Approx. 2 gms/packet.

**Culture:** In late fall or early spring (Feb. in low desert) plant seed 1/2 inch deep and 4 inches apart. Plants are winter hardy and are not damaged by light frosts.

**Seedsaving:** An annual, mainly self pollinated. Small pods contain 1 or 2 seeds. Harvest entire plant, thresh and winnow.



**LE2. Tarahumara Pinks**. A small round pink-gray seed, originally from Chihuahua, Mexico.



An early introduction by the Spanish into the Greater Southwest. The fruits are varied, with orange, green or white flesh and skins that are smooth, ribbed or netted. A summertime favorite. Approx. 1gm/packet.

**Culture:** A warm-season crop. Plant 3-5 seeds 1/2 inch deep directly in basins, 24 inches apart with plenty of room for sprawling vines. Overwatering can dilute flavor of fruit and cause splitting. **Seedsaving:** Annual plants are insect pollinated, and all *Cucumis* 

species cross. Male and female flowers form on each plant. Ripe fruits often have a distinct aroma. Remove seeds from cut fruit, wash off fibers, and spread seeds on a cloth to dry. Dry thoroughly before storing.

Bulk quantities available for \$8 (7gms)

**A C D F14. Acoma.** Fruit are round or oval, with smooth yellow skin and ribs. Flesh is white to salmon-colored with a mild, sweet flavor.



Spanish heirloom from northern New Mexico. Oval fruits have a sweet orange flesh.

Q

**F20. Cochiti Mix**. A mix

of native and honeydew types collected

round, smooth-skinned honeydews with

light green flesh to elongated oval fruit

💞 💷 F23. Corrales. A new

from Cochiti Pueblo. Fruit vary from

growout of a 1993 collection from

Corrales, NM. Typical oblong native

melons with ribs and smooth skin. Dark

green fruit turn yellow when ripe. Sweet

with ribs and orange flesh.

and juicy.

Two distinct fruit types within this collection: 1) wrinkled, round, yellow-green fruits and 2) smoothly elongated yellow-green fruits. Both have pale green to orange flesh. Juicy with a mild flavor. Tasty with chile, salt, and lime. Good

keepers if unbruised.

**F4. Isleta Pueblo**. This orange and green fleshed, ribbed melon is from near Albuquerque, NM. Tolerates heat.

**F21. Jemez**. Oval, ribbed, mostly smooth-skinned typical native melon. Orange flesh and sweet flavor. Collected in Jemez Pueblo in 1990.

**F16. Melon de Castillo.** A deliciously sweet melon with pale yellow, smooth skin, a staff favorite. From the Sierra Madre in Mexico.

**F9. Navajo Mix**. Our original seeds were obtained from a melon entered in the Navajo Nation Fair in Shiprock, New Mexico. From grow-outs, three fruit types have been produced: ribbed and smooth ovals, and elongated.

toll-free orders: 866.622.5561 29 Seedlisting 2008



#### More Melon

Mild flavored flesh is pale green to light orange.

### 🐨 መ F10. Navajo Yellow.

Ribbed fruit are round or oval and have smooth, yellow skin and orange flesh. Originally purchased at the Navajo Nation Fair. Good keeper if unbruised.

F12. New Mexico Melon. Originally from Alameda, New Mexico

(near Albuguergue). Fruits are ribbed green/yellow with sweet and juicy orange, white, green or yellow flesh.

F5. O'odham Ke:li Ba:so. A favorite of Tohono O'odham and Pima low-desert farmers. Fruits are casaba type with light green flesh. Very tasty-a staff favorite.

8. Ojo Caliente. Originally obtained from a farmer in northern New Mexico. The oval fruits are smoothskinned and can weigh 5-7 pounds. Pale green flesh with a tinge of orange is sweet and juicy. Harvest ripe fruits when bright vellow and aromatic.

F7. San Felipe. A mix of typical Puebloan melons with a variety of shapes from long, smooth skins to round casaba-types. Some with netting, others with smooth skin.

🐨 👜 F6. San Juan. A prolific honeydew-type with smooth, light green skin and light to deep lime-colored flesh. Vines are somewhat compact and desert hardy.

💷 F24. San Juan Native. Collected in 1993 from an elder in San Juan Pueblo. Fruit are oblong with ribs and the smooth skin of native melons. Skin turns yellow when ripe. Flesh is light green to orange.

💕 👼 F19. Santo Domingo **Casaba**. Originally collected in Santo Domingo Pueblo, this is a casaba-type melon. The skin is slightly wrinkled, the flesh is white to light green. Sweet and tasty.



F2. Santo Domingo **Mixed**. Round- to teardrop-shaped fruit with smooth skin. Some honeydew-types. Flesh varies from white to light green to orange.

💷 F18. Santo Domingo Native. Also collected from Santo Domingo Pueblo, these are typical of the "native" melons grown for hundreds of years in the pueblos of New Mexico. The fruit are oblong, ribbed, and have predominantly smooth skin. Some netting or "cracking" occurs. The flesh is orange and tasty. See color photo on page 21.

### Okra

Abelmoschus esculentus

An introduced African crop that does well in southern areas of the United States. Approx. 2 gms/packet.

Culture: Soak seeds of this warm-season crop for quicker germination. Plant 1/2 inch deep and allow 12 inches between plants. Plants can be 4-5 ft. tall and will produce until frost.

Seedsaving: The annual is insect pollinated, so varieties will cross. Allow the pods to dry and mature on the plant. Harvest before pods split open. Remove seeds carefully.

Bulk quantities available for \$8 (14gms)

Okra seeds can only be shipped to AZ, NM, TX and OK addresses.

🕂 🛍 OK2. Beck's Gardenville. A Texas heirloom from San Antonio. A vigorous, productive and drought-tolerant plant. Okra is ready to pick when it snaps off the stalk.

OK4. Eagle Pass. From the Carrizo Springs/Eagle Pass area in Texas. Good in gumbo or cut and fried. Not slimy or stringy when cooked. Plants bear large pods beginning near ground level, up to 5 ft.

OK1. Guarijio "Nescafe." From Sonora. Mexico. The beautiful vellow flowers have red throats. Young pods are fried, boiled or added to stews and gumbos. Seeds can be roasted, ground and mixed with coffee. Large mature pods are good for dried arrangements.

💵 🔟 OK3. Texas Hill Country Red. Attractive plant with colorful bronze-red fruit. Produces well in summer heat. Plants are 5-6 ft. Slender pods can be slivered and eaten raw in salads or cooked.



Allium cepa

These prolific multiplier onions have a shallot-like flavor. They are easy to grow. Approx. 10 bulbs/packet.

**Culture:** Separate bulbs, and plant in the fall 1 inch below surface and 12 inches apart. Bulbs will mutiply into clumps and can be harvested throughout the cooler months. Tops will die back in the heat of summer and may return with monsoon rains; bulbs can remain in the ground or be harvested and stored in a cool dry place for planting in the fall.

Seedsaving: Plants rarely flower, propagate by division.



### Pea

#### Pisum sativum

Introduced by the Spanish. The seed is eaten green and dried peas are used in soups or cooked like beans. Approx. 10gms/packet.

Culture: A cool season crop that should be planted in the fall or winter. Plant 1/2 inch deep and 6 inches apart. Plants will sprawl and can produce until days get too hot.

Seedsaving: A self-pollinating annual. Dried pods can be harvested as they mature or entire plants dried and threshed near the end of the season.

Bulk quantities available for \$8 (100gms)

#### 🕈 🎒 Q3. Alverjon Temporal. A "dry farm" pea introduced by the Spanish and now grown in the Manzano Mountains at 7500 ft. in northern NM.

**Q24.** Cumpas Green. A smooth green pea from central Sonora, once home to the Opata. Used in soups.

💷 Q23. New Mexico. A typical smooth-skinned, beige Spanish soup pea. Grown throughout New Mexico.

### 🕂 🛷 💩 Q1. O'odham.

Grown for more than 300 years as a desert winter crop by O'odham farmers. Has been planted in commercial fields in rotation with cotton to reduce Texas root rot. Alkali tolerant and very hardy.

### Q20. O'odham Green.

Originally collected in 1981 from Santa Rose Village on the Tohono O'odham Nation. Good in soups and stews. Smooth, green seeds. Does well at the Conservation Farm (4000 ft.).



The large seeds are tan and smooth. Good in soups and stews. Hardy in the desert, but also did very well at the Conservation Farm (4000 ft.).

### **Panic Grass**

Panicum sonorum

A native domesticate of arid America, the grass is used as a forage and the tiny seed harvested for grain. Replace a quarter to half of the flour in recipes with finely ground seed. Approx. 1 gram/packet.

Culture: Plant with summer rains by broadcasting. Rake in. Protect germinating seeds from birds.

Seedsaving: A wind-pollinated annual. Birds love the seed, which is borne in loose heads. Protect with paper or cloth bags. Harvest when dry, strip seeds and winnow off chaff.

01. Panic Grass. "Sagui". A rare grass. The small golden seed is rich in lysine. Attractive plants are fast growing and heat tolerant. Birds love it!

**Q8. San Luis.** Our only collection from southern Colorado. Seeds are tan to light yellow with smooth skin. Good for soups, Grown at 8500 ft.

### More on the Web

Pea 07. Oiito 022. Southern Tarahumara Q11. Tepehuan 04. Vadito 05. Velarde Q21. Yoquivo del Sur

🛀 🛷 👼 Q6. Taos. Grown in Taos Pueblo, New Mexico. The large seeds are tan to light green and smooth. Good in soups.

🕈 💷 Q2. Tarahumara "Chicharos." From the Sierra Madre in northern Mexico. Grown along the edges of bean and corn fields. Plant in early spring in cooler climates.

📲 🛷 👼 Q12. Truchas Alverion. Tan and green smooth soup pea introduced by the Spanish. Grown in Truchas, NM at 8000 ft.

### Sorghum

Sorghum spp.

Originally from Africa. Introduced as a forage, grain and sugar source. The prolific plants are desert hardy. Stalks are chewed for their sweet juices - children love them. Approx. 2gms/packet.

Culture: In the spring or with summer rains, broadcast seed and rake in, or plant 1/2 in. deep and 10 in. apart. Thin to allow space, as plants will tiller (sprout stalks from base).

Seedsaving: A wind-pollinated annual, so varieties will cross. Bag seedheads with paper or cloth bags to protect them from birds. Strip dry seeds from stem and winnow.

Bulk quantities available for \$6 (14gms)



bicolor. Grown by the Guarijio in Sonora, Mexico. Seeds are dark maroon and the sweet canes can be 6 feet tall.



514. Gila River Kaña. S. bicolor. Collected from Sweetwater on the Gila River Indian Reservation. Kaña was often grown for the sweet cane it produced. Stalks were cut into small pieces, split open and the juices sucked out.





#### More Sorghum

**4**S3. Mayo Broomcorn. Sorghum sp. "Caña de Escoba." Tassel spikes are used to make brooms. The Tarahumara sometimes use the seed as an aid in fermenting tesgüino (corn beer).

**A**red-seeded sugar cane grown by the Mt. Pima for eating. **st. Onavas Red**. *S. bicolor*. The stalks produce many tillers and are sweet and juicy, with burgundy red seeds. From the Pima Bajo village of Onavas.

**Stll. San Felipe Pueblo.** *S. bicolor.* Raised as "sugar cane", these stalks are chewed as a sweet treat. Dark black seeds, plants are up to five feet tall.

**Raised at the Santo Domingo Pueblo, the seeds are brick red from slender heads.** Cut stalks chewed for sweet treat.

**Sorghum** sp. White seed collected from Batopilas Canyon.

### Squash Cucurbita spp.

Squash fruits vary in shape, color and flavor. Flowers, seeds and growing tips of vines are all edible. All fruits can be eaten when small and immature as summer squash, and mature as winter squash. Approx. 3-4.5gms/packet, depending on seed size.

**Culture:** In the spring or with the summer rains, sow a few seeds one inch deep in each basin, allowing room for abundant vine growth.

**Seedsaving:** An insect-pollinated annual, varieties of the same species will cross. Allow fruits to ripen and mature on the vine until skin is hard and stem brown. After harvesting, fruit needs to after-ripen for 30 days in cool location. Remove seeds, wash and dry before storage.

**Cultural Varieties:** Some of our squash and melons exhibit a diversity of fruit types within a population. Although it may appear that a grower has allowed varieties to cross-pollinate, and did not maintain the purity of the strain, we have found that this is a cultural mixing. Traditional gardeners and farmers intentionally grow a mix of fruit types to add variety to their harvest and diet. When saving seeds from a diverse planting, gardeners can continue to select for desirable fruit types. Save seeds from the best-tasting squash, the healthiest plants, fruits that stored well, and other plants with the characteristics you want.

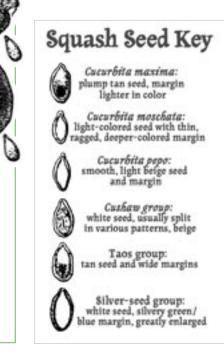
🛅 Bulk quantities available for \$8 (28gms)

#### **Collected from a remote Guarijio rancho** in the foothills of the Sierra Madre. This is a tall, sweet, sugar-type sorghum. The stalks are eaten like sugar cane. The seed is "black" (very dark red).

**Gamma Sc. Texas Black Amber Molasses.** *S. bicolor.* An heirloom from Waco, TX. Plump black seeds. Used for molasses and silage.

**4**S2. Tohono O'odham "Sugarcane." *S. bicolor.* "Ka:ña." Crosses with *S. halapense,* Johnson grass.

Apache. S. bicolor. Red-seeded sorghum from Cibeque, Arizona.



### More on the Web

#### C. argyrosperma

EA28. Calabaza Caliente EA34. Calabaza Huichona EA35. Cuares Mera EA3. Gila Pima Ha:l EA33. Middle Rio Conchos Calabaza EA29. Mt. Pima Striped EA23. Tarahumara EA17. Tarahumara Calabaza Corriente

### C. moschata

EM36. Middle Rio Conchos EM35. Piedras Verdes Segualca

#### C. argyrosperma

Striped cushaw-type fruit. The fast-growing vines have large splotched leaves. Characteristic peduncles (stems) are large and corky. The fruits of this species usually have a long storage life.

**EA31. Batopilas.** Large, bilobal to necked fruit are mostly green and white striped with somewhat thickened stems and occasional corky ribs. From the bottom of Batopilas Canyon in the Sierra Tarahumara. Not yet tested in the low desert of Tucson, but grows at low elevation in the hot, deciduous forest zone. *See color photo on page 21.* 

**EA38. Douglas Heirloom.** This squash was collected in 1982 from Douglas, AZ in the southeastern corner of the state, on the border with Mexico. It has solid pale yellow with occasional green fruit and heavy ribbing or "warting" on the stem end, giving it a somewhat unattractive appearance. Tasty, thick orange flesh.

#### More C. argyrosperma

EA32. La Bufa. Large fruit are green and white striped or mottled, dark green or green with orange splotches; predominantly tear-drop shaped with an expanded, squat bottom end and very large, corky stems. Thick flesh is light orange-colored. From Batopilas Canyon in the Sierra Tarahumara. Not yet tested in the low desert of Tucson, but grows at low elevation in the hot, deciduous forest zone.

🕂 🔟 EA24. Magdalena Cushaw.

Originally from Magdalena, Sonora. Good keeper.

EA36. Mayo Cushaw. Common in Mayo country between Navajoa and Alamos in southern Sonora. Fruit range from nearly white (pale green) to green and white stripes to solid dark green. Shapes vary, including nearly round, teardrop to slightly bilobal. Thickened stems and yellow to pale orange, somewhat thin flesh.

### 🗜 適 EA21. Papalote Ranch

Cushaw. Small, dark-green cushaws, with varied shapes. Tasty and versatile. Good keeper with very thick skin. Originally from Mexico.

EA22. Parral. Green striped fruits can weigh up to 10lbs. Corky ribs around the neck. From Parral, Chihuahua, MX.

🔟 EA5. Pima Bajo Segualca. From Onavas, Sonora. Small green and white striped fruits, round or with small necks, and pale cream flesh.

EA27. Salt River Pima Ha:I. Green and white striped cushaw squash from the Salt River Pima Reservation near Phoenix. Fruits mostly canteen-shaped or with long neck, some orange patches when mature.

Ha:I." A hardshelled variety with Taos-type seeds. A new grow-out of an old collection from the Tohono O'odham village of San Pedro. Fruit is yellow with some green mottling.

🗜 🛷 👼 EA15. Silver Edged.

Grown for the tasty seeds, which are large and white with a silver edge. Seeds are roasted for pepitas or used in pipian sauce.

#### EA14. Tohono O'odham Ha:l. A short-season crop and very heat tolerant. Prized for the immature fruits, "Ha:al mamat", (O'odham for "children"). Mature fruits have light orange flesh and store well.

🐨 መ EA20. Veracruz Pepita. The round, flattened fruits are white with green mottled stripes. Grown for the long, narrow seeds, which are toasted for snacks or ground to prepare Pipian sauces. Originally collected in Veracruz, southern Mexico.

#### C. maxima

Hubbard or turban type fruit, large beige seed.

🕂 🐼 🛍 EX1. Mayo Blusher. The large, white to light green fruits are round to elongated in shape and blush pink when fully ripe. The apricot colored flesh is sweet. Good keepers.

🐨 🛍 EX13. Mormon Squash. Collected in Hopiland but considered to have been from the Mormons. Typical hubbard with blue-green skin (some orange fruit also) and thick orange flesh. Flowered earlier than many other C. maxima's in our grow-out at the Conservation Farm.

📭 🐼 👼 EX5. Navajo Hubbard. Originally collected at Fort Defiance on the Navajo Nation and grown out at the new NS/S Conservation Farm. Large fruits with light green-blue to dark green to orange skin and tasty orange flesh. Large tan seeds.

EX6. Peñasco Cheese. A flat, ribbed cheese-shaped squash with sweet orange flesh. Fruits have gray or pale pink skin and can weigh 5-8 lbs. Collected in the Spanish village of Peñasco (8000 ft.), NM.

🐲 👼 EX11. Taos. Traditional "hubbard-type" squash from Taos Pueblo, New Mexico. Grown for us by an organic farmer in California.

### C. moschata

Includes Butternut and Big Cheese fruit types. They can cross with C. argyrosperma, but usually flower later. They have a non-stringy texture and are good keepers.

**EM29. Carrizo**. Formerly listed as "Sonora/Sinaloa Border." The orange fruit are butternut-shaped and tasty. Makes a great soup or puree. Common in southern Sonora.

🐨 📵 EM33. Guarijio Segualca. Originally collected in San Bernardo, Sonora. Fruit types vary in shape and size. Good keepers.

🕂 🐼 EM31. Magdalena Big **Cheese**. One of the oldest types of cultivated squash. Excellent producer of large, light orange, ribbed fruits with a flattened pumpkin shape and sweet, bright orange flesh.

EM34. Mayo Segualca. An early collection from Los Capomos, an old ceremonial village in northern Sinaloa, Mexico. Sweet and tasty.

🔶 🐼 🝈 EM30. Pima Bajo. Small fruits are striped green and white with narrow necks. Collected near Onavas, Sonora.

🕂 🐼 EM27. Rio Fuerte Mayo **Segualca.** A popular squash planted in the fall in Sinaloa, Mexico.

HEM28. Rio Mayo Segualca. Round, fluted big cheese type fruits with flavorful orange flesh.

EM37. Sonoran.

Beautiful muted orange and creamstriped fruit with bright orange flesh. Purchased at a roadside stand in central Sonora, an area once inhabited by the Opata.

🕂 💞 EM40. Yoeme Segualca. Collected from the Yoeme village of Vicam, Sonora. Fruit are large, mutedorange colored, and fluted with a flattened shape. Excellent taste. Like other C. moschata varieties, may require a long growing season.

#### All seed packets are \$2.75 each til May 1 when they go up to \$3



Seec

#### С. реро

Mostly grown for immature fruit and seeds. Pumpkins, acorn squash, zucchini and ornamental gourds are also C. pepos. Do not grow these varieties together if saving seeds.

**EP45. Acoma Pumpkin.** Round fruits have dark and light green stripes. Grown in northern New Mexico and used as winter squash.

Fruits can be round or elongated, striped or solid green turning yellow as they mature. Originally collected from Hotevilla, Arizona.

**A Calabaza "Vavuli."** From the Sierra Madre Mountains of western Chihuahua, Mexico. Pale green to yellow skins with cream-colored flesh.

### EP46. Pacheco

**Pumpkin**. An unusual collection from the northern plains of Chihuahua — the seed reportedly came from a ranch to the west in Sonora. Typical round to elongated "native pepo" with bright yellow skin and delicious cream-colored flesh.



Pumpkin-shaped medium sized fruits are cream and green striped with beige ribs. Very sweet, great tasting.

**Control Control Contr** 

**HIT IN ALL OF THE OUT OF THE OUT** 

### Sunflower

Helianthus spp.

Tobacco

Nicotiana rustica

apart.

caution). Approx. 0.1gms/packet.

A Native American domesticate, the seeds are eaten raw or roasted, pressed for oil, planted as an ornamental or for bird feed. The black-seeded variety is used for basketry dye material by the Hopi. Approx. 2gms/packet.

**Culture:** Plant seeds in the spring or with the summer rains, 1 inch deep and 12 inches apart. Plants can grow 6-7 feet tall.

Tobacco, used as a sacred and medicinal herb, is an important

part of Indian culture and folklore. This species, which came

north from South America before 1500 AD, is now extremely

rare. Can be used as an organic insecticide (with appropriate

**Culture:** Plant the tiny seeds in the spring, and cover with light sandy soil. Can be started indoors and transplanted. Plant 1 ft.

Seedsaving: An insect-pollinated annual, varieties will cross.

Remove mature seedheads and crush capsules in a bag or on a tray.

**Seedsaving:** Sunflowers are insect-pollinated annuals, and all varieties will cross. Protect maturing seed heads from the birds with paper sacks or cloth bags (pillow cases work great). Allow seeds to dry in the flower heads. Rub out seeds and winnow off chaff.

Called "Tceqa" by the Hopi, the blue/black hull is used for wool and basket dye, and eye medicine, but seed is also edible.

**15. Tarahumara White.** This rare variety with solid gold flowers has all-white hulls. Canadian Mennonite in origin but obtained by the Tarahumara more than 40 years ago when some Mennonites relocated to Chihuahua.

# **M6. Isleta Pueblo.** From the pueblo south of Albuquerque, NM. Plants grow to 4-1/2 ft., including flowers.

**N10. Mt. Pima.** Collected in the Mt. Pima region of western Chihuahua. It is commonly grown in plots or gardens around the house and used for smoking. Delicate pink-tinged flowers and huge leaves! *See color photo on page 20.* 



From northern New Mexico, this tobacco was used by early Spanish settlers until the 1930s.

Use a fan or light breeze to remove chaff. Bulk quantities available for \$7 (3gms)

#### More Tobacco

**N5. San Juan Pueblo.** Traditionally grown by elders in small secluded patches. Leaves are used ceremonially. Plants have small, tubular yellow flowers.

**Arr W N3. Santo Domingo Ceremonial.** A cultivated annual grown in irrigated gardens by various Puebloans. Used in rain ceremonials.

**M9. Southern Tepehuan. "Macuchi"** From Santa Maria Ocotan, Durango, Mexico. Reported to be very strong and mildly hallucinogenic.

### Tomatillo & Tomato

Tomatillos, the small green "husk tomatoes" used to make traditional and savory green salsas and stews, are not tomatoes (Lycopersicon) but members of the Physalis family that includes ground cherries and Cape gooseberries. Approx. 0.5gms/packet.

**Culture:** In the spring, plant seeds directly in the garden 1/4 inch deep, or start indoors and transplant. Allow 15 inches between plants.

**Seedsaving:** Flowers are both insect and self-pollinated, and varieties can cross. Grow only one variety at a time, or isolate plants. Tomatillos begin to ripen when they turn from green to light yellow. When the husk is dry and begins to split open at the bottom, the fruit can be harvested for seed. To remove seeds, mash and puree ripe fruit with water in blender. Allow the puree to stand 4-6 hours. Pulp will rise and seeds will sink. Ladle off pulp (add more water and flush out remaining pulp if needed), spread seeds on a cloth and allow to dry.



Bulk quantities available for \$7 (3gms)

### TM5. Ciudad Victoria Tomato.

*Lycopersicon esculentum* var. *cerasiforme*. A weedy, semi-cultivated tomato from dooryard gardens in Ciudad Victoria, Tamaulipas, Mexico. Small round, sweet fruit are late maturing.

**TM11. Mt. Pima Tomatillo**. *Physalis philadelphica* var. *philadelphica*. Recent grow-out of a 1988 original collection. Husked fruit are small and plants are somewhat sprawling. Commonly used in salsa.

TM14. Xcm! Nichols Heirloom Tomato. Lycopersicon esculentum. These seeds were sent to us by the Nichols family in Tucson. Volunteer seeds that just kept coming up, they have been maintained by the family patriarch for about 50 years. It is well adapted to the desert; it is heat-tolerant and prefers full sunlight. The tasty, "pink cherry" tomatoes are prolific producers.

### TM7. Punta Banda

**Tomato.** *Lycopersicon esculentum.* Collected on the Punta Banda Peninsula in Baja California. Plants produce hundreds of red meaty, thick-skinned fruits despite heat, water stress and poor soil. Great paste tomato. *See color photo on page 21.*  **China the set of the** 

TM12. Texas Wild Tomato. *Lycopersicon esculentum*. All we really know is that seed of this tomato was collected from a patch of apparently "wild" tomatoes in southern Texas. Plants sprawled in our Conservation Farm growout, producing tons of small, super tasty, cherry-type tomatoes.

**TM3.** Zuni Tomatillo. Physalis philadelphica var. philadelphica. The small sweet fruit have been semicultivated by the Zuni of northern New Mexico for more than a century. Can be roasted in an oven, blended with garlic, onion, chile and cilantro as a hot sauce. See color photo on page 20.

## More on the Web

#### Sunflower

I1. Apache Brown Striped I2. Havasupai Striped

### Watermelon

Citrullus lanatus

An African native introduced by the Spanish to Mexico, watermelon seed was rapidly traded northward, reaching the Colorado River delta area before the Spaniards. Fruits vary in size and color of flesh and rind. Seeds are eaten and used for their oil. Approx. 2gms/packet.

**Culture:** In the spring, plant seeds 1/2 to 1 inch deep, 3 seeds per basin, allowing ample room for vines. Plants need a long growing season.

**Seedsaving:** An insect-pollinated annual. Varieties will cross. Male and female flowers develop on each plant, and pollen must be transferred from a male to female for fruit set. Ripe fruits have a hollow sound when tapped and a yellowing patch on the bottom. Also look for dried tendrils next to the stem. Scoop out seeds of fully ripe fruit, wash thoroughly and dry.

Bulk quantities available for \$9 (14gms)

**difference G12.** Acoma. This watermelon is believed to have been grown by the ancient ancestors of Acoma Pueblo. Rounded to slightly elongated fruit with pale to dark green skin. Redmeated.

## G1. Hopi Red.

**"Kawayvatnga."** This was NS/S's first watermelon collection made at New Oraibi on Third Mesa. Fruits are round to oblong, have light to dark green skins and pink to red flesh. A few yellow-fleshed ones show up now and again.



#### More Watermelon

G2. Hopi Yellow.

"Sikyatko." A favorite at the Conservation Farm. The green striped fruits have pale yellow/orange flesh. Large fruit with crisp, sweet taste.

**G14. Jemez.** Striped fruit may vary from pale to dark green. Considered a "native" watermelon, which is still rare in any pueblo.

**A** rare watermelon collection from Redford, Texas. Round, smallish, "native-type" fruit with pale to darker green skin. Just over the border in Chihuahua it is known as "sandia tuliza".

### More on the Web

**Watermelon** G11. Navajo Winter Watermelon



Widespread use in the southwest after introduction by Spanish. Approx. 28gms/packet.

**Culture:** Plant in December through January. Broadcast and rake in seed, then lightly pat soil. If birds are a problem, cover very thinly with straw and sticks. Keep moist until sprouted.

**Seedsaving:** A self-pollinating annual. Birds love to eat the ripe seeds, so protection may be necessary. Harvest when dry, strip stems or walk on seedheads to remove seeds and winnow off chaff. **4 Constant of Section 2 G5. Mayo**. Originally collected from Mayo farmers in Los Capomos, Sinaloa, Mexico. Prolific vines produce small melons of various colors in the hot summer.

**4 (a) (b) (c) (b) (c) (** 

**Gr. Rio San Miguel**. Solid green fruits are small and round with pale flavorless flesh. Grown by the Tarahumaras for the plentiful edible seeds which are black, red and mottled. Originally from an isolated area near Polanco, Chihuahua, Mexico.

**G3. Tohono O'odham Yellow Meated.** A high yielder of green oval fruit with sweet and crisp yellow to orange flesh. Fruit can be up to 35 lb. Originally collected at Queenswell, Arizona.

WH3. Pima Club. At one time grown by the Pima on the Gila River Reservation. Seed heads are short, beardless and club shaped (flattened). White kernels are soft and produce flour used for cookies and pastry.

WH2. Baart. An heirloom spring wheat, introduced by the Arizona Agricultural Experiment Station in Tucson in 1900 from Australia. It became the Southwest's leading variety of wheat. Kernels are white, semi-hard and excellent for milling. Seed heads have long beards; plants average 50".

WH1. White Sonora. A beardless spring wheat. The compact head is medium long, with a soft kernel. Originally brought into the U.S. from Magdalena Mission in Northern Sonora, where it has been grown since around 1770. Common among the Pima and Yuma after 1820.



**DW2. Catalina Foothills.** These 17 varieties are native to the beautiful desert near Tucson and include many in the Sonoran Desert Mix plus Dyssodia, Blue Flax, Goldeneye, Paperflower and Blue Trumpets. Plant fall to early spring. **\$2**/pkt

#### DW16. Cut Flower Wildflower Mix.

Fifteen wildflowers perfect for cutting but also beautiful in your yard. Includes Scarlet Sage, Firewheel, Larkspur, Purple Coneflower and more. Plant fall to early spring. **\$2**/pkt

DW17. For the Birds & Bees Wildflower

Mix. Especially chosen to attract birds, butterflies, bees & Sphinx Moths. Includes Blackfoot Daisy, Desert Sunflower, Butterfly Weed, Rocky Mt. Bee Plant, Penstemon and more. Plant fall to early spring. **\$2**/pkt

#### DW25. Great Basin Wildflower Mix.

Especially mixed for Prescott, Payson, southern Utah, Santa Fe, and similar habitat. Contains 13 different wildflowers including Buttonroot Snakeweed, Purple Coneflower, and Mexican Hats. **\$2**/pkt

DW26. Mogollon Rim Wildflower Mix.

For Flagstaff and locations above Arizona's Mogollon Rim. Best at elevations of 6500-9000'. The different wildflowers include Goldpea, Locoweed and Tall Verbena. (Locoweed not recommended in livestock areas.) **\$2**/pkt

DW51. Old Town Tucson Wildflowers.

Thirteen beautiful wildflowers commonly found growing in central Tucson. Cultivation instructions included. One ounce covers approx. 200 sq. feet. **\$2**/1.5gm or **\$12**/oz

**DW1. Sonoran Desert Mix.** A spectacular mix of 14 species of annuals and perennials native to the Sonoran Desert. Includes Mexican Poppy, Owl's Clover, Desert & Arroyo Lupine, and Penstemon. Plant fall to early spring. **\$2**/pkt

DW18. Sonoran Summer Blend.

Eighteen wildflowers including Trailing Windmills, Sacred Datura, Dyssodia, Firewheel, Summer Poppy, Lemon Mint, Desert Four O'Clock, and more. Plant January to July. **\$2**/pkt

more wildflowers on page 37



Most desert wildflowers are planted in fall/winter in the desert, early spring in cooler climates. Planting instructions are included on the packets of these lovely native southwestern desert wildflowers. Small packets cover approx. 30 sq. feet; large packets, 100-200 sq. feet, depending on seed variety.

# wildflowers

#### Check our website for more wildflower seed availability!

**DW30. Blue Flax.** *Linum lewisii.* Perennial herb blooms sky blue with 5 petals from April to September. Used for fiber. Plant fall to spring. **\$2**/pkt

**DW31. Brittlebush.** *Encelia farinosa.* Perennial shrub, blooms with yellow composite flowers in early spring. Sap from stems was used to make a burnable incense. **\$2**/pkt

#### DW52. Colored Globemallow.

Sphaeralcea ambigua. This multistemmed mallow is a good source of pollen and nectar for honey bees. Plants are usually 2-4' tall with blooms in shades of pink and lavender. Plant fall to early spring. **\$2**/pkt or **\$12**/oz

DW10. Desert Blue Bells. Phacelia campanularia. Low growing, blue-violet flowers with yellow stamens look like little bells. Plant fall to early spring. \$2/pkt

**DW12. Desert Marigold.** *Baileya multiradiata*. Lemon yellow flowers on long stems with gray green foliage. Blooms mainly in the spring and after summer rains. Plant fall to early spring.

**\$2**/pkt or **\$12**/oz

#### DW24. Firecracker Penstemon.

*Penstemon eatoni*. Bright red flowers that attract hummingbirds. Will bloom March through July depending on water. Plant early fall to winter. **\$2**/pkt

**DW20. Firewheel.** *Gaillardia pulchella.* Firewheel has 2" diameter daisy-like flowers that are deep red with yellow tips. Blooms March through September. Plant in fall. **\$2**/pkt DW4. Lupine. Lupinus succulentus. Beautiful spikes of violet-blue, pea-like blooms. Plant fall to early spring. \$2/pkt or \$12/.5oz

**DW9.** Mexican Evening Primrose. *Oenothera speciosa.* Low growing perennial with bright pink, cup-shaped flowers. Plant anytime. **\$2**/pkt

**DW3. Mexican Gold Poppy**. *Eschscholtzia mexicana*. The most popular, most photographed golden desert wildflower. Plant fall to early spring. **\$2**/pkt or **\$12**/oz

**DW22. Mexican Hats.** *Ratibida columnaris.* The colorful 1.5" sombreroshaped flowers generally appear April to November. Easily grown from seed. Plant fall to early spring. **\$2**/pkt

**DW23. Owl's Clover.** *Orthocarpus purpurascens.* Showy 6" tall spikes of red-purple flowers from March to May. Difficult to germinate, but once established it easily reseeds. Best sown with grasses or other wildflowers. Plant fall to winter. **\$2**/pkt

**DW6. Palmer's Penstemon** *Penstemon palmeri.* Beautiful white flowers tinged with pink or lilac. Has a delicate, inviting fragrance. Grows in washes and along roadsides at 3500-6000'. Plant fall to early spring. **\$2**/pkt

**DW5. Parry's Penstemon**. *Penstemon parryi*. A favorite of hummingbirds, this tall perennial has rose colored, bell shaped flowers. Plant fall to early spring. **\$2**/pkt or **\$12**/.5oz

### Important Ordering Information

Please put quantity ordered and item number & name on order form

Keep a copy of your order. If you have any missing items or problems, it helps if you can identify your order. Please retain your catalog for reference. We accept checks or money orders drawn on U.S. banks. For your own safety, please do not send cash. We accept credit card orders (MasterCard, Visa, Discover/Novus) by mail, fax, our secure website, and for walk-in customers.

#### Toll-free order line: 866.622.5561

Our phone number is 520.622.5561. Our fax number — 520.622.5591 is available 24 hours per day.

Mail Order Hours: Monday-Friday 9:30am-5:00pm

### Shipping & Handling Charges

#### Shipping for seed-only orders

1-4 packets	\$3.50
5-15 packets	\$0.35 per add'l packet.
16+ packets	Refer to regular
	shipping charges below.

#### Regular Shipping & Handling Charges

All shipping is done by UPS Ground or USPS unless otherwise requested.

Up to \$15	\$6.95
\$15.01-\$30.00	\$8.95
\$30.01-\$45.00	\$11.00
\$45.01-\$60.00	\$13.95
\$60.01-\$75.00	\$15.75
\$75.01-\$100.00	\$16.95
\$100.01-\$135.00	\$17.95
\$135.01 & over	15% of Bill

#### Next Day Air

Add \$35 per order to regular shipping charge.

#### 2nd Day Air

Add \$20 per order to regular shipping charge.

#### 3 Day Select

Add \$14 per order to regular shipping charge.

#### Alaska & Hawaii

One and a half times regular shipping charge.

**Mexico, Canada & International** Triple regular shipping charges. ORDER NOW! Seed packet price increases to \$3.00 on May 1, 2008!

# 2008 Seedlisting Catalog Order Form

send orders to: Native Seeds/SEARCH, 526 N. 4th Ave., Tucson AZ 85705 Fax: 520.622.5591

online at our secure website: www.nativeseeds.org or toll-free order line: 866.622.5561

Full Name:	Shipping Address (if different):
Street Address:	Full Name:
City/State/Zip:	Street Address:
Daytime Phone:	City:
Email:	State/Zip:

Quantity	Item No./Name	Size/Letter	Unit Price	Amount
Join	and get a 10% discount! See page 8 for details!			
0	Is this a gift? Let us write a brief message on the card	!		

Please read Important Ordering

**Information (page 37)** for important details about shipping your order.



he .	Shipping/Handling (based on Subtotal 1) Your donations help our conservation efforts — <i>how 'bout rounding up?</i>					
C.C.	Payment method					
ears	Card no.:	•			O Discover/Novus Exp.: /	

Are you a NS/S member? Don't forget your 10% discount! \_\_\_\_\_\_

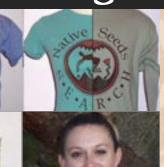
SUBTOTAL 1

SUBTOTAL 2 \_\_\_\_\_

# native seeds/SEARCH shirts, headgear (> more!

NSS 9







SEF



#### Baseball Cap

NSS2. Low profile cotton cap embroidered with the NS/S logo in three colors. One size, adjustable. **\$16** *Please specify:* A. Khaki B. Khaki with Green brim

Boonie Hat NSS29. One size. \$22

#### Bucket Hat

NSS3. Perfect for gardening, fishing or hiking. \$18 Please specify: A. S/M B. L/XL

Khaki Cap with Zip-out Flap NSS28. Flap has light, breathable, wicking, soft fabric. One size. **\$20** 









Brand new! Baby items! Inspired by new and anticipated growth we are offering for the first time two special items for the small ones in your life.

NSS54. Onesie. \$22 Select from: A. 3-6 mos. B. 6-12 mos. C. 12-18 mos.

NSS55. Bib. A one-size to fit all the spilling and dribbling your baby might manage. **\$18** 

Embroidered Women's Shirts All-cotton, fitted scoop neck tshirts. \$28

NSS24. Beans on Lilac NSS25. Beans on White NSS26. Purple Corn on Pink NSS27. Yellow Corn on Navy NSS32. Watermelon on White NSS41. Gourds on Black NSS45. Chiles on White Please specify size. M, L, XL & XXL

Short-sleeve crew neck. **\$28** NSS42. Gourds on Black. Please specify size: S, M, L, XL & XXL

Long-sleeve crew neck. **\$30** NSS40. Gourds on Black Please specify size: S, M, L, XL & XXL

#### Logo T-Shirt

**NSS1.** A 100% cotton t-shirt with our 3-color (dark brown, burnt orange, and forest green) logo surrounded by the words *Native Seeds/SEARCH* silkscreened on the front of the shirt. *Please specify type, color and size*:

short-sleeved scoop neck Ecru, Teal, or Wisteria M, L, XL \$15 XXL \$18

short-sleeved crew neck Ecru, Stonewashed Blue, or Stonewashed Green M, L, XL \$15 XXL \$18

**long-sleeved crew neck** *Ecru, Stonewashed Blue,* or *Stonewashed Green* M, L, XL \$20 XXL \$23

Blue Denim Shirt NSS9. With 3-color embroidered logo. Please specify: Women's M, L, XL \$32 Men's includes chest pocket on left side. L, XL, XXL \$36

#### Three Sister Socks

NSS12. These socks feature our planting man logo and corn, beans and squash inspired by the NS/S heirloom seed collection. \$9.25/pair

Please specify: A. M (9-11) B. L (10-13)

These and other botanical and pollinator socks can be found on our website — fun and comfy!

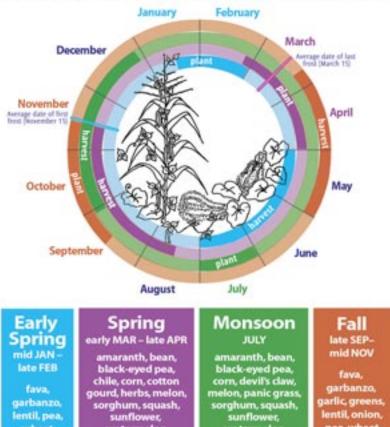
**NSS 29** 



An amazing array of baskets, wooden bowls & utensils, and one-of-a-kind crafts can be found on our website!

# Planting & harvesting in Tucson

lutside of Tucson? Contact your local extension agent or garden center for local planting times.



watermelon

Are you a member? Look for your expiration date near your name. Members receive a 10% discount! See page 8 to join or renew today!

wheat

watermelon

Native Seeds/SEARCH 526 N. Fourth Avenue Tucson Arizona 85705

NON-PROFIT ORG. U.S. POSTAGE PAID TUCSON, AZ PERMIT #2157

pea, wheat