

Taxonomic revision and typification of *Genista* (Leguminosae) in the Herbarium Carpato-Pannonicum in Budapest

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Abstract – Twenty-eight type specimens of 12 *Genista* taxa (4 holotypes, 5 lectotypes and 19 syntypes), described from the Carpathian Basin, and designated by the author.

Key words – *Corothamnus*, *Cytisus*, flowering plants, herbarium, HEUFFEL, HORÁNSZKY, KERNER, KITAIBEL, lectotype, SCHLOSSER, SOÓ, VUKOTINOVIC, WALDSTEIN.

INTRODUCTION

While arranging material of family Leguminosae of the Herbarium Carpato-Pannonicum of the Department of Botany of the Hungarian Natural History Museum, Budapest (BP) in 2005 a revision of the genus *Genista* and the selection of types were carried out, following my work on *Cytisus* (PIFKÓ 2005). All the types of taxa found in the collections Carpato-Pannonicum and Collectio Historica under the name of *Genista*, *Corothamnus* and *Cytisus* (*sensu lato*) are included in the present work. Lectotypes were designated if the main collection of the given author can be found at BP (even if duplicates might have been deposited in other herbaria as well), e.g. in the cases of the following authors: JÁNOS HEUFFEL, ANDRÁS HORÁNSZKY, PÁL KITAIBEL, REZSŐ SOÓ, ÁDÁM WALDSTEIN. Among the notable specimens a lectotypus for a WILLDENOW taxon (which was described by PÁL KITAIBEL from his collection) was also designated. Designation of types was not implemented if the main collection of the given author is kept in other institute, even if duplicates can be found at BP as well. Such cases are taxa described by ANTON KERNER, JOSEPH CALAS SCHLOSSER, LIUDJEVIT FARKAŠ VUKOTINOVIC. If more than one sytype were

available for a taxon, duplicates of the lectotype were treated as isolectotypes and the others as syntypes. All previous revisions on the same sheet are listed following a chronological order. Herbaria, where certain sheets had been kept earlier, are also mentioned in chronological order.

Abbreviations used in the text: **i.n.** = inventory number of the herbarium sheet (BP), in some cases followed by former (today unused) inventory numbers being in brackets; **coll.** = name of the collector and the date of collecting; **det.** = identified by; **rev.** = revised by; **herb.** = names of herbaria where the specimen was kept earlier along with the previous inventory number; **rem.** = remark of the author; **s.d.** = without date; **t.s.** = the text of the label of the herbarium sheet; “...” = illegible parts of the text of the labels are replaced by dots.

ENUMERATION OF GENISTA TYPE SPECIMENS AT BP

Genista bihariensis KERNER, 1868

Protologue – KERNER (1868): 344.

Syntype – i.n.: 94151; coll.: A. KERNER (s.d.); t.s.: “Ungarn, Biharia. Auf der Kuppe der Tataroea zwischen Rézbánya = Petrosa”; **herb.**: herbarium of L. SIMONKAI; **rem.**: In my opinion it belongs to *Genista januensis* VIVIANI, 1802.

Genista coriacea KITAIBEL in KANITZ, 1863

Protologue – KANITZ (1863): 605.

Holotype – Here designated. coll.: P. KITAIBEL (s.d.); t.s.: “In montanis Budae sero floret”; **rev.**: S. JÁVORKA as *G. elata* f. *pubescens* LÁNG, 1824 (cf. JÁVORKA 1929); **herb.**: herbarium of P. KITAIBEL XXIII. No. 222; **rem.**: In my opinion it belongs to *Genista tinctoria* subsp. *elatior* (J. KOCH) NYMAN, 1977.

Genista elliptica KITAIBEL in KANITZ, 1863

Protologue – KANITZ (1863): 606.

Holotype – Here designated. coll.: P. KITAIBEL (s.d.); t.s.: “In monte Világos Cottus Aradiensis”; **rev.**: S. JÁVORKA as *Cytisus procumbens* (cf. JÁVORKA 1929); **herb.**: herbarium of P. KITAIBEL XXIII. No. 233; **rem.**: In my opinion it belongs to *Chorothamnus procumbens* (WALDSTEIN et KITAIBEL) C. PRESL, 1844.

Genista heteroacantha SCHLOSSER et VUKOTINOVIĆ, 1857

Protologue – SCHLOSSER & VUKTOINOVIC (1857): 125.

Syntypes – 1. i.n.: 94065; coll.: J. C. SCHLOSSER (s.d.); t.s.: Auf Grastriften bei Gospic u St. Rochus”; rem.: In my opinion it belongs to *Genista germanica* LINNAEUS, 1753.

2. i.n.: 94123; coll.: J. C. SCHLOSSER (s.d.); t.s.: “Auf ... Lika”.

3. i.n.: 662766 (182599); coll.: J. C. SCHLOSSER (s.d.); t.s.: “Auf Grastriften bei Gospic u St. Rochus”; rem.: In my opinion it belongs to *Genista germanica* LINNAEUS, 1753.

Genista hirsuta KITAIBEL in NEILREICH, 1866

Protologue – NEILREICH (1866): 329.

Lectotype – Here designated. coll.: P. KITAIBEL (s.d.); t.s.: “In fruticetis ad Szent Miklós ultra Kanisam in Cottus Shümegiensis limite”; rev.: S. JÁVORKA as *Genista nervata* KITAIBEL ex de CANDOLLE, 1825; and *Genista hungarica* KERNER, 1863 (cf. JÁVORKA 1929); herb.: herbarium of P. KITAIBEL XXIII. No. 224; rem.: This is the syntype for *Genista nervata* at the same time. In my opinion it belongs to *Genista ovata* WALDSTEIN et KITAIBEL subsp. *nervata* (KITAIBEL) SOÓ, 1971.

Genista nervata KITAIBEL in DE CANDOLLE, 1825

Protologue – DE CANDOLLE (1825): 157.

Lectotype – Here designated. coll.: P. KITAIBEL (s.d.); t.s.: “... In cottus Sümeghiensis, Syrmiensis et Banatus sylvis jam Majo exeunte floret”; herb.: herbarium of P. KITAIBEL XXIII. No. 223; rem.: In my opinion it belongs to *Genista ovata* WALDSTEIN et KITAIBEL subsp. *nervata* (KITAIBEL) SOÓ, 1971.

Syntypes – 1. coll.: P. KITAIBEL (s.d.); t.s.: Syrmio; det.: S. JÁVORKA as *Genista nervata*; herb.: herbarium of P. KITAIBEL XXIII. No. 224a; rem.: In my opinion it belongs to *Genista ovata* subsp. *nervata* (KITAIBEL) SOÓ, 1971.

2. KITAIBEL XXIII. No. 224. see *Genista hirsuta* KITAIBEL in NEILREICH, 1866.

Genista ovata WALDSTEIN et KITAIBEL, 1801

Protologue – WALDSTEIN & KITAIBEL (1802): 86, tab. 84.

Lectotype – Here designated. coll.: P. KITAIBEL (s.d.); t.s.: “In collibus et montibus Banatus. Floret ad medio Majo. Fructum maturat sub initium”; herb.: herbarium of P. KITAIBEL XXIII. No. 227; rem.: In my opinion it belongs to *Genista ovata* WALDSTEIN et KITAIBEL, 1801.

Genista pilosa LINNAEUS var. *umbrosa* HEUFFEL, 1858

Protologue – HEUFFEL (1858): 48.

Lectotype – Here designated. i.n.: 662718 (182930); coll.: J. HEUFFEL (05.1835); t.s.: “In sylvis montanis ad Thermas Herculis in Banatu”; rem.: In my opinion it belongs to *Genista pilosa* LINNAEUS, 1753.

Genista pilosa LINNAEUS f. *densiflora* SOÓ et HORÁNSZKY, 1966

Protologue – SOÓ et al. (1966): 310.

Lectotype – Here designated. i.n.: 200493; coll.: S. JÁVORKA and V. CSAPODY (20.05.1954); t.s.: “Sátorhegység, Piszkés-tető környékén Hollóháza felett”.

Syntypes – 1. i.n.: 94320; coll.: J. BUDAI (14.05.1910); t.s.: “Bükk hegység Odvaskő és Kovácskő közt meredek mészsziklákon. Borsod megye”.

2. i.n.: 94324; coll.: L. THAISZ (04.06.1906); t.s.: “In montibus calcareis subalpinis haud procul ad arcem vetustam Murány”.

3. i.n.: 94336; coll.: K. NENDTVICH (s.d.); t.s.: “In saxis calcareis et sabulosis circa Budam”; herb.: herbarium of F. HAZSLINSZKY.

4. i.n.: 94376; coll.: J. A. BÄUMLER (05.1892); t.s.: “Thebner Kogel an schiniger Abhängen”.

5. i.n.: 94378; coll.: S. JÁVORKA (06.05.1928); t.s.: “Tahítótfalu ad Danubium: in declivibus versus Öregbükktető”.

6. i.n.: 94382; coll.: L. VAJDA (13.05.1933); t.s.: “Farkasvölgy”.

7. i.n.: 433174; coll.: Á. DEGEN (05.05.1927); t.s.: “Comit. Pest. In lapidosis montis Kis-Szénáshegy supra Pilis-Szentiván.”; det.: the collector as *Genista pilosa* var. *dolomitica*; rem.: *G. pilosa* var. *dolomitica* is a herbarium name.

8. i.n.: 433465; coll.: Á. BOROS (22.04.1934); t.s.: “Comit. Fejér. In collibus siccis granit ad Sukoró”.

9. i.n.: 433475; coll.: Á. BOROS (28.04.1952); t.s.: "Comit. Heves. In rupestribus andesiticis montis Hajnácskő prope Markaz".

10. i.n.: 580807; coll.: S. FEICHTINGER (s.d.); t.s.: "Esztergom megyében csak a dömösi trachytsziklákön".

11. i.n.: 580821; coll.: Á. BOROS (01.05.1918); t.s.: "Comit. Pest. Pilis-szentiván, Kisszénás-hegy, az egyeskői szikár lejtőn"; herb.: Herbarium Reg. Scient. Univ. Hung. Budapest.

12. i.n.: 580823; coll.: C. CHYZER (s.d.); t.s.: "Buda".

13. i.n.: 580863; coll.: N. FILARSZKY and K. SCHILBERSZKY (14.05.1892); t.s.: "Farkasvölgy"; det.: the collectors as *Cytisus supinus* LINNAEUS, 1753; herb.: Herbarium Reg. Scient. Univ. Hung. Budapest 30397. rem.: On the original label of the specimens, the name *Genista pilosa* can be seen; if a different name of the above appear on the labels, it is indicated. All the specimens were revised by the describers of the taxon in 1964 as *Genista pilosa* f. *densiflora* SOÓ et HORÁNSZKY, 1966.

Genista tinctoria var. *subpubescens* KITAIBEL in KANITZ, 1863

Protologue – KANITZ (1863): 605.

Holotype – coll.: P. KITAIBEL (s.d.); t.s.: "Specimen agglutinatum est ab Ehrharto, reliqua sunt hujatia. Omnia caules angulis et folia costa marginibusque plus minus pilosa habent et haec spinas stipulares habent."; rev.: S. JÁVORKA as *Genista elata* MÖNCH, 1794; and *Genista hungarica* KERNER, 1863 (cf. JÁVORKA 1929); herb.: herbarium of KITAIBEL of XXIII. No. 215; rem.: In my opinion it belongs to *Genista tinctoria* subsp. *elatior* var. *hungarica* (KERNER) NYMAN, 1977.

Genista triangularis WILLDENOW, 1802

Protologue – WILLDENOW (1802): 939.

Lectotype – Here designated. coll.: P. KITAIBEL (s.d.); t.s.: "In rupibus calc. ad thermas Herculis"; rev.: S. JÁVORKA as *Genista januensis* VIVIANI, 1802 (cf. JÁVORKA 1929); herb.: herbarium of P. KITAIBEL XXIII. No. 213; rem.: This is lectotype of *G. triquetra* WALDSTEIN et KITAIBEL, 1803, too. In my opinion it belongs to *Genista januensis* VIVIANI, 1802.

Genista triquetra WALDSTEIN et KITAIBEL, 1805

Protologue – WALDSTEIN & KITAIBEL (1805): 165, tab. 165.

Lectotype – Here designated. Lectotype is P. KITAIBEL XXIII. No. 213 see *G. triangularis*.

Syntype – coll.: P. KITAIBEL (s.d.); t.s.: “In alpe Számár”; herb.: herbarium of P. KITAIBEL XXIII No. 213a; rem.: In my opinion it belongs to *Genista januensis* VIVIANI, 1802.

REFERENCES

- DE CANDOLLE, A. 1825: *Prodromus systematis naturalis regni vegetabilis. Pars secunda.* – Argentorati et Londini, Parisiis, 644 pp.
- HEUFFEL, J. 1858: *Enumeratio plantarum in Banatu Temesiensi sponte crescentium et frequentius cultarum.* – Typis Caroli Ueberreuter, Vindobonae, 204 pp.
- JÁVORKA, S. 1929: Kitaibel herbarium. [The herbarium of P. Kitaibel.] – *Annales historico-naturales Musei nationalis hungarici* **26**: 97–210.
- KANITZ, A. 1863: Pauli Kitaibeli Additamenta ad Floram Hungaricam. – *Linnaea* **32**: 305–642.
- KERNER, A. 1868: Die Vegetations-Verhältnisse des mittleren und östlichen Ungarns und angrenzenden Siebenbürgens. – *Österreichische Botanische Zeitschrift* **18**(11): 343–352.
- NEILREICH, A. 1866: *Aufzählung Ungarn und Slavonien.* – Wilhelm Braumüller, Wien, VIII, 389, XI, 111 pp.
- PIFKÓ, D. 2005: Taxonomic revision and typification of *Cytisus* (Leguminosae) in the Herbarium Carpato-Pannonicum in Budapest (BP). – *Annales historico-naturales Musei nationalis hungarici* **97**: 21–32.
- SCHLOSSER, J. C. & VUKOTINOVIĆ, L. F. 1857: *Syllabus Flora Croaticae.* – Typis Dr. Ludovici Gaj., 192 pp.
- SOÓ, R., HORÁNSZKY, A. & JÁRAI-KOMLÓDI, M. 1966: Über einige Formenkreise der ungarischen und karpathischen Flora V. – *Annales Universitatis Scientiarum Budapestensis de Rolando Eötvös Nominatae, Sectio Biologica* **8**: 309–313.
- WALDSTEIN, F. A. & KITAIBEL, P. 1802: *Descriptiones et Icones Plantarum Rariorum Hungariae. 1.* – Schmidt, Viennae, pp. 1–104.
- WALDSTEIN, F. A. & KITAIBEL, P. 1805: *Descriptiones et Icones Plantarum Rariorum Hungariae. 2.* – Schmidt, Viennae, pp. 105–221.
- WILDENOW, C. L. 1802: *Species Plantarum.* – Impensis G. C. Nauk, Berolini **3**(2): 849–1474.