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Notes on types of *Astragalus* L. taxa (Leguminosae) in the botanical collection of the Moravian Museum

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SUTORÝ K. 2016: Notes on types of *Astragalus* L. taxa (Leguminosae) in the botanical collection of the Moravian Museum. *Acta Musei Moraviae, Scientiae biologicae* (Brno) **101(2):** 159–164. – A list is given of 30 *Astragalus* type specimens, the presence of which in the herbarium of Moravian Museum collection is omitted in the last *Astragalus* monograph (Podlech & Zarre 2013: A taxonomic revision of the genus *Astragalus* L. (Leguminosae) in the Old World. Naturhistorisches Museum, Wien).

Key words. *Astragalus*, types

Introduction

There are in total 199 type specimens of the genus *Astragalus* in the collection of the Moravian museum (BRNM). Most of them (154) belong to taxa described by J. F. Freyn alone or together with P. Sintenis and J. Bornmüller. In addition to this, there are BRNM type specimens of a further 45 taxa described by other authors. Information on the presence of 30 of them in the BRNM collection is absent from the excellent monograph by PODLECH & ZARRE (2013). A list of the omitted type specimens is given below.

List of *Astragalus* taxa preserved in the BRNM collection but not mentioned in Podlech & Zarre (2013)

Astragalus acmophyllus* var. *bracteolatus Širj. in Repert. Spec. Nov. Regni Veg. 47: 228. 1939.

(= *A. acmophyllus* Bunge)

BRNM 18164/34 (syntype): Cappadocia, m. Argaeus, reg. alpina, 2200–2500 m, 18. 6. 1890, J.F.N. Bornmüller 2133 (see PODLECH & ZARRE 2013: 1425).

Astragalus ankarensis Širj. in Repert. Spec. Nov. Regni Veg. 47: 251. 1939.

(= *A. condensatus* Ledeb.)

BRNM 18144/34 (isotype; see PODLECH & ZARRE 2013: 1397).

Astragalus arbelicus Bornm. in Beih. Bot. Centralbl. 57: 281.1937.

(= *A. macrocephalus* subsp. *finitimus* (Bunge) D.F. Chamb.)

BRNM 7822/34 (isotype) and BRNM 7823/34 (syntype; see Podlech & Zarre 2013: 396).

Astragalus carmanicus Bornm. in Beih. Bot. Centralbl. 57(2): 277. 1937. (name in current use)

BRNM 17967/34 (isotype; see Podlech & Zarre 2013: 1256).

Astragalus foliolosus* var. *meridionalis Huber-Morath in Repert. Spec. Nov. Regni Veg. 48: 279. 1940.

(= *A. anthylloides* Lam.)

BRNM 624424.

Note. The type is preserved in Geneva (G) (no G00000052). In Podlech & Zarre (2013: 1203), this fact is not mentioned. According to the type identification "Denizli, KaieTavas-Mugla, Eichenmacchie 7 km nach Kaie Tavas, 1100 m, 5.VI.1938, leg. H. Reese, J. Renz & A. Huber no. 5051", one isotype is in Vienna (W). Our specimen (BRNM 17441/34) was collected by Reese on the same day in the same area but the text of the label "Denizli. Steinige buschige Orte und Wälder südlich von Kalei Tavas nach Mugla" does not correspond exactly to that of the type. There is another specimen in Vienna (no 5052) not cited in the protologue, which means that this taxon was collected at the same time at more sites (at least two); thus we cannot identify the locality of our specimen with the locality of the type.

Astragalus gremlii Burnat in Fl. Alpes Marit. 2: 157. 1896.

(= *A. hypoglotis* subsp *gremlii* (Burnat) Greuter & Burdet)

BRNM 17638/34, 17638/34 (isotypes; see Podlech & Zarre 2013: 2: 963).

Astragalus gummifer* f. *macrophyllus Širj. in Repert. Spec. Nov. Reg. Veg. 47: 207. 1939.

(= *A. gumifer* Labill.)

BRNM 17939/34 (isotype; see Podlech & Zarre 2013: 1471).

Astragalus huberi Širj. & Skřivánek in Abh. Russ. Forsch. Ges. Prag 10 (15), No. 74: 117–120. 1940.

(= *A. glaucophyllus* Bunge)

BRNM 449640 (isotype).

Note. Podlech & Zarre (2013: 2232) only mention the type in Prague (PR) but no isotypes.

Astragalus jildisianus Bornm. in Repert. Spec. Nov. Regni Veg., Beih. 89: 181. 1940.

(= *A. lineatus* Lam.)

Note. There are two specimens held by BRNM, collected by H. Reese on 14th June 1939 and identified by Bornmüller. Both of them, BRNM 449645 and BRNM 624462, have almost identical labels "Gebirge Çamlibel, Südhang, ca 1600 m ü. M., 58 km von Sivas am Weg nach Tokat". In the protologue, Bornmüller quoted the label of the type as follows: "ibidem nuperrime (V. 1939) quoque collect. a cl. Dr. Reese (Basel)". If we consider the difference in dates "V." *vs*. "June" between the protologue and the labels as a mistake, both specimens are syntypes. Both are absent from the monograph (see Podlech & Zarre 2013: 1153).

Astragalus jubatus* var**. ***semiglaber Bornm. in Beih. Bot. Centralbl. 57(2): 278. 1937.

(= *A. glaucacanthos* Fisch.)

BRNM 17441/34 (isotype; see Podlech & Zarre 2013: 1193).

Astragalus karataschensis Širj. Repert. Spec. Nov. Reg. Veg. 47: 234. 1939. (= *A. diptherites* Fenzl)

BRNM 17990/34 (isotype; see Podlech & Zarre 2013: 1450).

Astragalus krajinae Domin in Acta Bot. Bohem 10: 48. 1931.

(= *A. australis* (L.) Lam.)

BRNM 450352, BRNM 624465 (isotypes; see Podlech & Zarre 2013: 808).

Astragalus krugeanus* var. *karagoeldaghensis Širj. in Repert. Spec. Nov. Reg. Veg. 47: 247. 1939.

(= *A. plumosus* subsp. *krugeanus* (Freyn & Bornm.) Ponert)

BRNM 17980/34 (isotype; see Podlech & Zarre 2013: 1502).

Astragalus krugeanus* var. *kurdomerensis Širj. in Repert. Spec. Nov. Reg. Veg. 47: 247. 1939.

(= *A. plumosus* subsp. *krugeanus* (Freyn & Bornm.) Ponert.)

BRNM 17979/34 (isotype; see Podlech & Zarre 2013: 1502).

Astragalus krugeanus* var. *sipikordaghensis Širj. in Repert. Spec. Nov. Reg. Veg. 47: 247. 1939.

(= *A. plumosus* subsp. *krugeanus* (Freyn & Bornm.) Ponert)

BRNM 18165/34 (isotype; see Podlech & Zarre 2013: 1502).

Astragalus macrourus* subsp. *adpressipilosus Ponert in Feddes Repert. 83: 620. 1973.

(= *A. pseudocylindraceus* Bornm.)

BRNM 17845/34 (isotype; see Podlech & Zarre 2013: 1121).

Astragalus mesogitanus* f. *glabriflorus Huber-Morath in Repert. Spec. Nov. Regni Veg. 48: 282. 1940.

(= *A. hololeucoides* Podlech & Sytin)

BRNM 449711, syntype.

Note. The locality on the label (Pisidia, Vilajet Burdur, nördlich von Dirmil) is not exactly the same as that of the syntypes seen by and cited in Podlech & Zarre (2013: 1664).

Astragalus murrii Huter in Schedis imprim. ad exsicc. ed. Baenitz (et in Österr. Bot. Z. 55: 29. 1905)

(= *A. leontinus* Wulfen)

BRNM 18070/34 (isotype; see Podlech & Zarre 2013: 1602).

Astragalus nervulosus Huber-Morath in Repert. Spec. Nov. Regni Veg. 48: 277. 1940. (name in current use)

BRNM 449742 (isotype; see Podlech & Zarre 2013: 347).

Note. The text of the label of our specimen "östlich von Salihli" does not entirely agree with the protologue but the date identifies it sufficiently. Only one isotype from Geneva (G) is listed in Podlech & Zarre (2013).

Astragalus oleaefolius* var. *kurdistanicus Širj. in Repert. Spec. Nov. Regni Veg. 47: 254. 1939.

(= *A. oleaefolius* DC.)

BRNM 17986/34 (isotype; see Podlech & Zarre 2013: 1389).

Astragalus parnassi* var. *oetaeus Širj. in Repert. Spec. Nov. Regni Veg. 47: 242. 1939.

(= *A. parnassi* Boiss.)

BRNM 17395/34 (isotype; see Podlech & Zarre 2013: 1403).

Astragalus parnassi* var. *samothracius Širj. in Repert. Spec. Nov. Regni Veg. 47: 242. 1939.

(= *A. thracicus* Griseb.)

BRNM 17393/34 (isotype; see Podlech & Zarre 2013: 1407*)*.

Astragalus phrygius Širj. in Repert. Spec. Nov. Regni Veg. 47: 249. 1939. (name in current use)

BRNM 18119/34 and 18121/34 (isotypes; see Podlech & Zarre 2013: 1405).

Astragalus quadrisulcatus* var. *glaber Bornm. in Beih. Bot. Centralbl. 57(2): 265. 1937.

(= *A. crenatus* Schult.)

BRNM 18147/34 (isotype; see Podlech & Zarre 2013: 54).

Astragalus rubicundus Podlech & Sytin in Sendtnera 8: 165. 2002. (name in current use).

BRNM 18217/34 isotype.

Note. Podlech & Zarre (2013: 1753 mentioned) only the type specimen preserved in Berlin (B). No isotype was reported.

Astragalus schahrudensis Bunge in Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 61. 1868 in clave [et l.c. 15(1): 103. 1869]. (name in current use)

BRNM 18181/34 (isotype; see Podlech & Zarre 2013: 406).

Note. Our specimen originated from "herb. E. Cosson" and is identical with isotype no C10011813 in Copenhagen (C).

Astragalus taochius* subsp. *erzincanicus Ponert in Feddes Repert. 83: 632. 1973.

(= *A. taochius* Woronov)

BRNM 13287/34 (isotype).

Note. Podlech & Zarre (2013: 1956) report that the type material is preserved in Brussels (BR) and Vienna (W). A lectotype has not yet been selected.

Astragalus verae Širj. in Repert. Spec. Nov. Regni Veg. 47: 250. 1939. (name in current use)

BRNM 18333/34 and 18335/34 (isotypes; see Podlech & Zarre, 2013: 1410).

Astragalus vermicularis Hausskn. & Bornm. in Beih. Bot. Centralbl. 57(2): 262. 1937.

(= *A. ophiocarpus* Bunge)

BRNM 18098/34 (syntype; "Persien, bei Kerman, 2000 m, 28.04.1892, J.F.N. Bornmüller 3733, BRNM 18099/34, isotype; see Podlech & Zarre 2013: 158).

Note. Podlech & Zarre l.c. listed only the type specimen preserved in Berlin (at B). No isotype was given.

Astragalus wanensis Bornm. ex Rech. f., Dulfer & Patzak Österr. Akad. Wiss., Math.-Naturwiss. Kl., Sitzungsber., Abt. 1, Biol. 168 (2): 107, 113. 1959.

(= *A. laguriformis* Freyn).

BRNM 17957/34 (isotype).

Note. The name is absent from Podlech & Zarre (2013).

Reference

Podlech D. & Zarre S. 2013: *A taxonomic revision of the genus Astragalus L. (Leguminosae) in the Old World*. Vol. 1–3. Naturhistorisches Museum, Wien, 2439 pp.