

**Freyn's *Astragalus* type specimens not mentioned by
PODLECH & ZARRE (2013)**

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SUTORÝ K. 2018: Freyn's *Astragalus* type specimens not mentioned by PODLECH & ZARRE (2013). *Acta Musei Moraviae, Scientiae biologicae* (Brno) (2017) **102(2): 159–163**. – A list of isolectotypes and syntypes belonging to 28 taxa and missing from PODLECH & ZARRE's monograph (2013) is provided.

Key words. *Astragalus*, types, Budapest, Gothenburg, Hamburg, Lund, Prague, Vienna, Wrocław

Introduction

Josef F. Freyn (7 December 1845–16 January 1903) described about 160 taxa of the genus *Astragalus*. The majority of his herbarium materials have been deposited in Brno (BRNM) since 1906. A search for further isolectotypes and syntypes in seven herbarium collections (BP, GB, HBG, LD, PR, PRC, W, and WRSL) brought to light 52 specimens of 28 taxa. The type specimens of these taxa are missing from the principal monograph by PODLECH & ZARRE (2013), and are listed below. A similar list of types from the Moravian Museum (BRNM) has already been published (SUTORÝ 2016).

Herbarium codes follow a online directory by THIERS (continuously updated).

List of specimens

Astragalus acrocarpus Freyn et Sint. in Oesterr. Bot. Z. 44: 64. 1894

(= *A. elongatus* Willd. subsp. *elongatus*)

Isolectotypes: GB (2 sheets), PRC (see PODLECH & ZARRE 2013: 222).

Astragalus albifolius Freyn et Sint. in Oesterr. Bot. Z. 43: 417. 1893

(=*Astracantha albifolia* (Freyn et Sint.) Podlech)

Isolectotype: PR (see PODLECH & ZARRE 2013: 1491).

Astragalus celakovskyanus Freyn et Bornm. in Oesterr. Bot. Z. 42: 8. 1892

(=*Astracantha celakovskiana* (Freyn et Bornm.) Podlech)

Isolectotype: GB (see PODLECH & ZARRE 2013: 1364).

Astragalus chamaephaca Freyn in Oesterr. Bot. Z. 40: 402. 1890,
name in current use

Isolectotype: GB (see PODLECH & ZARRE 2013: 749).

Astragalus declinatus var. *subglaber* Freyn et Bornm. in Oesterr. Bot. Z.
41: 408. 1891

(= *A. pinetorum* subsp. *declinatus* Podlech)

Isolectotype: BP (see PODLECH & ZARRE 2013: 605).

Astragalus declinatus var. *suprahirsutus* Freyn in Bull. Herb. Boissier
Ser. 1, 3: 178. 1895

(= *A. pinetorum* subsp. *pinetorum*)

Isolectotypes: BP (2 sheets) (see PODLECH & ZARRE 2013: 603).

Astragalus erythrocephalus Freyn et Sint. in Oesterr. Bot. Z. 42: 10. 1892

(= *A. lamarckii* Boiss.)

Isolectotype: PRC (see PODLECH & ZARRE 2013: 1477).

Astragalus euphraticus Freyn in Bull. Herb. Boissier 3: 186. 1895

(= *A. cadmicus* Boiss.)

Isolectotypes: BP (see PODLECH & ZARRE 2013: 1578).

Astragalus fragilidens Freyn et Sint., Bull. Herb. Boiss., ser. 2, 4: 1111. 1904

(= *A. cerasocrenus* Bunge)

Isolectotype: WRSL (see PODLECH & ZARRE 2013: 1437).

Astragalus fuhsii Freyn et Sint. in Bull. Herb. Boiss., sér. 2, 4: 1114. 1904

Isolectotype: WRSL (see PODLECH & ZARRE 2013: 1215).

Astragalus genuflexus Freyn et Sint. in Österr. Bot. Z. 42: 12. 1892

Isolectotype: WRSL (see PODLECH & ZARRE 2013: 386).

Frey'n's *Astragalus* types not mentioned by PODLECH & ZARRE (2013)

Astragalus hirsutus* var. *hispidus Freyn et Bornm. in Oesterr. Bot. Z. 42: 10. 1892

(= *A. hirsutus* Vahl)

Isolectotypes: PR, PRC, W, WRSL. Syntype: PRC (No 2104) (see PODLECH & ZARRE 2013: 1661).

Astragalus humillimus Freyn et Sint. nom. illeg. [non A. Gray] in Oesterr. Bot. Z. 44: 61. 1894

(= *A. prosgaeus* Barneby)

Isolectotypes: PRC (2 sheets), WRSL (see PODLECH & ZARRE 2013: 2277).

Astragalus krugaeus Freyn et Bornm. in Österr. Bot. Z. 40: 443. 1890

(= *A. plumosus* subsp. *krugaeus* (Freyn et Bornm.) Ponert)

Isolectotype: WRSL (see PODLECH & ZARRE 2013: 1502).

Astragalus krugaeus* var. *nitens Freyn et Sint. in Bull. Herb. Boissier Ser. 1, 3: 180. 1895

(= *A. barba-jovis* DC.)

Isolectotypes: HBG, PR (see PODLECH & ZARRE 2013: 1433).

Astragalus nertschinskensis Freyn in Oesterr. Bot. Z. 52: 21. 1902

(= *A. uliginosus* L.)

Isolectotypes: BP (2 sheets), HBG, PR (see PODLECH & ZARRE 2013: 1549).

Astragalus piletocladus Freyn et Sint. in Bull. Herb. Boiss., sér. 2, 4: 1108. 1904

(= *A. verus* Oliv.)

Isolectotype: WRSL (see PODLECH & ZARRE 2013: 1529)

Astragalus stereophyllus Freyn et Bornm. in Mém. Herb. Boiss. 13: 8. 1900

(= *A. cephalotes* Banks et Sol.)

Isolectotype: WRSL (see PODLECH & ZARRE 2013: 1379).

Astragalus tempskyanus Freyn in Österr. Bot. Z. 40: 442. 1890

(= *A. spruneri* Boiss.)

Isolectotype: WRSL (see PODLECH & ZARRE 2013: 2300).

Astragalus ufraensis Freyn et Sint. Bull. Herb. Boissier Ser. 2, 5: 568. 1905

(= *A. juratzkanus* subsp. *brotherusii* (Freyn et Sint.) Podlech)

Isolectotypes: GB without exsiccate number, HBG, WRSL (see PODLECH & ZARRE 2013: 1896).

Astragalus variifolius Freyn et Sint. in Bull. Herb. Boissier Ser. 2, 6: 784. 1905

(= *A. juratzkanus* Freyn et Sint.)

Isolectotype: BP; Syntypes: BP (No 1623c), PR (No. 1623c) (see PODLECH & ZARRE 2013: 1892).

Astragalus wettsteinianus Freyn et Sint. Bull. Herb. Boissier 3: 183. 1895

(= *A. amoenus* Fenzl)

Isolectotype: HBG (see PODLECH & ZARRE 2013: 1647).

Astragalus xanthoxiphidium subsp. *accrescens*. var. *angustilobus* Freyn et Sint.
in Bull. Herb. Boiss., sér. 2, 5: 796. 1905

(= *A. juratzkanus* Freyn et Sint.)

Isolectotype: WRSL, No. 101e (= type variety of subsp. *accrescens* Freyn et Sint. (see PODLECH & ZARRE 2013: 1893).

Note. The number 101c is mentioned in the description but the cited locality bears the number 101e.

Astragalus xanthoxiphidium subsp. *obscurus* Freyn et Sint. Bull. Herb. Boissier
Ser. 2, 6: 793, 799. 1905

(= *A. juratzkanus* Freyn et Sint.)

Isolectotypes: LD (3 sheets) (see PODLECH & ZARRE 2013: 1893).

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Astragalus xylorrhizus Freyn et Sint. nom. illeg. [non Bunge 1880] in Oesterr. Bot. Z. 42: 46. 1892

(= *A. petraeus* Kar. et Kir.)

Isolectotypes: PR, PRC; Syntypes: PR (Nos. 2657, 2721), PRC (Nos. 2657, 2721) (see PODLECH & ZARRE 2013: 1565).

Astragalus xylorrhizus var. ***angustus*** Freyn et Sint. in Oesterr. Bot. Z. 44: 28. 1894

(= *A. aduncus* Willd.)

Isolectotypes: GB, HBG (label transcribed by C.T. Timm), PRC (2 sheets), WRSL (see PODLECH & ZARRE 2013: 1565).

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