

## Typification of *Astragalus* species II. Species mainly of the herbaria of Paris (P) and Geneva (G)

D. PODLECH

### Abstract:

PODLECH, D.: Typification of *Astragalus* species II. Species mainly of the herbaria of Paris (P) and Geneva (G). – *Sentnera* 5: 247–263. 1998. ISSN 0944–0178.

215 taxa of the genus *Astragalus*, most of them described by Bunge, Boissier, DeCandolle and Lamarck are typified. The types are mainly housed in the herbaria of Paris (P) and Geneva (G).

### Zusammenfassung:

215 Sippen der Gattung *Astragalus*, die in erster Linie von Bunge, Boissier, DeCandolle und Lamarck beschrieben wurden, und deren Typen vor allem in den Herbarien von Paris (P) und Genf (G) aufbewahrt sind, werden hiermit typifiziert.

In a paper on the typification of principally Russian *Astragali* from the St. Petersburg herbarium (LE) (PODLECH & SYTIN 1996) we have shown that most of the *Astragalus* species have not been typified. In this paper species described by Bunge as well as by DeCandolle and Boissier and some others will be typified.

Most species described by Boissier are based on specimens in his own herbarium which are therefore automatically the holotypes, if only one collection is cited and there is only one sheet of a species. Species with more than one sheet in his herbarium have to be typified, as well as those based on syntypes and those which he described together with a second author (e.g. Boissier & Haussknecht, the original material of Haussknecht is housed at Jena, JE).

The original material of the species described by DeCandolle is only partly in his own herbarium (G-DC). Before moving from Paris to Genève he had seen many of his new species in the herbarium of Paris (P), quoted with “vidi olim in herbario parisiense”. As he not only studied the main herbarium at Paris but also the private herbaria of Tournefort, Lamarck and Jussieu, a lectotypification is required. The same holds true for the species described by Lamarck. Often the material of species based on Tournefort’s collection in his herbarium is very poor and often steril. In these cases the lectotype will be selected from one of the other herbaria mentioned. The situation in numerous species described by Bunge is more complex. For a longtime he was professor at Dorpat and certainly saw all the material of the St. Petersburg herbarium (LE). Wherever possible the lectotype will be selected from his private herbarium (now at P), even though it does not always contain the best material of the species.

- A. acutifolius* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 130. 1868 [et l.c. 15(1): 227. 1869] – Lectotype (designated here): Prov. Ghilan Persiae, *Aucher 4406* (P!; Iso: G!, G-BOIS!, LE!, P!, UPS!, W!).
- A. adesmifolius* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 4. 1868 [et l.c. 15(1): 2. 1869], nom. illeg. [gives *Phaca hoffmeisteri* Klotzsch in the synonymy] – Type: that of *Phaca hoffmeisteri*. The lectotypification by WENNINGER (1991): Tibet, Zanskar, 1852, *Thomson* (K!; Iso: BM!) is therefor invalid.
- A. adsurgens* Pall.  
– var. *prostratus* DC. 1825, Prodr. 2: 287. – Syntypes: Hort. gor., *Fischer* (G-DC!); Irkutsk, *Fischer*. – Lectotype (designated here): circa Irkutsk, *Fischer* (G-DC!; Iso: BR!).
- A. africanus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 61. 1868 [et l.c. 15(1): 104. 1869]. – Lectotype (designated here): Algeria, Jebel Bai Ilef prope Batna, VI.1857, *Lefranc* (P!; Iso: P!, W!).
- A. ajubensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 61. 1868 [et l.c. 15(1): 102. 1869]. – Lectotype (designated here): Persia australis, mt. Ajub prope Persepolis, 20.5.1842, *Kotschy 405* (P!; Iso: FI!, G!, G-BOIS!, GOET!, W!, ZT!). The lectotypification by BECHT 1978 upon a specimen at W is erroneous. The exsiccatum of Kotschy was distributed under the name *A. hymenocalyx*, so Bunge has not seen the specimen of Vienna. Therefore a new lectotype had to be chosen out of Bunge's herbarium at P.
- A. alaicus* Freyn, Bull. Herb. Boiss., sér. 2, 4: 766. 1904. – Lectotype (designated here): Mons Alai, Olgin Lug, 24.6.1898, *Paulsen 536* (BRNM!; Iso: C! foto MSB!, LE fragm.). In PODLECH 1988 is a holotype given, but meanwhile duplicates are seen by the author in several herbaria.
- A. alaschanus* Bunge, Bull. Acad. Imp. Sci. Saint-Pétersbourg 24: 31. 1877. – Lectotype (designated here): Mongolia, in monte Alaschan, 1873, *Przewalski 135* (P!; Iso: K!, LE!, P!).
- A. alberti* Bunge, Trudy Imp. S.- Petersburgsk. Bot. Sada 7: 375. 1880. – Syntypes: in Turkestanicae jugis Kujankus, 19.4.1877, *A.Regel 293*; et Altyn-imel pass, 20.4.1877, *A.Regel* (LE!); et in valle Dschauku inferiore, 1.9.1877, *A.Regel* (LE!). – Lectotype (designated here): *A.Regel 293* (LE; Iso: BR!, G!, K!, M!, P!).
- A. albicans* Bong., in Bongard & C.A.Meyer, Verz. Pfl. Saisang-Nor: 21, t. 2. 1841  
– var. *incanus* Bunge, Arbeiten Naturf. Vereins Riga 1: 229. 1847. – Syntypes: zwischen Tschakyr-Ata und Nasarbai-Kuduk, 12.4.1842, *Lehmann*; zwischen Nasarbai-Kuduk und Agatme, 13.4.1842, *Lehmann*; zwischen Agatme und Karagata, 14.4.1842, *Lehmann*; unweit Karagata, 17.4.1842, *Lehmann*. – Lectotype (designated here): Im Sande zwischen Tschakyr-Ata und Nasarbai-Kuduk, 12.4.1842, *Lehmann* (P!; Iso: G-BOIS!). The syntypes have been distributed as Rel. bot. Al. Lehmannii no. 341: K!, LE!, P!.
- A. alyssoides* Lam., Encycl. Méth. Bot. 1: 317. 1783. – Lectotype (designated here): Armenien, "Astragalus orientalis, argenteus angustifolius, flore leucophaeo", *Tournefort 29* (P-LA!; Iso: BM!; P-TRF nr. 3634!).
- A. ammodendron* Bunge, Arbeiten Naturf. Vereins Riga 1: 233. 1847. – Syntypes: Küste des kaspischen Meeres zwischen Nowo-Alexandrowsk und dem Vorgebirge Airakli, 12.5.1840, *Lehmann* (P!); Vorgebirge Airakli, 12.5.1840, *Lehmann*; im Flugsand bei Irgis, 22.6.1841, *Lehmann* (LE!, P!); rechtes Ufer des Syr-Darja bei Malibasch, 13.5.1842, *Lehmann* (LE!, P!). – Lectotype (designated here): Vorgebirge Airakli, 12.5.1840, *Lehmann* (P!; Iso: LE!, MSB!, P!); the syntypes have been distributed as Reliq. bot. Al. Lehmannii no. 346: GOET!, H!, P!, W!
- A. anacamptus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 110. 1868 [et l.c. 15(1): 190. 1869] – Syntypes: supra Schahrud in Persia, 23.5.1858, *Bunge & Bienert*; dto., 17.5.1858, *Bunge & Bienert* (P!). – Lectotype (designated here): supra Schahrud in Persia, 23.5.1858, *Bunge & Bienert* (P!; Iso: G-BOIS!).

- A. ancistrocarpus* Boiss. & Hausskn., in Boiss., Fl. Or. 2: 463. 1872 – Syntypes: Mesopotamia ad radices montis Gebel Abdul Aziz, V.1867, *Haussknecht*; montis Sindjar, *Haussknecht* (G-BOIS!); in monte Gebel Abiad inter Hama et Palmyram, 21.5.1859, *Blanche 3092* (G-BOIS!, JE!). – Lectotype (designated here): Mesopotamia ad radices montis Gebel Abdul Aziz, V.1867, *Haussknecht* (G-BOIS!; Iso: BM!, JE!, K!, LE!, P!, W!).
- A. anfractuusus* Bunge, Mém. Acad. Imp. Sci. Saint Petersbourg 11(16): 125. 1868 [et l.c. 15(1): 218. 1869]. – Lectotype (designated here): in Tibeto occidentali, 12000', *Hooker f. & Thomson* (sub *A. subulato*) (P!; Iso: BM!, C!, CGE!, K!, L!, M!, W!).
- A. angarensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 126. 1868 [et l.c. 15(1): 222. 1869]. – Lectotype (designated here): Sibiria baicalensis ad Angaram prope Balagansk, [1830] *Turczaminov* (P!; Iso: BR!, C!, G!, H!, K!, LE!, M!, W!, WAG!).
- A. angustifolius* Lam., Encycl. Méth. Bot. 1: 321. 1783. – Lectotype (designated here): “Tragacantha orientalis humillima, foliis argentei angustissimis”, *Tournefort*, Armenia (P-LA!; Iso: M!, P-JUSS no. 15289!).  
– var. *violaceus* Boiss., Fl. Or. 2: 490. 1872. – Syntypes: in montibus Graeciae, *Sibthorp*; supra Elmalu Lyciae, 9.6.1860, *Bourgeau 69*. – Lectotype (designated here): *Bourgeau 69* (G-BOIS!; Iso: C!, E, G-BOIS!, W!).
- A. anthylloides* Lam., Encycl. Méth. Bot. 1: 320. 1783. – Lectotype (designated here): “A. orientalis vesicaria, foliis & fructibus incanis”, *Tournefort 27*, et herb. (P-LA!; Iso: B-WILLD! sub *Phaca incana* Vahl, P-TRF!).
- A. antiatlanticus* Emb. & Maire, Bull. Soc. Hist. Nat. Afr. Nord 23: 182. 1932. – Lectotype (designated here): Anti-Atlas, in dit. Toufellazt, 1400 m, 17.4.1931, (MPU!; Iso: P!).
- A. arborescens* Bunge, Arbeiten Naturf. Vereins Riga 1: 229. 1847. – Syntypes: Kisil-kum, 22.7.1841, *Lehmann*; Batkak-kum, 21.4.1842; Kisil-kum, 30.4.1842, *Lehmann*. – Lectotype (designated here): Batkak-kum, 21.4.1842, *Lehmann* (P!; Iso: LE!, P!). The syntypes have been distributed as Rel. bot. Al. Lehmannii No. 342 (G-BOIS!, GOET!, LE!, P!).
- A. arganaticus* Bunge, Bull. Soc. Imp. Naturalistes Moscou 39(2): 23. 1866. – Syntypes: beim Piket Arganaty, 3.5.; *Semenov*; bei Bajak dshurus, 6.5., *Semenov* (LE!). – Lectotype (designated here): beim Piket Arganaty, 3.5., *Semenov* (P!).
- A. arguricus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 103. 1868 [et l.c. 15(1): 181. 1869]. – Lectotype (designated here): in valle Arguri in monte Ararat, 2.6.1856, *Seidlitz* (P!; Iso: G-BOIS!, MSB!, P!).
- A. argutensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 98. 1868 [et l.c. 15(1): 170. 1869]. – Lectotype (designated here): Altai, ad fluv. Argut vel Arkyt, *Politoff* (P!).
- A. aristatus* L'Hér., Stirp. Nov.: 170. 1791 – Syntypes: “Tragacantha alpina sempervirens, floribus purpurascens”, *Tournefort*; Garid. gallopr.: 469, t. 104; “A. ramosum petiolis spinescens, prima impare nulla” Hall. Helv. t. 177, no. 405 (exclusivis synonymis plurimis). – Lectotype (designated here): “Tragacantha alpina sempervirens, floribus purpurascens”, *Tournefort* (P Hb. Vaillant!; Iso: M!, P-JUSS nr. 15288 pp!).
- A. asciocalyx* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 137. 1868 [et l.c. 15(1): 234. 1869]. – Lectotype (designated here): in Cappadocia austr., *Aucher 1314* (P!; Iso: BM!, G!, G-BOIS!, K!, LE!, P!, W!). The remark in DAVIS (1970) “holotype at G” is erroneous.
- A. askius* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 120. 1868 [et l.c. 15(1): 208. 1869]. – Lectotype (designated here): ad radices montis Demawend supra Ask, 23.6.1843, *Kotschy 364* (sub nomine *A. refractus* var. *brachycarpa*) (P!; Iso: G!, G-BOIS!, LE!, W!, WAG!).
- A. atropurpureus* Boiss. & Heldr., in Boissier, Diagn. Pl. orient., ser.1, 9: 54. 1849 – Lectotype (designated here): in planitie Isbarta Pisidiae, V.1845, *Heldreich* (G-BOIS!; Iso: BM!, E, G!, G-BOIS!, GOET!, H!, K!, LE!, P!, PR!, W!, WAG!, ZT!).

- A. baicalensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 139. 1868, nom. illeg. [non Pall.] – Syntypes: *A. lupulinus* Pall. β. floribus albis Turcz.; lacus Baikal ad ostium Buguldeichae, *Turczaninow*. – Lectotype (designated here): lacus Baikal ad ostium Buguldeichae, *Turczaninow* (P!).
- A. barbatus* Lam., Encycl. Méth. Bot. 1: 314. 1783. – Lectotype (designated here): “*Astragalus armenus villosissimus, capitulis rotundioribus, fl. purpureis*” *Tournefort*, Armenie, (P-LA!; Iso: B-WILLD 14051!, BM!, M!, P Hb. Vaillant!, P-TRF nr. 3630!).
- A. berysius* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 50. 1868 [et l.c. 15(1): 78. 1869]. – Lectotype (designated here): Syria borealis, mt. Berys-dagh [Berit dagh] Cataoniae, 8000', 9.8.1865, *Hausknecht* [1130] (P!; Iso: G-BOIS!, JE!, K!, LE!, P!, W!).
- A. bicolor* Lam., Encycl. Méth. Bot. 1: 317. 1783. – Lectotype (designated here): “*Astragalus armeniacus incanus, angustifolius, fl. in eod. capitulo candid. et purpureo*” *Tournefort*, Armenia (P-LA!; Iso: B-WILLD 14082!, BM!, M!, P-JUSS 15253!, P-TRF nr. 3629!).
- A. bicuspis* Fisch., Bull. Soc. Imp. Naturalistes Moscou 26(2): 406. 1853. – Lectotype (designated here): between Lapau and Poya (upper Kunawur), *Jaquemont 1695* (LE!; Iso: P!).
- A. Biebersteinii* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 114. 1868 [et l.c. 15(1): 194. 1869]. – Syntypes: in subalpinis schirvanensibus circa Kurtbulak, 1796, *Bieberstein* (LE!, P! flower dissection); Caucasus or. supra Altyagatch, 21.7.1859, *Seidlitz*; Iberia, *Adam* ex Hb. Fischer (P! the plant in the middle row at the right side on the sheet). – Lectotype (designated here): Caucasus or. supra Altyagatch, 21.7.1859, *Seidlitz* (P! the upper and the lower left plants on the sheet).
- A. bourgaeanus* Coss., Notes Pl. Crit.: 160. 1852 – Lectotype (designated here): in monte Sierra de Baza, 21.5.1851, *Bourgeau 1144* (P Hb. Cosson!; Iso: B!, GOET!, LD!, M!, MSB!, P!, WAG!, ZT!).
- A. brachybotrys* Bunge, Del. Sem. Dorpat. 1839: 7. 1839. – Type: ad fl. Tchuja in jugo Altaico. – Lectotype (designated here): the sheet of Hb. Bunge with three separate labels: *A. brachylobo* “manu eo: Flor. orient. altaica 1839” – In montibus altaicis orientalibus vel deserto Kirghisico coll. *Polittoff*, Hb. Bunge – No. 477 (P!).
- A. brachycephalus* Franch., Pl. Delav.: 161. 1890. – Lectotype (designated here): Yunan, ad Tapin-tze, III.1884, *Delavay 587*, in schedis *567* (P!; Iso: LE!, P!).
- A. bracteolatus* DC., Astragal.: 208. 1802 (15. Nov.). – Lectotype (designated here): “*Tragacantha humillima se spargens floribus spicati*”, *Tournefort*, in Galatia (P-JUSS 15288!; Iso: B-WILLD 14089/1!, P Hb. Vaillant!).
- A. buhseanus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 120. 1868 [et l.c. 15(1): 207. 1869]. – Lectotype (designated here): Persia bor. in valle Lar prope Churchura ad pedem montis Demawend, 19.6.1948, *Buhse 1029* (P!; Iso: G-BOIS!, LE!).
- A. bungeanus* Boiss., Fl. Or. 2: 436. 1872. – Syntypes: ad Constantinogorsk, *Bieberstein* (G!); in Iberia Caucasica prope Tiflis, *Owerin*; Somchetia, prov. Karabagh, inter Ghierus et Bazartschai, *Szovits 317* (G-BOIS!, LE!, M!, P!). – Lectotype (designated here): in Iberia Caucasica prope Tiflis, *Owerin* (G-BOIS!).
- A. cadmicus* Boiss., Diagn. Pl. orient., ser. 1, 2: 44. 1843. – Syntypes: [Babadag] supra Denisleh, VI.1842, *Boissier*; et supra Colossam [Houaz], VI.1842, *Boissier* (MSB!, P!, W!). – Lectotype (designated here): in Cadmo [Babadag] supra Denisleh, VI.1842, *Boissier* (G-BOIS!; Iso: G-BOIS!, C!, LE!, P!, W!).
- A. camporum* Boiss., Fl. Or. 2: 231. 1872. – Syntypes: Belutchia prope Nichara, *Stocks 883*; in Affghania, *Griffith 1086* (K!). – Lectotype (designated here): *Stocks 883* (G-BOIS!; Iso: G!, K!).
- A. cancellatus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 102. 1868 [et l.c. 15(1): 178. 1869]. – Syntypes: prope Urmiah, *Stoddart* (G-BOIS!); ad Tschorbula distr. Khoi, *Szowits*; inter Chorun-dereh et Sultanieh, 6.6.1859, *Bunge & Bienert*; Prov. Adserbidshan, *Aucher 4425 pp.* (P! fragm., W!). – Lectotype (designated here): inter

- Chorum-dereh et Sultanieh, 6.6.1859, *Bunge & Bienert* (P!; Iso: G-BOIS!).
- A. canescens* DC., Astragal.: 142, t. 16. 1802 – Lectotype (designated here): “Astragalus orientalis canescens, capitulis trifolii bituminosi, flore dilute purpurascente”, *Tournefort*, Armenia (P Hb. Vaillant!; Iso: B-WILLD 14083!, BM!, P-JUSS 15254! without fl., P-LA! without fl., P-TRF 3622! & 3623!).
- A. capillipes* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 20. 1868 [et l.c. 15(1): 21. 1869]. – Lectotype (designated here): in Chinae bor. prov. Petscheli inter Pekinum et Lun-züan-ssy, *Tatarinow* (P!; Iso: G!, K!, LE!, PE!).
- A. caschmirensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 30. 1868 [et l.c. 15(1): 34. 1869]. – Syntypes: in alpinis caschmirensibus, *Jacquemont 778*; et *Falconer 420* (K!, LE!). – Lectotype (designated here): *Jacquemont 778* (P!; Iso: LE!, MSB!, P!).
- A. catacampus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 110. 1868 [et l.c. 15(1): 191. 1869]. – Syntypes: prope Sof; et inter Sof et Kohrud Persiae, V.1859 *Bunge & Bienert* (G-BOIS!, P! four plants on the left side at the top of the sheet); [prope Shahrud], V.1859, sub junio, *Bunge & Bienert*. – Lectotype (designated here): [prope Shahrud], V.1858, sub junio, *Bunge & Bienert* (P! cum descriptione, the two plants on the right side of the sheet).
- A. cataonicus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 107. 1868 [et l.c. 15(1): 188. 1869]. – Syntypes: in Tauro cilicico [in summo jugus inter Gisy deppe et Koschan, 2350 m], *Kotschy 158* (K!); in Tauro cilicico, alpe “Bulgar Dagħ”, in rupestribus montis Gisy Deppe, 8000', 1853, *Kotschy 169*. – Lectotype (designated here): *Kotschy 169* (P!; Iso: P!, STU!).
- A. chaborasicus* Boiss. & Hausskn., in Boissier, Fl. Or. 2: 437. 1872. – Syntypes: Mesopotamia, ad fl. Khabur, ad pedem montis Singarae, V. 1867, *Haussknecht*; et prope Derbent i Basian, *Haussknecht* (G-BOIS!). – Lectotype (designated here): Mesopotamia, ad fl. Khabur, ad pedem montis Singarae, V.1867, *Haussknecht* (G-BOIS!; Iso: JE!).
- A. chaetodon* Bunge, Beitr. Fl. Russl.: 96. 1852. – Lectotype (designated here): zwischen dem Kuwan und Syr-Darja, 9.5.1842, *Lehmann* (P!; Iso: P!); more isotype have been distributed as Rel. bot. Al. Lehm. 368 (GOET!, H!, K!, MSB!, P!, W!).
- A. chalaranthus* Boiss. & Hausskn., in Boiss., Fl. Or. 2: 390. 1872. – Syntypes: Kuh Sawers, 8000', VI.1868, *Haussknecht* (BP!, FR!, P!); et Kuh Eschker, 8000', VII.1868, *Haussknecht*. – Lectotype (TIETZ 1988 as holotype): Kuh Eschker, 8000', VII.1868, *Haussknecht* (G-BOIS!).
- A. chartaceus* Ledeb., Fl. Ross. 1: 634. 1843. – Holotype: ad torrentum Avrin distr. Khoi prov Adserbidshan Persiae *Szovits 549* (LE!; Iso: G-BOIS!, P!, ZT!). The statement of BECHT (1978) “lectotype in G-BOIS” is erroneus because Ledebour has not seen this sheet.
- A. chaubardii* (“*chaubarti*”) Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 118. 1868 [et l.c. 15(1): 202. 1869]. – Lectotype (designated here): in Moraea, *Chaubard* (P!; Iso: P!).
- A. chionobius* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 46. 1868 [et l.c. 15(1): 74. 1869]. – Lectotype (designated here): Persia, Kuh-Delu, 10.6.1842, *Kotschy 474* (P!; Iso: G!, G-BOIS!, K!, MSB!, P!, ZT!).  
– var. *hirtus* Boiss., Fl. Or. 2: 313. 1872. – Lectotype (designated here): Esfahan, ad nives Kellal et Sebse Kuh, 1868, *Haussknecht* (G-BOIS!; Iso: G!, K!, W!).
- A. chionophilus* Boiss. & Heldr., in Boissier, Diagn. Pl. orient., ser. 1, 9: 52. 1849. – Lectotype (designated here): mt. Gheidagh Tauri Isaurici, 7000–8000', VII.1845, *Heldreich* (G-BOIS!; Iso: G!, G-BOIS!, GOET!, H!, MSB!, P!, PR!, PRC!, STU!, WAG!, WU!, ZT!).
- A. chlorophaeus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 50. 1868 [et l.c. 15(1): 79. 1869]. – Lectotype (designated here): Phrygiae mont. prope Uschak, 820 m,

- Balansa* 1226 (P!; Iso: W!).
- A. *choicus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 119. 1868 [et l.c. 15(1): 204. 1869]. – Lectotype (designated here): Persia bor.-occ., circa Sseid-chodsi [Seichadschi] districtus Khoi, *Szovits* 240 (P!; Iso: G-BOIS!, K!, LE!, W!).
- A. *chordorrhizus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 52. 1868 [et l.c. 15(1): 86. 1869]. – Lectotype (designated here): in region. transcausicis, *Frick* (LE!; Iso: G-BOIS!, P!).
- A. *chorinensis*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 22. 1868 [et l.c. 15(1): 24. 1869]. – Syntypes: Selenginsk, ex Hb. *Pallas* (LE!); in lapidosis prope Selenginsk, 1829, *Turczaninov* (LE!); dto. 1832, *Turczaninov*; Tschokonda, leg. ? (P!). – Lectotype (designated here): Sibiria transbaicalensi (sub *Phaca arenaria* Pall.), 1832, *Turczaninov* (P!; Iso: LE!).
- A. *clavatus*** DC., Astragal.: 230, t. 44. 1802 – Type: Armenia, *Tournefort* (vidi olim in Hb. Mus. Par.). – The species is described with two varieties. – Lectotype (designated here): var. *longibracteatus* DC. = “Astragalus incanus siliqua incurva amplissimo folio”, *Tournefort*, Armenia (P Hb. Vaillant!).
- A. *collinus*** Boiss., Fl. Or. 2: 438. 1872, nom. illeg. [non G.Don 1832]. – Syntypes: Kamechly-Tschai près de Berekety Cappadoce, 1300 m, 17.6.1856, *Balansa* 170; ad Galaköi prope Argaeum, 5000', 24.5.1859, *Kotschy* 177 (G-BOIS!, JE!, MSB!, P!). – Lectotype (designated here): *Balansa* 170 (G-BOIS!).
- A. *comosus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 56. 1868 [et l.c. 15(1): 93. 1869]. – Syntypes: pr. Urmia, 8.4.1828, *Szovits* 69 (G-BOIS!, LE!, P!); prope Ask ad radices montis Demawend, *Kotschy* 852. – Lectotype (designated here): *Kotschy* 852 (P!; Iso: W!).
- A. *curviflorus*** Boiss., Diagn. Pl. orient., ser. 1, 2: 67. 1843. – Syntypes: Persia australis, *Aucher* 4388 (G!, G-BOIS!, W!), & 4391. – Lectotype (designated here): Persia australis, inter Jaroun [Jahrom] et Darab, *Aucher* 4391 (G-BOIS!; Iso: G!, P!).
- A. *cuspidatus*** Bunge, Mém. Acad. Imp. Sci. Saint Petersbourg 11(16): 117. 1868 [et l.c. 15(1): 198. 1869] – Lectotype (designated here): in monte Tauro, 1836, *Kotschy* 118 (LE! nomen scripsit Bunge; Iso: W!).
- A. *cytisoides*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 128. 1868 [et l.c. 15(1): 224. 1869]. – Lectotype (designated here): Karatau occ. Turkestanicae, 5000', 11.5.1866, *Sewerzow* (P!; Iso: G-BOIS: fragm.!, LE!).
- A. *decemjugus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 43. 1868 [et l.c. 15(1): 67. 1869]. – Lectotype (designated here): in regno Cabulico *Griffith* 1050 (= journ. no. 457 [Pakistan, Koshuk Pass, 12.4.1839] (K!; B: destroyed).
- A. *demaventicus*** Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 70. 1860. – Syntypes: Iran, Rudbar, 700', 12.3.1848, *Buhse*; Gipfel Aftschadagh des Demawend, 7500', 24.6.1843, *Kotschy* 389. – Lectotype (designated here): *Kotschy* 389 (G-BOIS!; Iso: BM!, G!, GOET!, H!, LE!, MSB!, P!, PRC!, W!).
- A. *densifolius*** Lam., Encycl. Méth. Bot. 1: 317. 1783. – Lectotype (designated here): “A. orientalis incanus, foliorum conjugationibus densissimis”, *Tournefort* 29 (P-LA!; Iso: B-WILLD 14079!, M!, P Hb. Vaillant!, P-JUSS 15256!, P-TRF 3631!).
- A. *dependens*** Bunge, Bull. Acad. Imp. Sci. Saint-Pétersbourg 26: 471. 1880 – Syntypes: China, prov. Kansu, 9.6.1875, *Piasezki*; dto., 13.6.1875, *Piasezki* (LE!). – Lectotype (designated here): China, prov. Kansu, 9.6.1875, *Piasezki* (LE!; Iso: PE!).
- A. *dilutus*** Bunge, Del. Sem. Dorpat. 1840: 7. 1840. – Lectotype (designated here): ad rivulum Tuktugem in deserto Tschujae, 10.7.1839, *Polittoff* (P!; Iso: LE!, P!, TUB!).
- A. *dipsaceus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 59. 1868 [et l.c. 15(1): 97. 1869]. – Lectotype (designated here): Alandagh prov. Tokat, prope Merzifoun, 1855, *Wiedemann* 393 (P!; Iso: G-BOIS!; LE!).

- A. discolor* Bunge, Bull. Acad. Imp. Sci. Saint-Pétersbourg 24: 33. 1877. – Syntypes: Mongolia, montibus Alaschan, 1873, *Przewalski 167*; et prov. Ordos, *Przewalski 168* (LE!, P!). – Lectotype (designated here): *Przewalski 167* (P!; Iso: K!, LE!, P!, PE!).
- A. effusus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 102. 1868 [et l.c. 15(1): 174. 1869]. – Syntypes: prope Sof inter Isfahan et Kaschan, *Bunge & Bienert*; ? Persia austr., *Kotschy 922* (W); et *Aucher 1371* (G-BOIS!, P!); Persia prope Siadune, *Belanger 391*. – Lectotype (designated here): prope Sof inter Isfahan et Kaschan, *Bunge & Bienert* (P!; Iso: GOET!, L!, LE! inter Isfahan et Teheran, MSB! inter Esfahan et Teheran, P!).
- A. elatus* Boiss. & Balansa, in Boiss., Diagn. Pl. orient. ser. 2, 6: 57. 1859. – Lectotype (designated here): Alidagh Cappadociae ad orientem Caesareae, 1600 m, 27.7.1857, *Balansa 188* (erroneously ?) & 928 (G-BOIS!; Iso: BM!, G!, G-BOIS!, GOET!, JE!, K, MSB!, OXF, P!, W!).
- A. elmaluensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 121. 1868 [et l.c. 15(1): 211. 1869 121]. – Lectotype (designated here): prope Elmalu Lyciae, 19.6.1860, *Bourgeau 75* (P!; Iso: G!, G-BOIS!, JE!, MSB!, P!, W!).
- A. eriopodus* Boiss., Diagn. Pl. orient., ser. 1, 2: 48. 1843, – Syntypes: Persia prov. Aderbidjan, *Aucher 4408* (BM!, G-BOIS!) & 4422. – Lectotype (designated here): *Aucher 4422* (G-BOIS!; Iso: BM!, K!, P!).
- A. erythrotaenius* Boiss., Diagn. Pl. orient., ser. 1, 6: 39. 1846. – Holotype: Türkei, prope Diarbekir, 26.6.1841, *Kotschy 265* (G-BOIS!; Iso: BM!, K!, P! erroneously no. 249, W!). – The statement “holotype at W” by AGERER-KIRCHHOFF & AGERER (1977) is erroneous.
- A. floridus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 24. 1868 [et l.c. 15(1): 28. 1869]. – Lectotype (designated here): Himalaya, Sikkim, 13000', *J.D.Hooker* (P!; Iso: P!).
- A. fraxinifolius* DC., Astragal.: 142. 1802. – Lectotype (designated here): (vidi olim in Herb. Mus. Paris.) “Astragalus orientalis altissimus Fraxini folio flore e viridi flavescente” *Tournefort* (P-JUSS 15273!; Iso: P Hb. Vaillant!, P-TRF!).
- A. fresenii* Decne., Ann. Sci. Nat. Bot., sér. 2, 3: 266. 1835. – Lectotype (designated here): Mont Horeb ou Sainte-Catherine, VI.1832, *Bové 191*; (G!; Iso: K!, L!, P!, W!).
- A. frickii* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 117. 1868 [et l.c. 15(1): 201. 1869]. – Syntypes: Transcaucasia provincia Signach, *Frick*; prope Maiman-tur Armeniae, *Huet de Pavillon* (G-BOIS!, P! fragm.); in Lasistani valle alpina prope Dshimil, 2200 m, VII.–VIII.1866, *Balansa 163* (G-BOIS! in flower and fruit). – Lectotype (designated here) Transcaucasia provincia Signach, *Frick* (P!; Iso: LE! Hb. Fischer).
- A. genistoides* Boiss., Diagn. Pl. orient., ser. 1, 9: 97. 1849. – Syntypes: Cabulico, summit of Kaloo, *Griffith 1054* = distr. no. 1537 (K Hb. Hooker!, LE!, P!) & *Griffith 1055*. – Lectotype (designated here): *Griffith 1055* (G-BOIS!; Iso: K!).
- A. gladius* Boiss., Diagn. Pl. orient., ser. 1, 2: 45. 1843. – Syntypes: in Mesogi circa Derwend, VI.1842, *Boissier*; in Rumelia, *Friwaldsky* (syntype also of *A. pugioniferus*) (G-BOIS!, P!, W! all sub *A. pugionifero*), LE! sub *A. subulato*). – Lectotype (designated here): in Mesogi circa Derwend, VI.1842, *Boissier* (G-BOIS!; Iso: BM!, G-BOIS!, GOET!, JE!, LE!, P!, W!, ZT!).
- A. glaucophyllus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 118. 1868 [et l.c. 15(1): 200. 1869]. – Lectotype (designated here): in prov. Tokat Asiae minoris, 21.4.1835, *Wiedemann* (P!; Iso: LE!).
- A. glaucus* M.Bieb. 1808, Fl. Taur.-Cauc. 2: 203 – Syntypes: the plants cited by PALLAS (1800–1802) as *A. dealbatus* Pall. (quoad descript. et plantas non quoad nomen); plants from *Bieberstein*. – Lectotype (designated here): Tauria, *Bieberstein* (LE!)
- A. globosus* Vahl, Symb. Bot. 1: 60. 1790. – Lectotype (designated here): “A. orientalis, foliis viciae argenteis, caule nudo, erecto floribus luteis”, *Tournefort 28* (P-TRF 3644!; Iso: B-WILLD 14081!, M!). No material in C Hb. Vahl, but the author has studied the collections at P.

- A. gremlii* Burnat, Fl. Alpes Marit. 2: 157. 1896. – Syntypes: *Huter*, Pl. Tyrol. nn. 1866 (Hb. Burnat) et 1872 [Tirol. austr. orient., Sexten in Pusteria, ad rivum loc. Kohlenplatz, 4200', 4.7.1872] (BRNU!, W!); *Baenitz* Herb. europ. ann. 1878 [Tyrol] (L!); Dalmatie [Waldblößen des Svedi-Inro, 3500–4000' (Biokovo), 24.6.] 1875, *Studniczka* (G-BU!, Z!); Dalmatien, Biokovo, bei Mascara, VII.1880, *Pichler* (G-BU!); *Forsyth-Major* Pl. Ital. select. ann. 1883 [Apenninus de Modène]; Tirolia australis, Judicaria, in glareosis prope Barsone, 700–1000 m, *Porta* in Kerner Fl. exs. austro-hung. 410. – Lectotype (designated here): Fl. exs. austro-hung. 410 (G-BU!; Iso: BP!, BRNU!, L!, MSB!, PRC!, W!, WU!).
- A. gudrunensis* Boiss. & Hausskn., in Boiss., Fl. Or. 2: 462. 1872. – Lectotype (designated here): in monte Pir Omar Gudrun Assyriae, 3000–4000', VI.1867, *Haussknecht* 325 (G-BOIS!; Iso: BM!, JE!, LE!, P!).
- A. gueldenstaedtia* (“*güldenstädtia*”) Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 119. 1868 [et l.c. 15(1): 203. 1869]. – Lectotype (designated here): prope Schahrud Persiae mediae bor., V.1858, *Bunge & Bienert* (P!; Iso: G-BOIS!, GOET!, L!, LE!, P!, W!).
- A. gymnolobus* Fisch., Bull. Soc. Imp. Naturalistes Moscou 26(2): 426. 1853. – Lectotype (designated here): dit. Angorensi ad Kadikios, *Wiedemann* (LE!; Iso: G-BOIS!, LE!).
- A. halicacabus* Lam., Encycl. Méth. Bot. 1: 320. 1783. – Lectotype (designated here): “*Astragaloides orientalis vesicaria*, foliis & fructibus glabris”, *Tournefort* 27 (P Hb. Vaillant!; Iso: M!, P-LA! 1 leave and frutescence only, P-JUSS 15292!).
- A. halodendron* Bunge, Bull. Soc. Imp. Naturalistes Moscou 39(2): 21. 1866. – Lectotype (designated here): Am Ili, 12.5., *Semenov* (P!; Iso: LE!).
- A. haussknechtii* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 49. 1868 [et l.c. 15(1): 77. 1869]. – Lectotype (designated here): Berys-dagh Ciliciae austr., *Haussknecht* [1129] (P!; Iso: G-BOIS!, G, JE!, LE!).
- A. hegelmaieri* Willk., Suppl. Prodr. Fl. Hisp.: 235. 1893. – Lectotype (designated here): in regno Valentino., pr. Crevillente, 1878, *Hegelmaier* (STU!; Iso: STU!).
- A. heldreichii* Boiss., Diagn. Pl. orient., ser. 1, 9: 43. 1849. – Syntypes: Davros Dagh Pisi-diae, 1830 m, 29.5.1845, *Heldreich*; in Cadmo [Baba Dagh] supra Geyra, 5000–6000', VI.1842, *Boissier* (BM, G-BOIS! [= also syntype of *A. lydius* Boiss.]). – Lectotype (designated here): *Heldreich* (G-BOIS!; Iso: BM, CGE, E, G!, G-BOIS!, GOET!, H!, K!, LE!, MSB!, OXF, P!, PR!, W!, WAG!, WU!, Z!, ZT!).
- A. hermoneus* Boiss., Diagn. Pl. orient., ser. 1, 9: 94. 1849. – Syntypes: Gebel Scheick, Hermon Antilibani nec non in monte Gebel Baruck Libani inter Rascheya et Deir el Kammar, VII.1846, *Boissier* (G-BOIS!, GOET!, K!, P!); Hermon cacumen, VII.1846, *Boissier*. – Lectotype (designated here): Hermon cacumen, VII.1846, *Boissier* (G-BOIS!; Iso: G-BOIS!, LE!, MSB!, P!, W!, ZT!).
- A. hirsutus* Vahl, Symb. Bot. 1: 59. 1790. – Lectotype (designated here): “*A. orientalis, candidissimus tomentosus*”, *Tournefort* 29 (P-Vaillant!; Iso: B-WILLD 14080!). No material in C Hb. Vahl, but the author has studied the collections at P.
- A. hispanicus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 135. 1868 [et l.c. 15(1): 231. 1869]. – Lectotype (designated here): Hispaniae prov. Almeria, prope Alcoy, *Bourgeau* 1584a (P Hb. Cosson!; Iso: P!).
- A. hololeucus* Boiss. & Buhse 1860, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 59. 1860. – Syntypes: im Albursgebirge oberhalb Nur, 9500'. 17.6.1848, *Buhse* 1035 (P!); 1035a. – Lectotype (designated here): *Buhse* 1035a (G-BOIS!; Iso: LE! sub 1034a).
- A. holopsilus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 56. 1868 [et l.c. 15(1): 93. 1869]. Syntypes: Isfahan, *Jenisch*; dto. *Bode* (LE Hb. Fischer). – Lectotype (designated here): prope Isfahan, *Bode* (P!; Iso: LE).
- A. holopterus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 98. 1868 [et l.c. 15(1): 170. 1869]. – Lectotype (designated here): in Sibiria transbaicalensi [ad acidulam Pogromenzensem], 1829, *Turczaninow* (P!; Iso: P!).



- A. holosemius* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 55. 1868 [et l.c. 15(1): 89. 1869]. – Lectotype (designated here): prope Tabris, *Aucher 4418* (P!; Iso: BM!, FI!, G!, G-BOIS!, K!, LE!, P! fragm., UPS!, W!).
- A. hyrcanus* Pall., Sp. Astragal.: 25, t. 22. 1800  
 – var. *lehmannianus* Bunge, Arbeiten Naturf. Vereins Riga 1: 235. 1847. – Syntypes: im Sande zwischen Nasar-bai-Chuduk und Agatme, 13.4.1842, *Lehmann* (G-BOIS!); zwischen Agatme und Karagata, 14.4.1842, *Lehmann* (LE!); im Jaman-Kisilkum, 22.4.1842, *Lehmann*; bei Bakali, 28.4.1842, *Lehmann*. – Lectotype (designated here): bei Bakali, 28.4.1842, *Lehmann* (P!). Syntypes have been distributed as Reliqu. bot. Al. Lehmannii no. 347g (LE!, P!, W!).  
 – var. *turcomanicus* Bunge, Arbeiten Naturf. Vereins Riga 1: 235. 1847. – Syntypes: Ustjurt am kaspischen Meer beim Vorgebirge Airakli, 11.5.1840; 17.5.1840; 22.5.1840 (P! sterile); 25.5.1840 (P!); 28.5.1840, all *Lehmann*. – Lectotype (designated here): Ustjurt am kaspischen Meer beim Vorgebirge Airakli, 28.5.1840, *Lehmann* (P!) – Syntypes have been distributed as Reliq. bot. A. Lehmannii no. 347 (GOET!, K!, LE!, P!).
- A. intarrensensis* Franch., Ann. Sci. Nat., Bot., sér. 6, 15: 258. 1883. – Syntypes: Gorge d'Intarr, près de Kanti (Kohistan), 2700 m, *Capus 321* (LE!, P!); Ansab, vallée des Jagnaous, 2215 m, 1881, *Capus 322*. – Lectotype (designated here): *Capus 322* (P!; Iso: P!).
- A. iranicus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 56. 1868 [et l.c. 15(1): 92. 1869]. – Syntypes: Schahrud, 19.5.1858, *Bunge & Bienert* (FI!, G!, G-BOIS!, GOET!, K!, L!, LE!, MSB!, P!, W!); Sof, 13.5.1858, *Bunge & Bienert*; Teheran, *Bunge & Bienert*; prope Asadbar et Paskaleh, [ad pagum Abbas Abad pr. Tehran, 10.6.1843, *Kotschy 297* (G!, G-BOIS!, LE!, P!, TUB!, W!)]. – Lectotype (designated here): Sof, 13.5.1858, *Bunge & Bienert* (P!).
- A. ispahanicus* Boiss., Diagn. Pl. orient., ser. 1, 2: 52. 1843. – Syntypes: prope Ispahan, *Aucher 1355* (G!) & 4326. – Lectotype (designated here): *Aucher 4326* (G-BOIS!; Iso: G-BOIS!).
- A. ispirensis* Boiss. & Huet, in Boissier, Diagn. Pl. orient., ser. 2, 2: 25. 1856. – Lectotype (designated here): prope Ispir Armeniae borealis, VI.1853, *Huet du Pavillon* (G-BOIS!; Iso: BM!, G-BOIS!, GOET!, MSB!, P!).
- A. jacquemontii* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 44. 1868 [et l.c. 15(1): 68. 1869]. – Lectotype (designated here): Himalaya bor.-occ., *Jacquemont 1640* (P!; Iso: LE!, P!).
- A. jaubertianus* Boiss., Fl. Or. 2: 244. 1872, nom. illeg. [non Bunge]. – Syntypes: inter Derbent et Azani Phrygiae, 2.7.1839, *Jaubert*; circa Byzantium, *Villejan*. – Lectotype (designated here): inter Derbent et Azani Phrygiae, 2.7.1839, *Jaubert* (G-BOIS!).
- A. jesdianus* Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 61. 1860. – Lectotype (designated here): bei Jesd, 3.5.1849, *Buhse 1281* (G-BOIS! with diagnosis; Iso: G-BOIS!, LE!, P!).
- A. jodostachys* Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 60. 1860. – Lectotype (designated here): Im Ssahendgebirge bei Liwan, 18.6.1847, *Buhse 494* (G-BOIS!; Iso: K: erroneously 464!; LE!).
- A. kadschorensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 103. 1868 [et l.c. 15(1): 182. 1869]. – Lectotype (designated here): Iberia caucasica prope Tiflis, Kadshory, supra ruinas Ker-ogly, 5.6.1866, *Owerin* (P!; Iso: G-BOIS!, P!).
- A. karakugensis* Bunge, Arbeiten Naturf. Vereins Riga 1: 232. 1847. – Syntypes: an den Seen Kara-kuga, 20.6.1841, *Lehmann*; Karakum, 28.6.1841, *Lehmann*; am Irgis, 22.6.1842, *Lehmann*. – Lectotype (designated here): an den Seen Kara-kuga, 20.6.1841, *Lehmann* (P!; Iso: G-BOIS!, LE!, MSB!, W!). Syntypes have been distributed as Reliqu. bot. Al. Lehmannii no. 345 (GOET!, LE!, P!).

- A. kohistanus* Franch., Ann. Sci. Nat. Bot., sér. 6, 15: 254. 1883. – Syntypes: Sangi Mailek (haute vallée du Jagnous) dans le Kohistan, 2990 m, 28.6.1881, *Capus 353*; Passe de Mourra (Kohistan), 4300 m, *Capus 354* (P!). – Lectotype (designated here): *Capus 353* (P!; Iso: LE! fragm.).
- A. kuramensis* Baker, J. Linn. Soc., Bot. 18: 46. 1880. – Syntypes: Kuram, V.1878 (young flowering), *Aitchison 238*; Shend Toi, 10000', VII.1879 (with young fruits), *Aitchison 710*. – Lectotype (designated here): *Aitchison 710* (K!; Iso: LE!). Syntypes with no. *238/710* (BM!, G-BOIS!, P! flowering).
- A. kurtschumensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 139. 1868 [et l.c. 15(1): 236. 1869]. – Lectotype (designated here): ad ostia fl. Kurtschum in deserto songorico, *Politoff* (P!; Iso: P!).
- A. lagopoides* Lam., Enycl. Méth. Bot. 1: 322. 1783. – Lectotype (designated here by Podlech & Zarre): “*Tragacantha orientalis*, floribus luteis in capitulum longe pediculo donatum congestis”, *Tournefort 30* (P Hb. Vaillant!; Iso: B-WILLD 14087! as *A. lagurus* Willd., G-DC!, M!, P-JUSS 15290!, P-LAM!).
- A. latifolius* Lam., Enycl. Méth. Bot. 1: 319. 1783. – Lectotype (designated here): Armenia, “*Astragalus orientalis incanus*, humifusus, amplissimo folio, spica longissima & angustissima”, *Tournefort* (P Hb. Vaillant!; Iso: B-WILLD 14023!, BM!, P-LA! only a sterile fragment, P-JUSS! sterile plant and one fruit, P-TRF 3628!).
- A. laxis* Boiss. & Hausskn., in Boiss., Fl. Or. 2: 269. 1872, nom. illeg. [non *A. laxis* Boiss. & Hausskn., l.c. p. 329]. – Lectotype (designated here): in monte Schahu Persiae occ., 10000', *Haussknecht* (G-BOIS!; Iso: G-BOIS!, JE!, P!).
- A. lepsensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 25. 1868 [et l.c. 15(1): 29. 1869]. – Lectotype (designated here): jugo Alatau ad fl. Lepsa et Sarchan, *Karelin & Kirilov 1362* (P!; Iso: BM!, K!, LE!, M!, P!, W!).
- A. leptothalamus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 135. 1868 [et l.c. 15(1): 232. 1869]. – Lectotype (designated here): ad ripas Sari prope Karakoi ad montem Argaeum Ciliciae, 4500'. 26.5.1859 *Kotschy suppl. 198* (P!; Iso: G-BOIS, HUJ!).
- A. lessertioides* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 24. 1868 [et l.c. 15(1): 28. 1869]. – Lectotype (designated here): in jugo himalayensis prov. Sikkim regione alpina, 12–14000', *I.D. Hooker* (P!; Iso: K!, L!, P!).
- A. leucocladus* Bunge, Bull. Soc. Imp. Naturalistes Moscou 39(2): 27. 1866. – Lectotype (designated here): Songoria australiore, Am Merke, 5.6., *Semenov* (P!; Iso: G!, LE!).
- A. lineatus* Lam., Enycl. Méth. Bot. 1: 314. 1783. – Lectotype (designated here): “*Astragalus orientalis*, calyce vesicario, lineis rubris striato” dans le Levant, *Tournefort* (P-LA!; Iso: B-WILLD 14046!, BM!, M!, P Hb. Vaillant!, P-JUSS 15240!, P-TRF 3632!).
- A. lydius* Boiss., Diagn. Pl. orient., ser. 1, 2: 43. 1843. – Syntypes: in alpina Tmoli supra Philadelphiam, VI.1842, *Boissier*; Cadmi supra Geyra, VI.1842, *Boissier* (G-BOIS!); et supra Colossam, VI.1842, *Boissier* (G-BOIS!, M! Kadmus mons). – Lectotype (designated here): in alpina Tmoli supra Philadelphiam, VI.1842, *Boissier* (G-BOIS!; Iso: G-BOIS!). Note: the syntype “Pic de Gheyra” has been later made by Boissier a syntype of *A. heldreichii* Boiss.
- A. macrobotrys* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 129. 1868 [et l.c. 15(1): 226. 1869]. – Syntypes: Khorasan, inter Sebsewar et fodinas Calaitis [N Sebsewar], 15.6.1858, *Bunge & Bienert* (P!); prope Isfahan (?), *Aucher 4460* (P!); [several sheets collected by *Bunge & Bienert*: inter Nischapur et Meschhed, VI.–VII.1858, (L!, LE!, P!); inter Schahrud et Nischapur (G-BOIS!, LE!); prope Tscheschme Ghilas prope Meshhed, 28.7.1858, *Bunge & Bienert*. – Lectotype (designated here): prope Tscheschme Ghilas prope Meshhed, 28.7.1858, *Bunge & Bienert* (P!).
- A. macroclamys* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 49. 1868 [et l.c. 15(1): 77. 1869] – Lectotype (designated here): in Ciliciae montibus Kassin-oglu prope

- pagum Gorumse, *Kotschy 127* (P!; Iso: G-BOIS!, K!, L!, P!, W!, ZT!).
- A. macrolobus* M.Bieb., Fl. Taur.-Cauc. 3: 493. 1819  
– var. *nigropilosus* Bunge, Arbeiten Naturf. Vereins Riga 1: 239. 1847. – Lectotype (designated here): Auf Kalkbergen bei Werchoturskoi Sawod, 8.7.1839, *Lehmann* (P!; Iso: P!); more isotypes have been distributed as Reliq. bot. Al. *Lehmannii 353β* (K!, P!).
- A. macrorrhizus* Cav., Icon. 2: 28, t. 133. 1793. – Syntypes: in Cerro Negro prope Matritum, et in collibus Moxente regni Valentini. – Lectotype (designated here): Madrid, Cerro Negro, IV.1791, *Cavanilles* (MA!).
- A. macrotropis* Bunge, Mém. Acad. Imp. Sci. Saint Petersburg 11(16): 127. 1868 [et l.c. 15(1): 223. 1869]. – Lectotype (designated here): Songaria, inter Arganaty et Keyssyk-auss, 3.5., *Semenow* (P!; Iso: LE!).
- A. massiliensis* Lam., Encycl. Méth. Bot. 1: 320. 1783. – Lectotype (designated here): cultivé au jardin du Roi [de la Suisse, *Reynier*]: (P-LA!; Iso: P-JUSS 15.287!).
- A. megalanthus* DC., Astragal.: 131, t. 20. 1802. – Lectotype (designated here): Sibirie, *Patrin* (P-JUSS 15302! the lower plant on the sheet; Iso: [circa fodinarum Tscherepanovskoj in Kolyvanensi, 13./24.6.1781, *Patrin*] H!).
- A. melanocalyx* Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 59. 1860. – Lectotype (designated here): im Gebirge bei Jesd beim Dorfe Deh-ballo, 25.4.1849, *Buhse 1350* (G-BOIS!; Iso: LE!, P!).
- A. melanocarpus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 51. 1868 [et l.c. 15(1): 81. 1869], nom. illeg. [non Hook. 1833]. – Lectotype (designated here): in alpe Berys-dagh [Berit Dagh], 8000–10000', 10.8.1865, *Hausknecht* (P!; Iso: G-BOIS!, JE!, W!).
- A. melinus* Boiss., Fl. Or. 2: 446. 1872. – Syntypes: in monte Alidagh, 7 km SE de Césarée (Cappadoce) 1500 m, VII.1856, *Balansa 930* (sub nom. *A. cylindraceo*) (G!, G-BOIS!, GOET!, P!); Cappadocia pr. Tehomakli ad radices Argaei, 5200', 31.5.1859, *Kotschy Suppl. 218*. – Lectotype (designated here): *Kotschy Suppl. 218* (G-BOIS!; Iso: JE!, P!, W!, ZT!).
- A. mercklinii* Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 70. 1860. – Syntypes: bei Rudbar, 12.3.1848, *Buhse*; bei Fachrabad pr. Jezd, 26.4.1847, *Buhse 1335*; im Jesder Gebirge bei Deh-ballo, 25.4.1847, *Buhse*. – Lectotype (designated here): im Jesder Gebirge bei Deh-ballo, 25.4.1847, *Buhse* (G-BOIS!; Iso: LE!, P!).
- A. mesogitanus* Boiss., Diagn. Pl. orient., ser. 1, 2: 41. 1843. – Lectotype (designated here): in collibus Mesogis circa pagum Derwend, VI.1842, *Boissier* (G-BOIS!; Iso: C!, G-BOIS!, LE!, MW, P!).  
– f. *glabriflorus* Hub.-Mor., Repert. Spec. Nov. Regni Veg. 48: 282. 1940. – Syntypes: Vilajet Burdur, Dirmil-Tefenni, 1250 m, 9.6.1938, *Reese, Renz & Huber 5531*; 3 km nach Dirmil, 1200 m, 9.6.1938, *Huber 5532* (G!). – Lectotype (designated here): *Reese, Renz & Huber 5531* (G!; Iso: G!). Note: Homotypic with *A. lycius* Boiss. f. *acutiflorus* Hub.-Mor.
- A. micrancistrus* Boiss. & Hausskn., in Boissier, Fl. Or. 2: 475. 1872. – Lectotype (designated here): in monte Pir Omar Gudrun Assyriae, 3000–4000'. VI.1867, *Hausknecht 326* (G-BOIS!; Iso: G-BOIS!, MW, LE!, P!).
- A. mitchellii* Post, Publ. Amer. Univ. Beirut, Nat. Sci. ser. No. 2, Minor Studies (Pl. Postianae et Dinsmoreanae fasc. 1): 7. 1890. – Syntypes: El-Jebah, ad fines Deserti Syriaci, leg.?: Syria borealis dit. Hems inter Es-Sait et Abu Dali, 12.4.1890, *Post*. – Lectotype (designated here): Syria borealis dit. Hems inter Es-Sait et Abu Dali, 12.4.1890, *Post* (G! with handwritten original diagnosis; Iso: BM!).
- A. mossulensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 101. 1868 [et l.c. 15(1): 177. 1869]. – Syntypes: inter Mossul et Bagdad, *Olivier & Bruguère*; in Persia prope Kermanschah, *Aucher 1363*. – Lectotype (designated here): *Aucher 1363* (P!; Iso: G-BOIS!, LE!, P!).

- A. nemorosus* Batt., Bull. Soc. Bot. France 40: 263. 1893 et 42: 207. 1895 – Lectotype (designated here): circa Ain Lellout in ditone Beni Hindel, V.1893, *Battandier* (P!; Iso: MPU!).
- A. nigrescens* Franch., Pl. Delav.: 162. 1890, nom. illeg. [non Pall.]. – Syntypes: Hee-chan-men, Lan kong, 2800 m, 31.7.1889, *Delavay 1684* (K!, MSB!, P!); Yunnan, mt. Hee-chan-men, 3000 m, 1.9.1884, *Delavay 930*. – Lectotype (designated here): *Delavay 930* (P!; Iso: P!).
- A. nitens* Boiss. & Heldr., in Boissier, Diagn. Pl. orient., ser. 1, 9: 51. 1849, nom. illeg. [non Host]. – Syntypes: in Lycia prope Elmalu, anno 1876, *Pestalozza* (G-BOIS!); prope Malatia, *Aucher 1356* (BM, G!, G-BOIS!, K, LE!, MSB!, P!, W!); prope Koniah Lycaoniae, 16.6.1849, *Heldreich 1122*. – Lectotype (designated here): *Heldreich 1122* (G-BOIS!).
- A. nurensis* Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 58. 1860. – Lectotype (designated here): Albursgebirge oberhalb Nur, 17.5.1848, *Buhse 1150* (G-BOIS!; Iso: K!, LE!).
- A. ochreatus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 127. 1868 [et l.c. 15(1): 224. 1869]. – Lectotype (designated here): Persia bor. prope Scharud, *Bunge & Bienert* (P!; Iso: G-BOIS!, K!, LE!).
- A. odoratus* Lam., Encycl. Méth. Bot. 1: 311. 1783. – Syntypes: cult. au Jardin du Roi; Levant, “Astragalus orientalis, angustifolius, caule pedali, flore e viridi flavescente odoratissimo”, *Tournefort*. – Lectotype (designated here): Levant, “Astragalus orientalis, angustifolius, caule pedali, flore e viridi flavescente odoratissimo”, *Tournefort* (P-TRF 3639!; Iso: M!, P! Hb. Vaillant, P-JUSS 15271!).
- A. olivieri* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 69. 1868 [et l.c. 15(1): 115. 1869]. – Lectotype (designated here): inter Kermanschahéh et Hamadan, *Olivier & Bruguère* (P!; Iso: B!, P!). Note: Homotypic with *A. persicus* (DC.) Fisch. & C.A.Mey.
- A. olopterus* DC., Prodr. 2: 284. 1825. – Syntypes: in Kirghisorum ex Hb. Moricand (not in G-DC); in montibus Altaicis, misit Fischer (sub *A. austriacus altaicus*). – Lectotype (designated here): in montibus Altaicis, misit Fischer (sub *A. austriacus altaicus*) (G-DC!; Iso: LE!).
- A. onobrychis* L., Sp. Pl.: 760. 1753  
– var. *stipulaceus* DC., Astragalologia: 125. 1802. – Lectotype (designated here): ex campis ad Obum, *Demidow* (P!; Iso: G-DC!).
- A. ornithopodioides* Lam., Encycl. Méth. Bot. 1: 312. 1783. – Lectotype (designated here): Armenia, “Astragalus orientalis, ramosus, fructu adunco”, *Tournefort 29* (P-LA! the two plants at the top on the left side of the sheet; Iso: B-WILLD 14048!, P-TRF 3638!).
- A. ortholobus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 127. 1868 [et l.c. 15(1): 223. 1869]. – Syntypes: prope Orenburg, *Claus*; in jugi altaici ad Katunjam et Tschujam, *Bunge* (P!); dto., *Politoff* (C!, G!, K!, P! foto MSB!); prope Orenburg, *Eversmann*. – Lectotype (designated here): prope Orenburg, *Eversmann* (P! with diagnosis).
- A. owerinii* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 105. 1868 [et l.c. 15(1): 186. 1869]. – Syntypes: Daghestan bor., in alpe Chalakoi-tau supre pagum Danuch, 8800', 4.7.1861 (fl.), *Owerin*; 26.7.1861 (fr.), *Owerin* (G-BOIS!, LE!, P!). – Lectotype (designated here): Daghestan bor., in alpe Chalakoi-tau supre pagum Danuch, 8800', 4.7.1861 (fl.), *Owerin* (P!).
- A. oxytropifolius* Boiss., Diagn. Pl. orient., ser. 1, 9: 37. 1849. – Syntypes: Cadmi (Babadag) supra Colossam, VI.1842, *Boissier* (G-BOIS!, K, P!); [Turkey] ad Tcheltickchi, *Heldreich*; [Turkey, C3 Isparta] in monte Davros Pisidiae, VI.1845, *Heldreich* (BM!, E, K!, LE!, OXF, P!), *Aucher 1323* (G!, G-BOIS!, K!, LE!, OXF, P!); prope Aleppum, *Kotschy 100* (BM!, G!, G-BOIS!, MSB!, P!, W!); Caria, 1843, *Pinard*. – Lectotype (designated here): Caria, 1843, *Pinard* (G-BOIS!; Iso: BM!, G-BOIS!, K!, M!, MSB!, OXF, P!).

- A. paecilanthus* Boiss. & Heldr., in Boissier, Diagn. Pl. orient., ser. 2, 6: 54. 1859. – Syntypes: Davros Dagh Pisidiae, 1530 m, 26.5. (fl.), 6.6. (fr.) 1845, *Heldreich* (G-BOIS!, K!, P!, W!); Ouchak (Usak) Phrygiae, alt. 3000', 26.5. & 6.6.1857, *Balansa 1127* (B!, BM!, G!, G-BOIS erroneously 322 [other handwriting], JE!, K, LE!, MSB!, P!, W!); Davros Dagh Pisidiae, 5000–6000', 28.5.1848, V.1848, *Heldreich*. – Lectotype (designated here): Davros Dagh Pisidiae, 5000–6000', 28.5.1848, V.1848, *Heldreich* (G-BOIS!; Iso: LE!, W!).
- A. pallasii* Spreng., Fl. Hal. Mant.: 48. 1807. – Type: ad mare caspium inventus, *Pallas*. – Neotype (Iconotype) (designated here): PALLAS, Sp. Astragal. tab. 59. 1802.
- A. pallasii* DC., Prodr. 2: 305. 1825, nom. illeg. [non Spreng.]. – Lectotype (designated here): in deserto Caspico, ad lacum inderiensem (P! fruct., [misit] Fischer; Iso: B-WILLD 14071 [misit] Fischer, BM!, P! flor., [misit] Fischer). No specimen in G-DC).
- A. paphlagonicus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 121. 1868 [et l.c. 15(1): 210. 1869]. – Lectotype (designated here): Anatolia inter Boli et Gerida (inter Hamamli et Safranbol), *Wiedemann* (P!; Iso: LE!, P!).
- A. paradoxus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 64. 1868. – Syntypes: ad Araxem, 1825, *Belanger 71* (P!); in distr. Khoi Adserbidshan Persiae, 17.3.1828, *Szovits 14*. – Lectotype (designated here): *Szovits 14* (P!; Iso: BP!, G-BOIS!, GOET!, H!, K!, L!, LE!, MSB!, P!, W!, ZT!).
- A. paragylyphylos* Boissieu, Lecomte, Not. Syst. 1: 225. 1910. – Syntypes: à Vladimirof, 1.8.1908, *Faurie 517* (P!); Sakhalin, près Brizine, 1.7.1908, *Faurie 516*. – Lectotype (designated here): *Faurie 516* (P!).
- A. pinardii* Boiss., Diagn. Pl. orient., ser. 1, 9: 56. 1849. – Syntypes: in Caria, 1843 *Pinard* (G!, G-BOIS!, JE!, LE!, P!, W!); in Graecia [Hb. Fauché] (G-BOIS! inserted under *A. wulfeni* Koch β. *chaubardi* (Bunge) Boiss.); in monte Solima Lyciae, IV.1845, *Heldreich*. – Lectotype (designated here): in monte Solima Lyciae, IV.1845, *Heldreich* (G-BOIS!; Iso: BM!, G!, G-BOIS!, LE!, MSB!, P!, PR!, W!, WU!).
- A. podosphaerus* Boiss. & Hausskn. in Boiss., Fl. Or. 2: 255. 1872. – Lectotype (designated here): in monte Schahu Kurdestaniae, 11000', VII.1867, *Haussknecht* (G-BOIS!; Iso: JE!, LE!, P!).
- A. polemoniicus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 135. 1868 [et l.c. 15(1): 233. 1869]. – Syntypes: in Anatoliae provincia Tokat in montosis ad austrum et orientem ab urbe Tokat sitis, *Wiedemann* (P!); et prope Samsun, *Wiedemann*. – Lectotype (designated here): Anatoliae prope Samsun, 1835, *Wiedemann* (P!; Iso: G-BOIS!).
- A. psilopterus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 45. 1868 [et l.c. 15(1): 71. 1869]. – Syntypes: in regno Cabulico, *Griffith 1055* (G-BOIS!, K!) et *1054*. – Lectotype (designated here): *Griffith 1054* (P!; Iso: K Hb. Hooker!).
- A. psoraloides* Lam., Encycl. Méth. Bot. 1: 317. 1783. – Lectotype (designated here): “*A. orientalis canescens capitulis trifolii bituminosi*”, *Tournefort 28*, in Anatolia (P Hb. Vaillant!; Iso: B-WILLD 14083!, BM!, P-JUSS 15254! without fl., P-LA! without fl., P-TRF 3622! & 3623!).
- A. pubiflorus* DC., Astragalologia: 216. 1802. – Holotype: “Habitat in Sibiria e herb. Desfontaines”, [*Astragalus pubiflorus* Decand. Astrag. no. 111 (scripsit Desfontaines)] (P!). Note: In 1988 a neotype was selected (*Pavlov M, PODLECH 1988*). This choice is now superfluous as the holotype, not known at that time, has been located.
- A. pugioniferus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 125. 1868 [et l.c. 15(1): 219. 1869]. – Syntypes: in pascuis Macedoniae borealis [Ueskueb], *Friedrichsthal* hb. macedon. 436 (W! [= syntype of *A. subulatus* var. *strictus* Griseb.]); Rumelia, *Frivaldsky* [also a syntype of *A. gladiatus* Boiss.]. – Lectotype (designated here): Rumelia, *Frivaldsky* (P!; Iso: G-BOIS!, LE! Hb. Fischer, W!).

- A. pungens* Willd., Sp. Pl. 3: 1325. 1802. – Syntypes: in Galatia, “Tragacantha humillima se spargens floribus spicatis”, *Tournefort* (B-WILLD 14089/1 & 2). – Lectotype (designated here): B-WILLD 14089/1; Iso: B-WILLD 14089/2, P-JUSS 15288!).
- A. quinquefoliolatus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 119. 1868 [et l.c. 15(1): 204. 1869]. – Lectotype (designated here): prope Isfahan, *Aucher* 4427 (sub nom. *A. latifolio*) (P!; Iso: G-BOIS!, P!).
- A. rauwolfii* Pall., Sp. Astragal.: 6. 1800. – Syntypes: “Astragalus orientalis, maximus, incanus, erectus, caule ab imo ad summum florido”, *Tournefort* 29 [= *A. christianus* L.]; RUSSEL, Natur. Hist. of Aleppo (1756: 5a, tab. V) [= *A. russellii* Banks & Sol.]. – Lectotype (designated here): RUSSEL, Natur. Hist. of Aleppo, 1756: 5a, tab. V.
- A. rigidulus* Bunge, Mém. Acad. Imp. Sci. Saint Péterbourg 11(16): 23. 1868 [et l.c. 15(1): 25. 1869]. – Lectotype (designated here): in alpibus Sikkimensibus, 13000', *Hooker* (P!; Iso: G-DC, K!, L!, P!, W!).
- A. rigidus* Boiss. & Balansa, in Boissier, Diagn. Pl. orient., ser. 2, 6: 55. 1859. – Lectotype (designated here): Alidagh prope Caesaream Cappadociae, 1500 m, 25.6.1856, *Balansa* 925 (G-BOIS! the flowering plant with young fruits, no. 160 [obviously alien handwritting put later on the original label]; Iso: G-BOIS! the flowering plant, GOET!, JE!, K!, MSB!, P!, W!).
- A. rostani* Boiss., Diagn. Pl. orient., ser. 1, 2: 45. 1843. – Syntypes: Syria prope Antab, *Aucher* 1351bis (LE!); in monte Argeh prope Caesaream, *Rostan* in Hb. DC.; Syria prope Antab, *Aucher* 1351. – Lectotype (designated here): *Aucher* 1351 (G-BOIS! inserted under *A. chrysophyllus* Boiss.; Iso: BM!, K!, LE!, MSB!, P!, W!).
- A. salatavicus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 117. 1868 [et l.c. 15(1): 201. 1869]. – Lectotype (designated here): in alpe Chanakoi-tau Salataviae, i.e. Daghestaniae borealis, 8800', 24.7.1861, *Owerin* (P!; Iso: G-BOIS!, LE!, P!).
- A. sanctus* Boiss., Diagn. Pl. orient., ser. 1, 9: 47. 1849. – Syntypes: in Arabia petraea Palaestinae [inter Nukl et Saga], IV.1846, *Boissier* (G-BOIS!, P!); in monte Oliveti prope Bethaniam in Judaea, IV.–V.1846, *Boissier*. – Lectotype (designated here): in monte Oliveti prope Bethaniam in Judaea, IV.–V.1846, *Boissier* (G-BOIS!; Iso: LE!, P!).
- A. schistocalyx* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 46. 1868 [et l.c. 15(1): 75. 1869]. – Syntypes: inter Nischapur et Mesched prov. Chorassan Persiae, 13.7.1856, fr., *Bunge & Bienert* (L!, LE!, P!); 12.6.1858, fl., *Bunge & Bienert*. – Lectotype (designated here): inter Nischapur et Mesched prov. Chorassan Persiae, 12.6.1858, fl., *Bunge & Bienert* (P!; Iso: G-BOIS!, GOET!, K!, P!, W!).
- A. sclerocladus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 46. 1868 [et l.c. 15(1): 75. 1869]. – Syntypes: env. de Kohrud, *Belanger* 693 (P!); inter Sof et Kohrud, V.1859, *Bunge & Bienert*. – Lectotype (designated here): inter Sof et Kohrud [inter Isfahan et Teheran], V.1859, *Bunge & Bienert* (P!; Iso: G-BOIS!, GOET!, K!, L!, LE!, W!).
- A. semenovii* Bunge, Bull. Soc. Imp. Naturalistes Moscou 39(2): 22. 1866. – Lectotype (designated here): in der Nähe von Mai-tübe [in valle Ili], 11.5., *Semenov* (P!; Iso: LE!).
- A. semibilocularis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 103. 1868 [et l.c. 15(1): 183. 1869]. – Syntypes: Altai, *Ledebour*; dito, *Meyer*; dito, *Bunge et al.*; Riddersk, *Bunge* (LE!). – Lectotype (designated here): Hb. Bunge: Fl. orient. Altaica 1839, *Bunge*: with flower dissection (P!).
- A. sempervirens* Lam., Encycl. Méth. Bot. 1: 320. 1783. – Syntypes: “Tragacantha alpina sempervirens, floribus purpurascensibus”, *Tournefort* (P Hb. Vaillant!, P-JUSS 15288 pp!); Astragalus no. 405, *Haller* Hist. Helv. 1; cultivé au Jardin du Roi. – Lectotype (designated here): (P-LA! without data of the provenience).
- A. sibthorpianus* Boiss., Diagn. Pl. orient., ser. 1, 2: 84. 1843. – Syntypes: in Olympo Bithyno, *Sibthorp*; dto., *Aucher* 1348 (BM!, G-BOIS!, LE!, MSB!, OXF!, P!); dto., VII.1842, *Boissier*. – Lectotype (designated here): in Olympo Bithyno, VII.1842, *Boissier*

- (G-BOIS!; Iso: C!, G-BOIS!, GOET!, LE!, P!).
- A. *sigmoideus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 123. 1868 [et l.c. 15(1): 214. 1869]. – Lectotype (designated here): Anatolia prov. Tokat prope Safranbol, *Wiedemann* 37 (P!; Iso: G-BOIS!, LE!).
- A. *sikkimensis*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 23. 1868 [et l.c. 15(1): 28. 1869]. – Lectotype (designated here): Sikkim pr. Lacker, 8000–12000', Samdong, *Hooker* (P!; Iso: C!, G!, GOET!, K!, L!, LD!, M!, P!, STU!, W!).
- A. *sitiens*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 126. 1868 [et l.c. 15(1): 220. 1869]. – Syntypes: inter Isfahan et Teheran, *Bunge & Bienert* (G-BOIS!); prope Mutshehar; Sof; Schurab et Kenaredshird, *Bunge & Bienert* [pr. Kenaredshir inter Mutshehar et Sof], 13.5.1859, *Bunge & Bienert* (P!); Kenaredshir, 17.5.1859, *Bunge & Bienert*. – Lectotype (designated here): Kenaredshir, 17.5.1859, *Bunge & Bienert* (P!).
- A. *soyeri*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 118. 1868 [et l.c. 15(1): 199. 1869]. – Syntypes: in collibus Clissa, et in insula Cherso, *Tommasini*; insula Lesina Dalmatiae, *Botteri* (P!); am Salona-Fluß prope Spalato, *Petter*. – Lectotype (designated here): am Salona-Fluß prope Spalato, *Petter* (P!; Iso: W!).
- A. *spachianus*** Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 67. 1860. – Lectotype (designated here): bei Jesd, beim Dorfe Maswar, 4.5.1849, *Buhse 1405* (G-BOIS!; Iso: LE!, P! inter Jesd et Ispahan).
- A. *spruneri*** Boiss., Diagn. Pl. orient., ser. 1, 2: 79. 1843. – Syntypes: in Attica, *Spruner* (BR!, G-BOIS!, GOET!, K!, M!, TUB!, W!); dto., VI.1842, *Boissier*. – Lectotype (designated here): Attica, VI.1842, *Boissier* (G-BOIS! with fr.; Iso: G-BOIS! without fr., K!, P!, W!).
- A. *squarrosus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 129. 1868 [et l.c. 15(1): 22.6. 1869]. – Syntypes: Persia media inter Kerman et Jesd prope Kaleh-i-schimsch, 27.4.1859, *Bunge & Bienert* (P!); in montibus brahuicis Beludschistani, *Stocks 761* (CGE!, G-BOIS!, K!); in Affghania pr. Achulze, *Griffith distr. no 1541*. – Lectotype (designated here): *Griffith distr. no. 1541* (P!; Iso: G-BOIS!, K!, LE!, W!).
- A. *subalpinus*** Boiss. & Buhse, Nouv. Mém. Soc. Imp. Naturalistes Moscou 12: 69. 1860. – Lectotype (designated here): oberes Ketulthal (östlich von Asterabad). 11.3.1847, *Buhse 1151* (G-BOIS!; Iso: LE!).
- A. *subsecundus*** Boiss. & Hohen., in Boissier, Diagn. Pl. orient., ser. 1, 9: 54. 1849. – Lectotype (designated here): mt. Syach Nalas, ad radices montis Demawend, prope pag. Lar, 19.6.1843, *Kotschy 337* (G-BOIS!; Iso: BM!, G!, G-BOIS!, GOET!, H!, K!, LE!, M!, MSB!, P!, PRC!, REG!, TUB!, WAG!, ZT!).
- A. *suffalcatus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 125. 1868 [et l.c. 15(1): 219. 1869]. – Syntypes: Afghanistan prope Kuschlak [Chokey], *Griffith distr. 1566* (K!) et 1582 (K!), (G-BOIS! without nr.); in Beludshistano superiore, *Stocks 905*. – Lectotype (designated here): *Stocks 905* (G-BOIS!).
- A. *sulfureus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 29. 1868 [et l.c. 15(1): 33. 1869]. – Lectotype (designated here): in regno Cabulico, base of Kulloo, 10000–11000', *Griffith journ. 1114 = distr. 1568* (K!; Iso: G-BOIS!, K!).
- A. *supinus*** Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 51. 1868 [et l.c. 15(1): 82. 869. 1869]. – Syntypes: in alpe Kätschäl-Sähend, *Seidlitz* (P!); planta e seminibus a cl. C.A.Meyer in Caucaso lectis in horto Dorpatensi enata [verosim. in monte Kasbek sec. TRAUTVETTER (1878)], V.1838 a *Bunge* lecta. – Lectotype (designated here): planta e seminibus in hort. Dorpatensi enata, 1838, *Bunge* (P!; Iso: LE!).
- A. *surugensis*** Boiss. & Hausskn., in Boissier, Fl. Or. 2: 402. 1872. – Lectotype (designated here): Mesopotamia inter Bir et Surug, 5.5.1865, *Haussknecht 34* (G-BOIS!; Iso: JE!).
- A. *sutchuenensis*** Franch., Pl. Delav.: 160. 1889. – Lectotype (designated here): au bord du fleuve Bleu, à Che pa to près de Tschong Kin (Su tschuen), 18.4.1882, *Delavay 2294* (P!; Iso: P!).

- A. tataricus* Franch., Nouv. Arch. Mus. Hist. Nat., sér. 2, 5: 239 [= Pl. Davidian. 1: 87]. 1883. – Lectotype (designated here): Mongolie, autour de Géhol, VII.1865, *David 2151* (P!; Iso: P!).
- A. tauricola* Boiss., Diagn. Pl. orient., ser. 2, 5: 86. 1856. – Lectotype (designated here): Taurus or., supra Bulgharmaden, 18.7.1855 *Balansa* (G-BOIS!; Iso: G!, G-BOIS!, K!).
- A. tecti-mundi* Freyn, Bull. Herb. Boiss., sér. 2, 4: 456. 1904. – Lectotype (designated here): Pamir, Kisil Krashim ad fl. Pamir-Daria, 3600 m, *Paulsen 1260* (C!; Iso: BRNM!, LE! fragm.).
- A. tenuicaulis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 23. 1868 [et l.c. 15(1): 28. 1869]. – Syntypes: prov. Sikkim pr. Lacker, Samdong, 7–9000', *Hooker*; in distr. Kumaon, 9000', *Strachey & Winterbottom*. – Lectotype (designated here): prov. Sikkim pr. Lacker, Samdong, 7–9000', *Hooker* (P!; Iso: G!, K!, L!, W!, P!).
- A. tenuispinus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 44. 1868 [et l.c. 15(1): 70. 1869]. – Syntypes: in Caschmiria et Kunaur, *Jacquemont 1543*; *Jacquemont 1584* (= perhaps from Lari in Spiti or from “upper Kunawar”, PARKER (1921), Cashemiria according to Bunge) (LE!, P!). – Lectotype (designated here): *Jacquemont 1543* (P!; Iso: LE!, P!).
- A. tibetanus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 52. 1868 [et l.c. 15(1): 85. 1869]. – Syntypes: in Tibeto occ., 9–14000', *Thomson*; in regno Cabulico, near Schayuk river, *Griffith* (K!); et Kaleh Akrabbad, *Griffith* (G-BOIS!, K!). – Lectotype (designated here): in Tibeto occ., 9–14000', *Thomson* (P!; Iso: G!, G-BOIS!, GOET!, L!, LE!, MSB!, P!, STU!).
- A. tomentosus* Lam., Encycl. Méth. Bot. 1: 312. 1783. – Lectotype (designated here): Afrika, *Lippi* (comm. par Mr. Jussieu) (P-JUSS 15277!; Iso: P-LA! bad specimen).
- A. tongolensis* Ulbr., Bot. Jahrb. Syst. 50, Beibl. 110: 12. 1913. – Syntypes: Ta tsien lu, VII.–VIII.1894, *Soulié 2409* (P!); Tongolo, Tcheto, 10.7.1894, *Soulié 2523*; Tongolo, Olong che, 4.8.1894, *Soulié 2524* (B!, P!, W!). – Lectotype (designated here): *Soulié 2523* (P! with flowers and fruits; Iso: W!).
- A. trachytrichus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 101. 1868 [et l.c. 15(1): 173. 1869]. – Lectotype (designated here): prope Ispir Armeniae, 7.7.1862, *Bourgeau 216* (sub *A. onobrychoidem*) (P!; Iso: G-BOIS!, JE!, K, P!). Note: The statement in DAVIS (1970) of a holotype in G-BOIS is erroneous!
- A. tragacanthoides* Lam., Encycl. Méth. Bot. 1: 316. 1783. – Syntypes: “Astragalus orientalis acaulos, flore luteo”, *Tournefort 28*; Buxb. Cent. 3. p. 21. t. 38. f. 2; “Astragalus syriacus”. Lob. Ic. 2. p. 79. – Lectotype (designated here): “Astragalus orientalis acaulos, flore luteo”, *Tournefort 28* (P-TRF!; Iso: B-WILLD 14050!, P-LA!).
- A. tschujensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 22. 1868 [et l.c. 15(1): 24. 1869]. – Lectotype (designated here): in lapidosis alpinis ad Tschujam, *Politoff* (P!; Iso: G!, LE!, P!).
- A. ulachanensis* Franch., Nouv. Arch. Mus. Hist. Nat., sér. 2, 5: 239 [= Pl. Davidian. 1: 87]. 1883. – Lectotype (designated here): Mongolie, Oulachan, VIII.1864, *David 2862* (P!; Iso: P!).
- A. umbellatus* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 24. 1868 [et l.c. 15(1): 29. 1869]. – Lectotype (designated here): insula Nowaja-Semlia ad sinum Kostin-schar, 11.8.1837, *Lehmann* (P!; Iso: LE!).
- A. ustiurtensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 102. 1868 [et l.c. 15(1): 179. 1869]. – Syntypes: nördl. Turcomanien bei Nowo-Alexandrowsk, 17.5.1840, *Lehmann*; Vorgebirge Airakli am kasp. Meer, an der Bucht Mertwoi-Kultuk, 11.5.1840, *Lehmann*. – Lectotype (designated here): in desertis Usturtensis sterilibus apricis, *Lehmann* (P! with flower dissection). Syntypes have been distributed as Reliqu. bot. Al. Lehmannii no. 338 (P!, W!).



- A. variegatus* Franch., Ann. Sci. Nat. Bot. sér. 6, 15: 259. 1883. – Lectotype (designated here): Djidjik, 22.6.1881, *Capus 326* (P!; Iso: P!).
- A. vestitus* Boiss. & Heldr., in Boissier, Diagn. Pl. orient., ser. 1, 9: 98. 1849. – Lectotype (designated here): mt. Karadagh Isauriae, 4500', 21.6.1845, *Heldreich 930* (G-BOIS!; Iso: BM!, G!, G-BOIS!, GOET!, K!, LE!, MSB!, P!, W!, WU!).
- A. viridis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 135. 1868 [et l.c. 15(1): 231. 1869]. – Syntypes: Persia bor.-occ., *Aucher 1374* (BM!, G!, P!); prope Nachitschewan, 31.5.1847, *Buhse* (LE!, P!); Armenia rossica, in valle Koschadara distr. Nachitschewan, *Szovits 271*. – Lectotype (designated here): *Szovits 271* (P!; Iso: G-BOIS!, LE!), more isotypes have been distributed as Reliqu. Szovitsianae no. 371 (L!, MSB!, P!).
- A. xiphidium* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 25. 1868 [et l.c. 15(1): 218. 1869]. – Syntypes: in Somchetia, pr. Thaus et Zicwinth, *Szovits 121*; prope Elisabethpol, VI.1834, *Hohenacker* (G-BOIS!, LE!, MSB!, P!). – Lectotype (designated here): *Szovits 121* (P!; Iso: G-BOIS!, LE!, P!).
- A. zanskarensis* Bunge, Mém. Acad. Imp. Sci. Saint Pétersbourg 11(16): 43. 1868 [et l.c. 15(1): 67. 1869]. – Lectotype (designated here): Himalaya occidentali-borealis alpinis, prope Zanskar, 10–14000', *Thomson* (P!; Iso: CGE!, GOET!, K!, L!, M!, MSB!, W!). Note: The lectotypification by ALI (1961) was made only in the assumption that there is material at LE. In fact there are no type specimens in this herbarium.

## References

- AGERER-KIRCHHOFF, CH. & AGERER, R. 1977: Eine neue Sektion der Gattung *Astragalus* L.: *Laxiflori* Agerer-Kirchhoff. – Mitt. Bot. Staatssamml. München 13: 203–234.
- ALI, S.I. 1961: Revision of the genus *Astragalus* L. from W. Pakistan and N.W. Himalayas – Biologia (Lahore) 7: 1–89.
- BECHT, R. 1978: Revision der Sektion *Alopecuroidei* DC. der Gattung *Astragalus* L. – Phanerog. Monogr. 10: 1–227.
- BUNGE, A. 1868–1869: *Astragali* Species Gerontogaeae. Pars 2: Specierum enumeratio. – l.c. 15(1): 254 S.
- DAVIS, P.H. (ed.) 1970: Flora of Turkey vol. 3. Edinburgh.
- PALLAS, P. 1800–1802: Species *Astragalarum*. – 123 S. 100 Tafeln. Leipzig.
- PARKER, R.N. 1921: N.W. Himalayan *Astragali* of the subgenus *Aegacantha*. Bull. Misc. Inform. 1921: 266–270
- PODLECH, D. 1988: Revision von *Astragalus* L. sect. *Caprini* DC. (Leguminosae) – Mitt. Bot. Staatssamml. München 25: 1–924.
- PODLECH, D. & SYTIN, A. 1996: Typification of Russian and some other species of *Astragalus* L. – Sendtnera 3: 149–176.
- RUSSELL, A. 1756: The natural history of Aleppo, ed. 1. London.
- TIETZ, S. 1988: Revision von *Astragalus* L. sect. *Campylanthus* Bunge, sect. *Microphysa* Bunge und sect. *Poterion* Bunge. – Mitt. Bot. Staatssamml. München 27: 135–380.
- TRAUTVETTER, E.R. 1878: Plantas caspico-caucasica, a Dr. Radde et A. Becker anno 1876 lectas. – Trudy Imp. S.-Petersburgsk. Bot. Sada 5: 401–488.
- WENNINGER, J. 1991: Revision von *Astragalus* L. sect. *Chlorostachys* Bunge, sect. *Phyllolobium* Bunge und sect. *Skythropos* Bunge (Leguminosae). – Mitt. Bot. Staatssamml. München 30: 1–196.

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sendtnera = vorm. Mitt. Bot. Sammlung München](#)

Jahr/Year: 1998

Band/Volume: [5](#)

Autor(en)/Author(s): Podlech D.

Artikel/Article: [Typification of Astragalus species II. Species mainly of the herbaria of Paris \(P\) und Geneva \(G\) 247-263](#)