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Some new species and combinations in *Astragalus* and *Phyllolobium* (Fabaceae)

Summary

During the work on a revision of the Old World Astragali, twelve new species and one new species and two new combinations of the genus Phyllolobium could be found in the newly investigated material. Furthermore some illegitimately names species had to be-renamed and some new combinations are presented. The new Astragalus species are: Sect.: Brachycarpus: A. pseudomahoschanicus; Sect. Caprini: A. gandomanicus; sect. Chlorostachys: A. lobbichleri; Sect. Dissitiflori: A. pseudoamabilis; Sect. Hymenostegis: A. ciloensis, A. salavatabadensis; Sect. Incani: A. yusufeliensis; Sect. Komaroviella: A. haiyuanensis, A. bouffordii; Sect. Poliothrix: A. mekongensis; Sect. Pseudotapinodes: A. pseudorigidulus; Sect. Stereothrix: A. chamardiensis. The new Phyllolobium species is Ph. sichuanense.

Introduction

In new available material of *Astragalus* several new species of this genus and one species of the related genus *Phyllolobium* could be found. They are presented here.

Astragalus pseudomahoschanicus PODLECH, sp. nova [sect. Brachycarpus BORISS.]

Differt ab A. mahoschanico HANDEL-MAZZ. caulibus sparse pilis 0.3-0.5 mm longis (nec laxe pilis 0.2-0.3 mm longis) obtectis, stipulis 7-10 mm [nec 3-5(-79 mm] longis, foliolis ellipticis. $15-25\times6-13$ mm (nec anguste ellipticis, $7-20\times1,5-4$ mm), bracteis 4-6.5 mm (nec 1.5-3 mm) longis, calyce ca. 5 mm (nec 3-4 mm) longo, vexillo ca. 10 mm

Zusammenfassung

Einige neue Arten und Kombinationen in Astragalus und Phyllolobium (Fabaceae)

Während der Arbeiten an einer Revision der altweltlichen Astragalus-Arten konnten in neu untersuchtem Material zwölf neue Astragalus-Arten sowie eine neue Art und zwei neue Kombinationen der verwandten Gattung Pgyllolobium gefunden werden. Ferner mussten einige illegitim beschriebene Arten umbenannt und zwei Arten umkombiniert werden. Die neuen Astragalus-Arten sind: Sect. Brachycarpus: A. pseudomahoschanicus; Sect. Caprini: A. gandomanicus; sect. Chlorostachys: A. lobbichleri; Sect. Dissitiflori: A. pseudoamabilis; Sect. Hymenostegis: A. ciloensis, A. salavatabadensis; Sect. Incani: A. yusufeliensis; Sect. Komaroviella: A. haiyuanensis, A. bouffordii; Sect. Poliothrix: A. mekongensis; Sect. Pseudotapinodes: A. pseudorigidulus; Sect. Stereothrix: A. chamardiensis. Eine neue Phyllolobium Art ist Ph. sichuanense.

longo et 5-6 mm lato, basi subabrupte in unguem distinctum contracto (nec 6,5-8 mm longo et 3,5-4,2 mm lato, sine ungue distincto), laminis alarum apice retusis (nec asymmetrice incisis).

Typus: China, Prov. Xinjiang, near Yecheng, ca. 77°22′ E, 37°53′ N, 3000 m, 15. 08. 1987, *QING-HAI-XIZANG TEAM 1067* (holotypus PE).

Plants $25-30\,\mathrm{cm}$ tall. Caudex with a pluricipital root-crown. Stems several, up to 20 cm long, ascending, covered in basal part loosely with subappressed, white, in upper part sparsely with appressed white and black hairs $0.3-0.5\,\mathrm{mm}$ long. Stipules greenish, $7-10\,\mathrm{mm}$ long, narrowly oblong-triangular, acute, nearly free from petiole, free from each other, sparsely covered with \pm spreading, tan-



gled black and white hairs up to 1 mm long. Leaves 7-9 cm long; petiole 1-2 cm long, like the rachis grooved adaxially, sparsely to loosely covered with subappressed to ascending, partly curved black and white hairs up to 0.3 mm long. Leaflets in 5-7 pairs, elliptic, $15-25 \times 6-13$ mm, rounded, on upper side glabrous, on underside loosely covered with appressed white hairs 0.5-0.8 mm long. Peduncle 9–11 cm long, striate-sulcate, loosely white hairy like the rachis, with few black hairs toward the raceme mixed in. Racemes ovoid to shortly cylindric, 3-4 cm long, densely many-flowered. Bracts whitish-membranous, narrowly triangular, ca. 5-6 mm long, loosely black hairy. Pedicels ca. 1 mm long, black hairy. Calyx shortly campanulate, 5 mm long, loosely to rather densely covered with subappressed to slightly ascending, predominantly black hairs up to 0.8 mm long; teeth narrowly triangular, 2–2.5 mm long, \pm as long as the tube, hairy on inner side. Petals yellowish when dry. Standard ca. 10 mm long; limb 5-6 mm wide, elliptic, slightly to distinctly emarginate, subabruptly contracted into the short but distinct claw. Wings 8 mm long; limbs narrowly obtriangular, widest at the retuse tip, ca. 5×2 mm; auricle minute, claw 3 mm long. Keel 6 mm long; limbs obliquely triangular-elliptic, with widely rectangularcurved lower edge and slightly curved upper edge, subacute, $3-3.5 \times 2-2.5$ mm; auricle minute, claw curved, ca. 3 mm mm long. Stamen-tube nearly truncate at the mouth. Ovary subsessile, ellipsoid, densely white hairy; style short, glabrous. Legumes sessile, globose, ca. 4 mm in diameter, rounded ventrally and dorsally, beakless, fully bilocular; valves rather thick, covered densely with spreading white and black hairs ca. 1 mm long.

Specimens examined

CHINA, Prov. Sichuan: Kangtin (Tachienlu) district, Tapaoshan, east range, 4100 m, 24. 08. 1934, *H.Smith 11186* (PE); Prov. Xinjiang: near Yecheng, 77°22' E, 37°53' N, 3000 m, 15.8.1987, *QINGHAI-XIZANG TEAM 1067* (PE).

Astragalus gandomanicus PODLECH, sp. nova [sect. Caprini DC.]

Differt ab A. aprico BUNGE, cui habitu similis caudice irramoso (nec ramoso, caudicibus bre-

vibus ad longis proviso), rachidibus foliorum pilis 1–2 mm longis (nec 0,2–0,5 mm et insuper pilis paucioribus 1–2 mm longis) obtectis, foliolis supra glabris (nec utrimque pilosis), calyce 14–15 mm (nec 10–12 mm) longo, carina 20 mm (nec 11–14 mm) longa, ovario stipite ca. 3 mm longo suffulto (nec sessilis vel subsessilis), stylo glabro (nec sub stigmate linea e pilis brevibus consistente proviso).

Typus: Iran, Prov. Bakhtiari: between Kharadji and Gandoman, Kuh-e-Parreh-das, 2150–2350 m, 10. 05. 1987, *B. Zehzad, Kiabi & Darrehshuhri 87515* (holotypus W).

Etymology: named after the village Gandoman in Bakhtiari province.

Plants 15-18 cm tall, acaulescent, covered with thin, soft, spreading white hairs up to 2 mm long. Caudex up to 8 mm thick, unbranched. Stipules white-membranous, narrowly triangular, 12-14 mm long, adnate to the petiole for 4-5 mm, sparsely to loosely hairy, the lower ones partly subglabrous. Leaves 10–18 cm long; petiole 3–5 cm long, like the rachis rather densely covered spreading hairs 1-2 mm long. Leaflets in (14-)18-27 pairs, narrowly elliptic, $7-12 \times 2-4$ mm, acute, on upper side glabrous, on underside sparsely, at margins and midvein more densely hairy, mostly folded. Racemes subsessile or with a loosely spreading hairy peduncle 1–2 cm long, loosely 4-8-flowered. Bracts white-membranous, 5-7 mm long, linear-acute, hairy. Pedicels 5-7 mm long, spreading hairy. Calyx 14–15 mm long, tubular, loosely covered with spreading hairs 1-1.5 mm long; teeth narrowly triangular, 2.5-3 mm long, glabrous on inner side. Petals glabrous, yellow. Standard 23-25 mm long; limb ca. 10 mm wide, obovate, emarginate, gradually narrowed into the rather short claw. Wings ca. 22 mm long; limbs narrowly oblong, rounded, 9 × 3.5 mm; auricle ca. 2 mm, claw 12 mm. Keel 20 mm long; limbs obliquely elliptic-triangular, with widely to nearly rectangularly curved lower edge and slightly curved lower edge, subacute, ca. 7 × 4.5 mm; auricle ca. 1 mm, claw 12 mm. Stamen-tube obliquely cut at the mouth. Ovary with a stipe ca. 3 mm long, hairy; style glabrous. Legumes unknown.

Specimens examined

Known only from the type material.

Astragalus lobbichleri PODLECH, sp. nova [sect. Chlorostachys BUNGE]

Differt ab *A. tumbatsicus* C.MARQUAND & AIRY SHAW caulibus slender, 1,5–2 mm in diameter, pilis ad 0,3 mm (nec ad 1 mm) longis obtectis, foliolis 5–6-jugis (nec 7–9-jugis), ellipticis, 5–10 × 2,5–5 mm (nec anguste anguste ellipticis, 10–24 × 4–9 mm), bracteis anguste ellipticis, 3–4 mm longis, pilis nigris tantum obtectis. persistentibus (nec ovatis ad late ovatis, 4–7 mm longis, albo-nigro-pilosis, caducis), vexilli lamina orbiculare, ca. 8 mm lata (nec rectangulari-oblonga, 5–6 mm lata), carina quam vexillum distincte breviore (nec aequilonga), ovario stipite ca. 0,5 mm (nec 3–4 mm) suffulto, albi-piloso (nec glabro).

Typus: Nepal, Raum Manangbhot, Sabzi-Chu, orogr. linke Talseite, 28°40′ N, 84°01′ E, 3700 m, 11. 06. 1955, F. LOBBICHLER (holotypus M).

Etymology: Named after the collector of the plant.

Plants 25-30 cm tall. Stem 1.5-2 mm in diameter, loosely covered with flexuose-curled, ± spreading black hairs 0.2-0.3 mm long. Stipules greenish, ca. 5 mm long, triangular, all free, glabrous or black only at the margins, at the base sometimes with minute glands. Leaves 4-5 cm long, the lower ones with petiole 0.5-1 cm long, the upper ones sessile; rachis grooved adaxially, sparsely to loosely hairy like the stem. Leaflets in 5-6 pairs, elliptic, rounded or slightly retuse, $5-10 \times 2.5-$ 5 mm, on upper side glabrous, on underside loosely covered with flexuose, tangled, appressed to subappressed white hairs 0.2-0.4 mm long. Peduncles 6-7 cm long, angular-sulcate, rather densely to densely black hairs like the stem. Racemes rather densely 12-14-flowered; axis black hairy, flowers nodding. Bracts narrowly elliptic 3-4 mm long, black hairy, persistent. Pedicels ca. 1 mm long, densely black hairy. Bracteoles absent. Ovary shortly tubular, 6-70 mm long, obliquely gibbous at the base, slightly obliquely cut at the mouth, rather densely covered with subappressed to ascending tangled, partly flexuose black hairs ca. 0.2 mm long; teeth narrowly triangular, ca. 2 mm long, black hairy on inner side. Petals violet. Standard ca. 10 mm long; blade orbicular, ca. 8 mm wide, emarginate, at the base abruptly contracted into the short claw.

Wings ca. 9 mm long; blades narrowly elliptic, obtuse, ca. 5.5×2 mm; auricle ca. 1 mm, claw 4 mm. Keel ca. 7 mm long; blades obliquely obovate, with widely, \pm rectangularly curved lower edge and \pm straight upper edge, subacute, ca. 3×2 mm; auricle ca. 0.5 mm, claw ca. 4 mm. Stamen-tube truncate at the mouth. Ovary with a stipe ca. 0.5 mm long, ovoid, white hairy. Legumes unknown.

Specimens examined

Known only from the type material.

Astragalus pseudoamabilis PODLECH & L.R.XU, sp. nova [sect. Dissitiflori DC.]

Differt ab A. amabile POPOV in partibus vegetativis pilis albis et nigris 0,3–0,5 mm longis (nec imprimis albis 0,5–1 mm longis) obtecti, caulibus 10–20 cm (nec 4–10) cm) longis, loosely to rather densely covered with white hairs, with black hairs mixed in, foliis 8–10 cm (nec 2–4 cm) longis, foliolis 9–12-jugis (nec 5–6-jugis), pedunculis 13–18 cm (nec ca. 3 cm) longis, calyce 10–11 mm (nec 14–16 mm) longo, dentibus ca. 2 mm (nec 3–4 mm) longis, petalis flavidis (nec violaceis), leguminibus nigro-(nec albo-)pilosis.

Typus: China, Xinjiang: near Urumqi, 1640 m, 07. 06. 1987, no collector name nr. *1-093* (holotypus PE).

Plants ca. 30 cm tall. Caudex slightly divided with short branches. Stems solitary or several, 10-20 cm long, ascending, loosely to rather densely covered with medifixed, appressed white hairs 0.3-0.5 mm long, with black hairs mixed in. Stipules greenish, 3-4 mm long, narrowly triangular, nearly free from petiole, losely white and black hairy. Leaves 8–10 cm long; petiole 1.5–3 cm long, like the rachis slender, white and black hairy like the stem. Leaflets in 9–12 pairs, elliptic or narrowly elliptic, $10-13 \times 3-5$ mm, rounded to slightly emarginate, on upper side very sparsely, on underside sparsely to loosley covered with appressed, medifixed white hairs 0.6-1 mm long. Peduncles 13-18 cm long, sparsely to loosely hairy like the stem. Racemes densely 10-15-flowered. Bracts whitish, narrowly triangular, 3-4 mm long, loosely black hairy, at the base with minute glands. Pedicels ca. 1 mm long, predominantly black hairy. Calyx 10–12 mm long, narrowly tubular, obliquely cut a the mouth, loosely covered with appressed black hairs 0.3–0.6 mm long; teeth subulate, ca. 2 mm long, subglabrous on inner side densely hairy. Petals yellowish. Standard ca. 25 mm long; limb narrowly elliptic, ca. 7 mm wide, narrowly emarginate, ± gradually narrowed at the base. Wings 18–21 mm long. Keel ca. 16 mm long. Legumes (unripe) sessile, erect to spreading, narrowly linear, 40–45 mm long, 1.5–2 mm long; valves densely covered with appressed, symmetrically to asymmetrically bifurcate black hairs 0.4–0.6 mm long.

Specimens examined

CHINA, Xinjiang: near Urumqi, 1640 m, 07.06. 1987, no collector name nr. *1-093* (PE); Sarybulak NW Kuldsha [Yining], 1220–1830 m, 24.04.1878, *A. REGEL 456* (Holotypus LE: as *A. amabilis* var. *nigrescens* N.ULZIKH., ined.).

Astragalus ciloensis PODLECH, sp. nova [sect. Hymenostegis BUNGE]

Differt ab A. bradosticus MAASSOUMI & POD-LECH stipulis 12-15 mm longis petiole adnatis per 6-8 mm (nec 8-10 mm longis petiolo adnatis per 4-5 mm), foliis 8-10 cm longis petiolo 3.5-4 cm longo (nec 4-7 cm longis petiolo 1-1.5 cm longo), foliolis ellipticis $6-10 \times 3-4.5$ mm (nec anguste ellipticis $6-10 \times 1.5-3$ mm), pedunculis ca. 13 cm longis, dense pilis subappressis ad ascendentinus 0.3-0.5 mm longis et pilis ascendentibus ad patentibus ad 1.5 mm longis obtectis (nec brevissimis, patenter pilosis), racemis ovoideis ad breviter cylindraceis, 3-7 cm longis (nec subcapitatis, 2.5-3 cm longis et ca. 2.5 cm latis)

Typus: Turkey, Prov. Hakkari, Cilo Dağ, below Cilo yaylâ, 2743 m, 07. 08. 1954, *P. Davis & O. Po-LUNIN D.23974* (holotypus M; isotypus: E).

Etymology: named after the Cilo Dağ, a mountain in Hakkari province.

Plants subshrubby, caespitose, spiny, 17–20 cm tall, subacaulescent. Stems short, branched; parts of the current year ca. 2 cm long. Stipules hyaline-membranous, whitish, 12–15 mm long, adnate to the petiole for 6–8 mm, shortly connate behind the stem, the free tips narrowly triangular-acuminate, ciliate at the margins. Leaves 8–10 cm long; petiole

3.5-4 cm long, like the rachis rather densely to densely covered with subappressed to partly slightly ascending hairs 0.2-0.5 mm long and with few ascending hairs up to 1 mm long, spiny. Leaflets in 6-7 pairs, narrowly elliptic, $6-10 \times 3-4.5$ mm, acuminate-aristate, pungent, with a cusp 0.5-1 mm long, on both sides rather densely to densely covered with slightly to distinctly ascending hairs 0.3–0.5 mm long, sometimes in few leaves on upper side sparsely hairy, especially toward the margins. Peduncles ca. 13 cm long, densely covered with subappressed to ascending hairs 0.3-0.5 mm long and with ascending to spreading hairs up to 1.5 mm long. Racemes ovoid to shortly cylindric, 3-7 cm long, rather densely many-flowered. Bracts partly soon falling, thinly papery with narrow hyaline margins, ca. 10×4 mm, ovate, acuminate, glabrous or very sparsely hairy at margins and tip. Calyx during the anthesis tubular, slightly inflated, 12–13 mm long, whitish-yellow, rather densely covered with ascending to spreading hairs 0.3-0.5 mm long and with ascending to spreading, tangled white hairs 3–3.5 mm long; teeth subulate, 5-6 mm long. Petals lilac, fading to yellowish. Standard ca. 16 mm long; blade ca. 6 mm wide, obovate, slightly emarginate, at the base not hastate-auriculate but gradually passing into the short cuneate claw. Wings 15-16 mm long; blades narrowly elliptic, obtuse, ca. 6×2.5 mm; auricle ca. 0.3 mm, claw 9-10 mm. Keel ca. 13 mm long; blades obliquely obovate, subacute, ca. 5×3 mm; auricle short, claw 8–9 mm. Ovary subsessile, ca. 4 mm long, densely subappressed hairy; style glabrous. Legumes sessile, narrowly ellipsoid, ca. 7 mm long, 2 mm high and 1.5 mm wide, slightly keeled ventrally and dorsally, obtuse, incompletely bilocular with a narrow septum; valves yellowish, densely covered with subappressed, tangled hairs 0.3–0.5 mm. Ovules several but only one ripe seed.

Specimens examined

Known only from the type material.

Astragalus salavatabadensis PODLECH, sp. nova [sect. Hymenostegis BUNGE]

Differt ab A. bradosticus MAASSOUMI & POD-LECH plantis 8–10 cm (nec 17–20 cm) altis, foliis 2–3 cm (nec 4–7 cm) longis, foliolis 3–4-jugis (nec 6–7-jugis), pedunculis 5–8 cm longis (nec subnullis vel brevissimis), bracteis 6–7 mm (nec 8–15 mm) longis.

Typus: Persia, Kurdistan, in jugo prope Salavatabad E Sanandaj, 2300 m, 28. 06. 1974, *K. H. Re-CHINGER* 48473 (holotypus M).

Plants subshrubby, caespitose, spiny, 8-10 cm tall, subacaulescent. Stems up to 10 cm long, branched at the base, in older parts densely covered with dirty brown remnants of old leaves, parts of the current year ca. 1 cm long. Stipules hyaline-membranous, pale whitish-yellowish, 8-10 mm long, adnate to the petiole for 4-5 mm, shortly connate behind the stem, the free tips narrowly triangularacuminate, glabrous or ciliate at the margins. Leaves 2-3 cm long; petiole 0.5-1 cm long, like the rachis densely covered with subappressed to partly slightly ascending hairs 0.2-0.8 mm long and with few ascending hairs up to 1.5 mm long, spiny. Leaflets in 3–4 pairs, narrowly obovate to elliptic, $6-8 \times$ 2-3 mm, acuminate-aristate, pungent, with a cusp 0.5-1 mm long, on both sides densely to very densely covered with subappressed to partly slightly ascending hairs 0.3-0.5 mm long, partly boat-shaped or folded. Peduncles 5-8 cm long, slender, densely covered with ascending to partly spreading, tangled hairs 0.3-1 mm long. Racemes nearly capitate, ca. 2 cm in diameter, rather densely few-flowered. Bracts partly falling, thinly papery, with very narrow hyaline margins, 6-7 mm long and ca. 4 mm wide, ovate, acuminate, sparsely hairy along the centre line and toward the tip, ciliate at the margins. Calyx slightly inflated, ca. 12 mm long and ca. 4 mm wide, tube whitishyellow, rather densely to densely covered with ascending to spreading hairs 1.5-3 mm long and with fewer short hairs 0.3–0.5 mm long; teeth subulate, purple, 3-5 mm long. Petals purplish violet. Standard ca. 15 mm long; blade ca. 5 mm wide, narrowly obovate, rounded, at the base gradually narrowed into the wide claw. Wings ca. 14 mm long; blades narrowly oblong, obtuse, 6 × 2 mm; auricle ca. 0.3 mm, claw ca. 8 mm. Keel ca. 13 mm long; blades obliquely obovate, subacute, ca. 4.5 × 3 mm; auricle short, claw ca. 8 mm. Ovary sessile, hairy; style glabrous. Legumes unknown.

Specimens examined

Known only from the type material.

Astragalus yusufeliensis PODLECH, sp. nova [sect. Incani DC.]

Differt ab A. achundovii GROSSH. bracteis dense albo-pilosis vel imprimis albo-pilosis (nec laxe nigro-pilosis), bracteolis saepissime deficientibus (nec saepissime praesentibus), calyce 12–14 mm longo, praecipue dense pilis medifixis ad saepissime arcte asymmetrice bifurcatis albis obtecto (nec 10–12 mm longo, laxe pilis medifixis nigris obtecto), petalis longioribus.

Typus: Turkey, Prov. Çoruh [Artvin], canyon of river Çoruh, 45 km above Yusufeli, 09. 04. 1996, *A. Sytin & A. Khokhryakov* (holotypus MSB; isotypi: GAZI, LE, MSB).

Plants 15-20 cm tall, covered with appressed, medifixed, in vegetative parts nearly merely white hairs 0.3-0.5 mm long. Rootstock 4-10 mm thick, divided, with branches up to 5 cm long, densely covered with stipules and remnants of slender, hardened petioles. Stipules 5-6 mm long, triangular or the upper ones with narrowly triangular free tip, densely appressed hairy. Leaves 5-15 cm long; petiole 2-5 cm long, like the rachis slender, later on often somewhat hardening, grooved on upper side, sparsely to loosely, more rarely in some leaves densely white hairy. Leaflets in 6–8 pairs, widely obovate, $4-6 \times$ 3-4 mm, widely rounded to slightly retuse, on upper side loosely to rather densely, on underside densely appressed hairy. Peduncles 8-10 cm long, slender, sparsely covered with appressed white, toward the raceme sometimes with few black hairs mixed in. Racemes loosely 7-10-flowered. Bracts greenish, narrowly ovate to narrowly triangular, 2-4 mm long, white or predominantly white hairy, at the base with minute sessile glands. Pedicels 3-4 mm long, black and predominantly white hairy. Bracteoles mostly absent, rarely in few flowers present, linear, 1-1.5 mm long, in lower part of calyx. Calyx tubular, 12-14 mm long, at the base slightly obliquely gibbous, distinctly obliquely cut at the mouth, densely covered with symmetrically to mostly strongly asymmetrically bifurcate, appressed white hairs 0.2-0.8 mm long, with shorter black hairs mixed in, especially toward the teeth; teeth subulate, 2-3,5 mm long, densely hairy on inner side. Petals pale pink. Standard 22-25 mm long; blade ca. 8 mm wide, obovate, slightly emarginate, gradually narrowed into the cuneate claw. Wings ca. 22 mm long; blades narrowly oblong, unequally and laterally emarginate, $9 \times 2.5-3$ mm; auricle ca. 1 mm, claw ca. 13 mm. Keel ca. 20 mm long; blades obliquely obovate-curved, with widely curved lower edge and concave upper edge, obtuse, 7 × 3 mm; auricle ca. 1 mm, claw 13 mm. Stamen-tube truncate at the mouth. Ovary with a stipe 1-1.5 mm long, narrowly oblong, appressed white hairy; style glabrous. Legumes unknown.

Specimens examined

TURKEY, Prov. Çoruh: canyon of river Çoruh, 45 km above Yusufeli, 09.04.1996, SYTIN & KHOKH-RYAKOV (GAZI, LE, MSB); Yusufeli, 09.04.1996, SYTIN & KHOKHRYAKOV (MSB); dto., 11.04.1996, SYTIN & KHOKHRYAKOV (MSB); between Yusufeli and Sarigöl, 11.04.1996, SYTIN & KHOKHRYAKOV (MSB).

Astragalus bouffordii PODLECH, sp. nova [sect. Komaroviella GONTSCH.]

Differt ab A. kuschakewiczi B.FEDTSCH. foliis 5–6 cm (nec 1–3 cm) longis, foliolis 11–15-jugis, supra glabris, subtus pilis appressis 0,3–0,7 mm longis obtectis (nec 6–9-jugis, utrimque laxe ad densiuscule pilis subappressis ad ascendentibus ad 0,3 mm longis obtectis), pedunculis mere albipilosis (nec racemum versis nigropilosis), calyce pilis imprimis albis (nec nigris) obtecto.

Typus: China, Prov. Xizang, N of the city of Changdu along Ge Qu (river) on road to Nangqen, Qinghai, 31°16′24″ N, 96°58′11″ E, 3349 m, 16. 08. 2004, D. E. BOUFFORD et al. 32419 (holotypus: MSB). Etymology: named after D. E. BOUFFORD, the collector of the plant.

Plants 10–20 cm tall, caespitose, with appressed to subappressed white, at the calyx also with black hairs. Rootstock up to 10 mm in diameter, with a pluricipital root-crown. Stems many, ascending to erect, often flexuose, angular-sulcate, branched from the base, loosely covered with hairs 0.1–0.3 mm. Stipules 2.5–3 mm long, narrowly triangular to triangular, nearly free from the petiole, at least

the lower ones shortly vaginate-connate behind the stem. Leaves 5-6 cm long; petiole 1-2 cm long, with the rachis slender, grooved adaxially, hairy like the stem. Leaflets in 11-15 pairs, elliptic, $3-8\times1.5-3$ mm, rounded to retuse, on upper side glabrous, on underside loosely covered with appressed hairs 0.3-0.7 mm long. Peduncles 4-7 cm long, slender, angular-sulcate, white hairy like the stem. Racemes subcapitate, 1–1.5 cm long, rather densely 7–12-flowered. Bracts whitishmembranous, narrowly triangular, 0.5-1 mm long, black and white ciliate, at the margins with minute subsessile glands. Pedicels ca. 1 mm long, predominantly white hairy. Calyx campanulate, ca. 4 mm long, rather densely to densely covered with appressed white 0.3-0.5 mm long and often with few to more black hairs mixed in; teeth subulate, ca. 2 mm long, as long as the tube. Petals purple, the keel with darker tip. Standard 8-9 mm long; blade ca. 6 mm wide, widely elliptic, emarginate, at the base gradually narrowed into the short, cuneate claw. Wings ca. 6 mm long; blades narrowly oblong, obtuse, ca. 4×1.5 mm; auricle 0.6 mm, claw 2 mm. Keel 7-7.5 mm long; blades obliquely obovate, with in upper part widely rounded lower edge and ± straight upper edge, obtuse, ca. 5×2.5 mm; auricle 0.5 mm, claw 2.5 mm. Stamen-tube slightly obliquely cut at the mouth. Ovary with a stipe 1−2 mm long, densely appressed white hairy; style slender, glabrous. Legumes (unripe) ± spreading, with a stipe ca. 2 mm long, obliquely narrowly ellipsoid, ca. 6 mm long, 2-2.5 mm high and wide, obtusely keeled to narrowly rounded ventrally and dorsally, minutely beaked; valves thin, rather densely covered with appressed white hairs 0.3–0.4 mm long.

Specimens examined

Known only from the type material.

Astragalus haiyuanensis PODLECH & L.R.XU, sp. nova [sect. Komaroviella GONTSCH.]

Differt ab A. confertus BUNGE distincte caulescens, non caespitosus, 16–20 cm altus (nec 2–10 cm), acaulescens ad breviter caulescens, dense caespitosus, stipulis ante petiolum liberis (nec distincte connatis), calyce antice arcte oblique praecisso (nec leviter praecisso), laxe pilis 0,3–0,5 mm longis (nec densiuscule ad

dense pilis 0.1-0.3 mm longis) obtecto, dentibus intus parse (nec dense) pilosis; vexillo $9-10 \times 6$ (nec $10-12 \times 6.5-8$) mm.

Typus: China, Prov. Ningxia, near Haiyuan Xian, ca. 105°38′ E, 36°34′ N, 10. 07. 1956, *YELLOW RIVER TEAM 5219* (holotypus PE).

Etymology: named after the town Haiyuan in Ningxia province.

Plants 16-20 cm tall, caulescent, furnished with appressed to subappressed or ascending, in vegetative parts white hairs, sometimes with black hairs mixed in. Stems in old parts up to 2 cm long, sometimes branched; stems of the current year 11-13 cm long, angular-sulcate, sparsely to loosely covered with subappressd white and black hairs 0.1–0.5 mm long. Stipules greenish, 2.5-4 mm long, triangular, nearly free from, behind the stem connate high up, those of lower leaves loosely to rather densely covered with white, those of upper leaves predominantly black hairs up to 0.8 mm long. Leaves 2-3 cm long; petiole ca. 0.5 cm long, with the rachis slender, loosely to rather densely subappressed, partly white, partly white and black hairy like the stem. Leaflets in 7-10 pairs, narrowly elliptic to elliptic, $3-5 \times 1.5-\bar{3}$ mm, subacute to obtuse, on upper side glabrous or sparsely hairy toward the margins or mor rarely allover, on underside loosely to rather densely covered with subappressed hairs 0.5-0.7 mm long. Peduncles 3-5 cm long, slender, loosely covered with appressed to slightly ascending white and black, toward the raceme predominantly black hairs 0.2-0.3 mm long. Racemes 1.5-2 cm long, ca. 10-12-flowered. Bracts whitishmembranous, narrowly triangular, ca. 1.5 mm long, predominantly black hairy, at the base sometimes with minute, sessile glands. Pedicels ca. 1 mm long, densely black hairy. Calyx campanulate, 4-5 mm long, oblique at the base, strongly obliquely cut at the mouth, loosely covered with subappressed black hairs 0.3-0.5 mm long; teeth narrowly triangular, somewhat unequal, 1-2 mm long, sparsely black hairy on inner side. Petals violet. Standard 9-10 mm long; limb ovate, ca. 6 mm wide, widely emarginate, at the base subabruptly contracted into the short claw. Wings ca. 8 mm long; limbs narrowly oblong, subobtuse, ca. 6×1.5 mm; auricle ca. 0.8 mm long,

claw ca. 2 mm long. Keel ca. 9-11 mm long; limbs obliquely obovate-triangular, with in upper part widely curved lower edge and \pm straight upper edge, obtuse, ca. 6.5×3 mm; auricle minute, claw ca. 3 mm long. Stamentube \pm truncate at the mouth. Ovaries with a slender stipe ca. 3 mm long, white hairy; style glabrous. Legumes (unripe) with a stipe ca. 4 mm long, covered with white, appressed hairs.

Specimens examined

Known only from the type material.

Astragalus mekongensis PODLECH, sp. nova [sect. Poliothrix BUNGE]

Differt ab A. maowensis PODLECH & L.R.XU stipulis 6–10 mm longis, a petiolo et inter se liberis (nec 2–3 mm longis a tergo caulis ad medium inter se vaginanti-connatis), bracteis ca. 4 mm longis nigropilosis (nec 2–3 mm longis albopilosis), calyce albo-nigropiloso (nec albopiloso), leguminibus sessilibus (nec stipitate ca. 3 mm longo suffultis).

Typus: China, Prov. Xizang, N of the city of Changdu along Lancang Jian (Mekong River) on road to Jiangda (Gyamda), 31°18′10″ N, 97°09′41″ E, 3320 m, 27.07.2004, D. E. BOUFFORD et al. 31179 (holotypus: MSB).

Plants ca. 20 cm tall. Rootstock slender, undivided (always ?). Stem singular, 12-16 cm long, undivided or near the base with few short non-flowering side-branches, in basal parts terete, in other parts angular-sulcate, rather densely to densely covered with appressed to ascending and partly also spreading, flexuose-tangled white hairs 0.2-0.3 mm long. Stipules greenish, 6–10 mm long, narrowly triangular, acuminate, free from petiole, behind the stem connate up to the middle, densely appressed hairy. Leaves 5-10 cm long; petiole short, up to 2 cm long, hairy like the stem or the lower leaves subsessile. Leaflets in 10-13 pairs, in side-branches in fewer pairs, narrowly elliptic to elliptic, $8-15 \times 2.5-6$ mm, in side-branches smaller, subacute to obtuse, on upper side glabrous or sparsely, on underside rather densely, in young leaves also densely covered with subappressed, flexuose-tangled white hairs 0.3–0.8 mm long. Peduncles 5.5–7 cm long, striate-sulcate to angular-sulcate, loosely to densely covered with ascending to nearly spreading white hairs 0.3-0.6 mm long, below the raceme with black hairs mixed in. Racemes ellipsoid, rather densely 10-20flowered; rachis rather densely covered with spreading black hairs. Bracts membranous, slightly greenish linear, acute, (3–)4 mm long, black hairy, at lower margins with few minute glands. Pedicels ca. 1-1.5 mm long, black hairy, obliquely erect. Calyx campanulate, 4.5−5 mm long, obliquely inserted on the pedicel, flowers therefore spreading to nodding, obliquely cut at the mouth, rather densely covered with subappressed white and black hairs 0.3–0.8 mm long; teeth subulate, somewhat unequal, the longer ones 2.5–3 mm long, white and black hairy on inner side. Petals white, tip of the keel sometimes purple. Standard 9-10 mm long; blade elliptic, 4.5-5 mm wide, emarginate, at the base indistinctly cuneately narrowed, without distinct claw. Wings ca. 8 mm long; blades narrowly oblong, obtuse, 5×1.5 mm; auricle ca. 0.5 mm long, claw 3 mm long. Keel 6-6.5 mm long; blades triangular, with in the midle rectangularly curved lower edge and sigmoid-concave upper edge, subacute, 3.5 ± 2 mm; auricle 0.5 mm, claw ca. 3 mm. Stamen-tube \pm truncate at the mouth. Ovary sessile, white hairy; style glabrous. Legumes (unripe) pendulous, slightly curved, 5-7 mm long and 2 mm high, densely covered with subappressed to ascending white and black hairs.

Specimens examined

CHINA, Prov. Xizang: N of the city of Changdu along Ge Qu (river) on road to Nangqen, Qinghai, 31°16′24″ N, 96°58′11″ E, 3349 m, 16.08.2004, BOUFFORD et al. 32422 (MSB); N of the city of Changdu along Lancang Jian (Mekong River) on road to Jiangda (Gyamda), 31°18′10″ N, 97°09′41″ E, 3320 m, 27.07.2004, D. F. BOUFFORD et al. 31179 (MSB).

Astragalus pseudorigidulus PODLECH, sp. nova [sect. Pseudotapinodes PODLECH & L.R.XU]

Differt ab *A. rigidulus* stipulis pro parte laxe subappresse albo-pilosis vel margine ciliatis (nec glabris vel margine tantum ciliatis), foliis 1,5-2 (nec 3-7) cm longis, foliolis 3-4-jugis, $4-9 \times 1-3,5$ mm (nec 6-11-jugis, $3-4 \times 1-1,5$ mm), inflorescentibus subsessilibus vel

pedunculo ad 0.5 cm longo suffultis, 1–2-floribus (nec 4–7-floribus), calyce sparse albipilosus (nec dense nigro-pilosus), ovario glabro (nec dense nigro-piloso).

Typus: Nepal, near Dogado Khola, 15,000', 19.06.1954, STAINTON, SYKES & WILLIAMS 3194 (holotypus M; isotypus: BM).

Plants 5-12 cm tall, caulescent, sparsely hairy. Rootstock with short elongated subterranean and aerial stolons. Stems up to 8 cm long, ascending to erect, irregularly branched, glabrous. Stipules membranous, 3-4 mm long, ovate, subobtuse, adnate to the petiole for 1-2 mm, sometimes distinctly connate before the petiole, often shortly connate behind the stem, subglabrous or partly ciliate at the margins or loosely covered with subappressed white hairs 0.4-0.6 mm long. Leaves 1.5-2 cm long; petiole and rachis slender, sparsely to loosely covered with slightly ascending hairs 0.3–0.5 mm long, sometimes subglabrous. Leaflets in 3-4 pairs, narrowly elliptic, 3- $4 \times 1-1.5$ mm, often slightly boot-shaped or with uprolled margins, obtuse, on upper side glabrous, on underside and at margins sparsely white hairy, sometimes subglabrous or glabrous. Peduncles up to 0.5 cm long, rather densely covered with subappressed to slightly ascending white hairs. Racemes 1-2-flowered. Bracts membranous, ovate, 2-3 mm long, sparsely white and black hairy. Pedicels 1-2 mm long, black and white hairy. Calyx 5-6 mm long, campanulate, nearly truncate at the mouth, sparsely to loosely white hairy; teeth 1.5-2 mm long, unqual, the upper (adaxial) triangular, the lower (abaxial) narrowly triangular-subulate, white hairy on inner side. Petals violet. Standard 11-12 mm long; blade widely ovate, 6-7 mm wide, emarginate, subabruptly contracted into the cuneate claw. Wings ca. 9 mm long; blades obovate, obtuse, $5 \times 2.5 - 2.8$ mm; auricle ca. 1.5 mm, claw 3.5-4 mm. Keel ca. 8 mm long; blades obliquely elliptic, with slightly curved lower edge and scarcely convex upper edge, rounded, $4.5 \times$ 2 mm; auricle minute, claw 4 mm. Ovary sessile, glabrous. Legumes unknown.

Specimens examined

Known only from the type material.

Astragalus chamardiensis PODLECH, sp. nova [sect. Stereothrix BUNGE]

Differt ab A. sorgerae Hub.-Mor. & D.F.CHAMB. plantis 4–8 cm altis, mere albopilosis (nec 8–25 cm altis, in partibus nigropilosis), caulibus pilis subappressis ad leviter ascendentibus (nec retrorse patulis) obtectis, stipulis 5–6 mm [nec 6–10(–14) mm] longis, pilis dentium calycis in tuberculis insidentibus.

Typus: Turkey, C5 Niğde, 10 km S Çamardi to Pozanti, 1400 m, 16.06.1990, *M. NyDEGGER 45741* (holotypus: MSB; isotypus BASBG).

Etymology: named after the town Çamardi in the Niğde province.

Plants 4-8 cm tall, shortly caulescent, with white hairs only. Stems 1-3 cm long, branched, densely covered with subappressed to slightly ascending hairs 0.4-1 mm long. Stipules 5-6 mm long, narrowly triangular, free from the petiole, the lower ones distinctly vaginate-connate behind the stem, the upper ones free from each other, loosely covered with hairs up to 2 mm long. Leaves 2.5-4 cm long; petiole 0.7-1.5 cm long, with the rachis hairy like the stem, with some spreading hairs mixed in. Leaflets in 6-8 pairs, in short sidebranches in less pairs, elliptic, $4-8 \times 1.5-3$ mm, rounded to retuse or sometimes acute, on both sides ± densely covered with subappressed to slightly ascending hairs 0.6-1 mm long, mostly folded. Peduncles 1.5-2 cm long, hairy like the stem. Racemes short, densely ca. 10-flowered. Bracts whitish, 8-10 mm long, linear-acute; hairy, at the margins with ± spreading hairs up to 2 mm long, partly sitting on little tubercles. Pedicels ca. 0.5 mm long. Calyx straw-coloured, 10-11 mm long, loosely covered with ascending to spreading hairs up to 2 mm long, hairs at the teeth sitting on tubercles; teeth subulate, 5-6 mm long. Petals yellow. Standard ca. 16 m long; blade 6-7 mm wide, ovate, slightly narrowed in upper third, rounded, gradually narrowed into the short cuneate claw. Wings ca. 11 mm long; blades narrowly oblong, elliptic, rounded, ca. 7×2 mm; auricle 0.5 mm, claw 5 mm. Keel ca. 10 mm long; blades obliquely elliptic, curved, with widely curved lower edge and concave upper edge, acute, 5×2 mm; auricle 0.3 mm, claw ca. 5 mm. Stamen-tube truncate at the mouth. Ovary sessile, hairy. Legumes unknown.

Specimens examined

Known only from the type material.

Phyllolobium sichuanense Podlech, sp. nova

Differt ab Phyllolobium tingriense (C.C.NI & P.C.LI) M.L.ZHANG & PODLECH foliolis obovatis $5-9 \times 3-6$ mm (nec anguste obovatis $4-8 \times$ 2-3 mm), subtus pilis $0,\overline{4}-0,5$ mm (nec 0,2-0,3 mm longis) obtectis, bracteolis basi calycis ca. 1 mm longis vel deficientes [nec 2-3 (-4) mm longis evolutis], calyce 7-8 mm longo, dentibus ca. 4 mm (nec 5-6 mm longo, dentibus 2-3 mm), vexillo ca. 12 mm longo, lamina ca. 8 mm lata, quam longitudo non latiore (nec 15-16 mm longa, lamina 11-12 mm lata, quam longitudo latiore), alis ca. 10 mm longis, laminis anguste oblongis, 6×1.5 mm (nec 13 mm longis laminis obovatis, 7–9 × 3-4 mm), leguminibus stipite ca 2-3 mm (nec ca. 5 mm) longo suffultis.

Typus: China, Sichuan Province, Dêgê Xian, road to Serxz ca. 14 km W of Manigange, between Manigange and Gengda at Haizi Kou (Lake), 31°59′58″ N, 99°03′58″ E, 4050 m, 18. 08. 2006, D. E. BOUFFORD et al. 36825 (MSB).

Etymology: named after the Sichuan province in China.

Plants ca. 15 cm tall. Stems 6-12 cm long, branched at the base, slender, sparsely to loosely covered with appressed to subappressed white and black hairs 0.2-0.3 mm long, in upper part sometimes with predominantly black hairs. Stipules greenish, 3-4 mm long, triangular, free, subglabrous, sparsely ciliate at the margins. Leaves ca. 3 cm long, subsessile; rachis sulcate adaxially, sparsely hairy like the stem. Leaflets in 5-7 pairs, elliptic to obovate, $5-9 \times 2-3$, 3-6 mm, truncate to slightly emarginate and minutely mucronulate, on upper side glabrous or with scattered hairs only. On underside loosely covered with subappressed, white hairs 0.4-0.5 mm long. Peduncles 2-3 cm long, loosely predominantly black hairs like the stem. Racemes short, 4-5-flowered; axis short, black hairy. Bracts 3–4 mm long, narrowly triangular, whitish, black hairy, at the base with few minute sessile glands. Bracteoles ca. 1 mm long, linear, acute, at the base of calyx, sometimes absent. Pedicels ca. 1 mm long, black hairy. Calyx 7-8 mm long, campanulate, rather densely covered with subappressed black hairs 0.1-0.3 mm long, with some white hairs mixed in; teeth subulate, ca, 4 mm long, densely black hairy on inner side. Petals purple. Standard ca. 12 mm long; limb ca. 8 mm wide, emarginate, at the base abruptly contracted into the short claw. Wings 10 mm long; limbs narrowly oblong, obtuse, ca. $6 \times 1.\overline{5}$ mm; auricle triangular, ca. 1 mm, claw ca. 4 mm. Keel ca. 12 mm long; limbs obliquely obovate, widely rounded, ca. 7×3.5 mm; auricle triangular, ca. 1 mm, claw 4-5 mm. Stamen-tube obliquely cut at the mouth. Ovaries stipitate, hairy; style with a brush of hairs below the stigma. Legumes (unripe) with a stipe ca. 2-3 mm long, ellipsoid, at least 10 mm long and 3 mm high, compressed laterally, acuminate with persistent style; valves thin, densely covered with appressed white and partly black hairs 0.05-0.2 mm long.

Specimens examined

Known only from the type material.

New names

Astragalus yushensis T.SABAII, ZARRE & PODLECH [sect. Anthylloidei DC.]

nomen et status novus \equiv *A. submitis* BOISS. & HOHEN. subsp. *maassoumii* TIETZ & ZARRE, Sendtnera **2**: 337. 1994.

Typus: Iran, prov. Mazanderan, Pol-e Zangouleh to Doab, after Takour village, 2500 m, 03. 06. 1986, leg. A.A. MAASSOUMI 55131 (holotypus TARI, isotypus MSB).

Etymology: after the village Yush in Mazanderan.

A complete description is given here, because the original description of the subspecies is very short.

Plants 15-30 cm tall, cushion-forming, woody and densely branched at base. Hairs 0.1-2 mm long, white on vegetative parts, mixed with black ones on the inflorescene. Stems from a prostrate Rootstock ascending, parts of the current year 2.5-3 cm long. Stipules papery, whitish yellow, 5-10 mm

long, adnate to the petiole for 4–5 mm, shortly connate behind the stem, free tips narrowly triangular, acuminate, younger ones densely tomentose, becoming glabrous with age. Leaves 3-12 cm long, paripinnate, crowded; petiole 0.5-4 cm long, like the rachis rigid, straight or ± curved, spiny, densely subappressed hairy; terminal spine 1–2 times as long as the uppermost leaflets. Leaflets in 9-23 pairs, cloth together, slightly folded ovate, elliptic or obovate, $1.5-4.5 \times 0.75-2$ mm, obtuse to retuse, with a minute mucro not longer than 0.2 mm, upper side with \pm spreading hairs, underside densely covered with appressed hairs. Peduncle 5-10(-15) cm long. Raceme at fruiting time \pm dense at fruiting time, ca. 6 cm long and 3 cm in diameter. Bracts papery, 3-5 mm long, narrowly triangular to ovate, acuminate, densely hairy. Calyx reticulately veined, purplish, at anthesis 8-11 mm long and 4-6 mm wide, at fruiting time bladdery-inflated, 9-14 mm long and 10-13 mm in diameter, with 12-14 main nerves, sparsely subappressed villous becoming glabrescent; teeth subulate, 3–4 mm long. Petals creamy at lower half, pink to purple further up. Standard 17-22 mm long; blade 8–11 mm long and 8–10 mm wide, orbicular to widely ovate, retuse, rounded or angularly passing into the claw 8.5-12 mm long. Wings 16–21 mm long; blades narrowly obovate, obtuse, $7-8 \times 2-3.5$ mm; auricle ca. 1 mm, claw 10-14 mm. Keel 15-20 mm long; blades obliquely obovate-elliptic, 5×2.5 – 3 mm; claw 10-15 mm. Legumes with a stipe 0.5-2 mm long, 5-7 mm long, 3-5 mm high and 1.5-2 mm wide, compressed laterally; valves papery, densely covered with black and white appressed hairs.

Specimens examined

IRAN, Prov. Mazanderan: 85 km from Kandavan on Haraz road, Mazid village, 1900–2300 m, 23. 06. 1979, ASSADI & MOZAFFARIAN 33037 (MSB, TARI); Upper Haraz valley, between Rayan and Takar, 1650 m, 09. 06. 2001, PODLECH & ZARRE 55181 (MSB, TUH); 12 km after Haraz deviation towards Yush, 1184 m, 36°10′ N, 52°12′ E, 25. 04. 2006, ZARRE, MOAZZENI & RAZIFARD 36099 (TUH); Pol-e Zangouleh to Doab, after Takour village, 2500 m, 03. 06. 1986, MAASSOUMI 55131 (MSB, TARI); entre Amol et Siavicheh, 500–1800 m, 21. 05. 1956, SCHMID 5872 (M, W); Haraz valley, above Siah Bisheh, 900 m, WENDELBO 398 (BG).

Astragalus ranjbarii PODLECH [sect. Dissitiflori DC.]

nomen novum ≡ *A. ghahremaninejadii* RAN-JBAR, Nordic J. Bot. **24**: 524. 2007, nom. illeg. [non RANJBAR 2005] (sect. *Astragalus*).

Typus: Iran: Prov. Gorgan: Marravehtappeh, near Ghosh-tappeh, Atrak river side, 300–400 m, 25. 05. 2003, M. RANJBAR 6234 (Holotypus: BASUH).

Etymology: Named after the author of the substituted illegitime name.

Astragalus gunibensis PODLECH [sect. Incani DC.]

nomen novum ≡ *A. alexandrii* KHARADZE, Soobshch. Akad. Nauk Gruzinsk. SSR **3**: 700. 1942, illeg. [non ŠIRJ. 1939].

Typus (Syntypi): [Russia] Daghestan, Gunib, 15. 05. 1914, D. BUTEEV (sub *A. sanguinolentus*); Gunib, 11. 06. 1915, GROSSHEIM (sub *A. monspessulanus*) (TBI).

Etymology: named after the village Gunib in Daghestan.

Astragalus erraticus PODLECH [sect. Incani DC.]

nomen novum ≡ *A. brevidentatus* PODLECH, Sendtnera **6**: 151. 1999, illeg. [non C. H. WRIGHT 1906] (syn.: *A. angorensis* PODLECH, Sendtnera **7**: 200. 2001, illeg. [non *A. angarensis* BUNGE 1868]; *A. blandulus* PODLECH, Feddes Repert. **119**: 35. 2008, illeg. [non PODLECH & L.-R.XU 2006]).

Typus: Turkey, prov. Ankara, zwischen Ankara und Aksaraym 10 km N Sereflikoçhisar, 970 m, 01. 04. 1986, *M. Nydegger 41023* (holotypus MSB, isotypus BASBG).

Etymology: erraticus = full of faults.

Sect. Malacothrix BUNGE

Astragalus neoalbanicus PODLECH & SYTIN [sect. Malacothrix BUNGE]

nomen novum \equiv *A. albanicus* GROSSH. in Fl. USSR 12: 886. 1946, illeg. [non ŠIRJ. 1939].

Typus (Syntypes): [Azerbaijan] Distr. Schemacha inter montes Boz-dagh et Kara-dagh,

19. 05. 1928, M. SACHOKIA (BAK, LE); dto. inter pasc. Mechene et Arich, 23. 05. 1928, M. SACHOKIA (BAK). Lectotype (designated here): [Azerbaijan] Distr. Schemacha inter montes Boz-dagh et Karadagh, 19. 05. 1928, M. SACHOKIA (lectotypus LE, isotypus BAK).

Phyllolobium lachungense (CHAUDHARY) PODLECH

combinatio nova ≡ *Astragalus lachungensis* CHAUDHARY, J. Japan. Bot. **81**: 168. 2006.

Typus: India, Sikkim, Lachung, between Lachung and Yumthang, ca. 15 km away from Yunftham, 3399 m, 15. 08. 2004, L. L. CHAUDHARY 225079 (holotypus LWG, isotypus CAL).

Phyllolobium petri-primi (RASSULOVA & STRIZHOVA) PODLECH

combinatio nova ≡ *Astragalus petri-primi* RAS-SULOVA & STRIZHOVA, Dokl. Akad. Nauk Tadzhik. SSR **13**(10): 57. 1970.

Typus: Tadzhikistan, ad declivitatem borealem jugi Petri Primi 5 km ad meridiem a pago Kanyschbek, locus Kiri dictus, secus tractum pascuum, 01. 09. 1969, T. G. STRIZHOVA 5323 (holotypus TAD, isotypus LE).

References

PODLECH, D. 2008: Thesaurus Astragalorum: Index of all taxa within the genus *Astragalus* L. and other genera but belonging to the genus *Astragalus*. Taxa of the Old World and related taxa of the New World. – http://www.botanik.biologie.uni-muenchen.de/botsyst/theslit.html.

ZHANG, M.-L. & D. PODLECH 2006: Revision of the Genus *Phyllolobium* FISCH. (Leguminosae-Papilionoidei). – Feddes Repert. **117**: 41–64.

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