© Biologiezentrum Linz/Austria; download unter www.biologiezentrum.at

A new *Astragalus* L. (*Fabaceae*) species from Uzbekistan

F. O. Khassanov*, Sh. U. Sarybaeva & A. S. Esankulov

Abstract: *Astragalus russanovii* F. O. Khass., Sarybaeva & Esankulov (sect. *Paraxiphidium*) is newly described. Its relationship to another allied Pamir-Alain species is discussed.

Zusammenfassung: *Astragalus russanovii* F. O. Khass., Sarybaeva & Esankulov (sect. *Paraxiphidium*) wird neu beschrieben. Seine Verwandtschaftsbeziehung zu einer anderen Art aus der Pamir Alai Region wird diskutiert.

Key words: Taxonomy, *Astragalus*, Central Asia, description.

* Corresponding author (fkhasanov1@mail.ru)

Introduction

Several collecting missions have been made by the senior author during last 20 years in the area of the Pamir-Alai mountain chains. Several new *Astragalus* species have been described (*A. neobotschantzevii* F. O. Khass., Gaffarov & Turak., *A. nenilinii* F. O. Khass., & I. I. Malzev, *A. nigrocarpus* F. O. Khass., & I. I. Malzev and *A. belolipovii* Kamelin ex F.O. Khass. & N. Sulejm.) from the area of Hissar, Turkestan and Nuratau mountain ranges. The last species was described recently (Khassanov & Sulejmanov 2010) on the basis of plants cultivated in the Botanical Garden in 1975. The only available specimen has been chosen by R. Kamelin as a holotype. In 2010, during a collecting mission to Zaomin (Guralash) reserve special attention has been made for the locus classicus of that species in order to collect living plants. Several plants of this species were collected. Moreover, one more *Astragalus* species has been found there as well.

New description

Astragalus russanovii F. O. Khass., Sarybaeva & Esankulov sp. nov. (sect. *Paraxiphidium* Kamelin)

Frutex 30-50 cm altus, cortice fuscenti-griseo. Ramuli hornotini dense adpresse pilis bipartitis albis, interdum nigris sparsis intermixtis, canescenti-pilosi. Stipulae triangulares, triangulatae-lanceolatae vel lanceolatae, 2-4 mm longae, herbaceae albo nigroque pilosae. Folia 5-15 cm longa, petiolo quam rachis multo breviore, albo piloso necnon pilis nigris solitariis obsito. Foliola 2-5 –juga, elliptica vel anguste linearia, apice obtusata, plurimum brevissime apiculata, utrinque adpresse pilosa. Pedunculi axillares, 10-25 cm longi, pilis adpressis albis et paucioribus nigris pilosi. Racemi densi multiflori 2-7 cm longi. Bracteae oblongae vel lineari-lanceolatae, 4-6 mm longae, albo nigroque pilosae. Pedicelli bracteis breviores. Flores erecto vel horizontaliter patentes. Calyx tubulosus 12-16 mm longus, albo vilosus et adpresse nigro pilosus; dentibus lineari-subulatis, nigro pilosis tubo 3-4 plo brevioribus. Corolla rosea. Vexillum 20-25 mm longum; lamina obovata, apice rotundata glabra, basi in unguiculum cuneato-attenuata. Alae 20-22 mm longa. Carina 18-20 mm longa. Legumina horizontaliter patentia vel subnutantia, anguste-linearia, dorso rosea, 20-24 mm longa, ca 6 mm lata (rostrum ca 5 mm longum), albo et nigro pilosa.

Ab *A. iskanderi* Lipsky lamina vexilli extus complete glabriscente et albido-rubescente differt.

Habitat ad montium Turkestanici (Asia Media, Pamir-Alaj Occidentalis).

Typus: Pamir-Alaj Occidentalis, montes Turkestanici, prope pagum Kuljsaj, N 39°38’45.3’’, E 68°19’49,1’’, 2400 msm, 27.07.2010, Khassanov, Esankulov (TASH, isotypus LI).

Etymology: Species in honorem Prof. Dr. Nikolaj Russanov Tashkentensis denominata est.

Discussion

The senior author collected *A. iskanderi* in its classical location (surroundings of Iskanderkulj lake, Zaravschan range) in 1985. The flowers were violet and vexillum only was hairy on the outside. Two specimens of *A. iskanderi* are presented and have been studied in TASH (Upper Zaravschan (Kuhistan), basin of river Fan (Pasrud, Chan-Dara), juniper forests, southern slope, 2400 msm, Zakirov. Popov, Sergeeva, 16.06.1940; Samarkand district, Iskanderkulj lake, Beter, 19.06.1916). The same characters were found as well. The plants we collected in the Zaomin reserve were rather close to *A. iskanderi* , but the flowers were pinkish-white and naked (Fig. 1). Moreover, the fruits are reddish having rather long beaks and calyx has blackish stripes (Fig. 2). Comparison of the plants from Zaomin reserve and Zaravschan ones showed that they are separate spe-

© Biologiezentrum Linz/Austria; download unter www.biologiezentrum.at



Fig. 1: Inflorescence and flowers of *A. russanovii* sp. nov.



Fig. 2: Fruits of *A. russanovii* sp. nov.

cies. Astonishingly, the presence of rather long white hairs on the outside of the vexillum of *A. iskanderi* was not mentioned in the first description made by Lipsky (1907), neither in Flora of USSR (Vassilczenko 1946), nor in the Flora of Uzbekistan (Gontscharov 1955). R. Vinogradova revised this group (sect. *Paraxiphidium*) isolated but not legally described by Kamelin from section *Xiphidium* Bunge in the Conspectus Florae Asiae Mediae (1976) and there was not any notice about hairy vexillum of *A. iskanderi* in her determination key. Nevertheless, this unique character for all the representatives of *Xiphidium* s. l. was mentioned by Koroleva (1937) and Rassulova in the Flora of Tadzhikistan (1981).

References

Gontscharov N. F. (1955): In Vvedensky A. I. (ed.) Rod *Astragalus* L. — Flora of Uzbekistan; vol 6. Izd. "FAN" Uzb. SSR, Tashkent, p. 622.

Khassanov & Sulejmanov (2010): Novye vidy rastenij iz severnogo Pamiroalaja. — Doklady Akad. Nauk Respubliki Uzbeskistan **4**: 14-16.

Koroleva A.S. (1937): In Gontscharov N.F. (editor) Section Xiphidium. — Flora of Tadzhikistan, vol.5, Izd. Akad. Nauk Moscow-Leningrad, p. 470.

Rassulova M. (1981): *Astragalus*. In: Ovczinnikov P. N. (editor) *Astragalus* L. — Flora of Tadzhikistan Vol. **6**., Moscow-Leningrad Nauka, p. 233.

Vassilczenko I. T. (1946): In Gontscharov N. F. & M. G. Popovov (editors) Rod 555, (27) *Astragalus* L. — Opredelitel rastenij Srednej Azii. Kriticheskij konspekt flory; 6. Izd. "FAN" Uzb. SSR, Tashkent, pp. 185.

Vinogradova R. (1981): In Kamelin R., Nabiev M. & S.S. Kovalevskaya (editors) Rod 555, (27) *Astragalus* L. — Opredelitel rastenij Srednej Azii. Kriticheskij konspekt flory; vol. 6. Izd. "FAN" Uzb. SSR, Tashkent, p. 185.

Prof. Dr. Furkat O. Khassanov
SPC Botanika, Academy of Sciences
F. Khodzhaeva, 32
700143, Tashkent
Republic of Uzbekistan

Dr. Sarybaeva Shakhnoza Usamovna
SPC Botanika, Academy of Sciences,
F. Khodzhaeva, 32
700143, Tashkent
Republic of Uzbekistan

Alizhon Saidovich Esankulov
Dzjizzak Pedagogical Institute,
Dzhizzak
Republic of Uzbekistan

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: Stapfia

Jahr/Year: 2010

Band/Volume: 0092

Autor(en)/Author(s): Khassanov Furkat O., Sarybaeva Shakhnoza Usamovna, Esankulov Alizhon [Alijon] Saidovich

Artikel/Article: A new Astragalus L. (Fabaceae) species from Uzbekistan 25-26