

## Two new *Allium* L. species from the Fergan depression (Central Asia)

F. O. Khassanov\* & K. Sh. Tojibaev

**Abstract:** *Allium scharobitdinii* F. O. KHASS. & TOJIBAEV (sect. *Caerulea* (OMELCZ.) F. O. KHASS.) and *A. chorkessaricum* F. O. KHASS. & TOJIBAEV (sect. *Campanulata* KAMELIN) are newly described. Their relationships to other Western-Tian-Shanian and Afghan-Pamir-Alain species are discussed.

**Zusammenfassung:** *Allium scharobitdinii* F. O. KHASS. & TOJIBAEV (sect. *Caerulea* (OMELCZ.) F. O. KHASS.) und *A. chorkessaricum* F. O. KHASS. & TOJIBAEV (sect. *Campanulata* KAMELIN) werden neu beschrieben und ihre Verwandtschaftsbeziehungen zu anderen Arten der westlichen Tian Shan und Afghanischen Pamir Alai Region diskutiert.

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

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### Introduction

During the botanical collecting mission of the area of Kurama mountainous ridge in 2009, two more new *Allium* taxa were found in the subalpine zone. Thus, additionally to the recently described (FRITSCH 1998) new 4 Alliums (*A. haneltii* F. O. KHASS. et R. M. FRITSCH, *A. kuramense* F. O. KHASS. et N. FRIESEN, *A. orunbaii* F. O. KHASS. et R. M. FRITSCH, *A. michaelis* F. O. KHASS. & TOJIBAEV) the descriptions of two more new species are given below.

### New descriptions

#### *Allium scharobitdinii* F. O. Khass. & Tojibaev sp. nov. (sect. *Caerulea* (Omelcz.) F. O. Khass.)

Bulbus solitarius ovatus 10-15 mm altus, 5-10 mm latus; tunicae exterieores papyraceae, cinereo-nigrescens. Bulbulae violaceae ovoidea ca 1 cm lg. Caulis teres glaber striatus 15-30 cm alt. Folia in numero 2-4, 1-2 mm lata semeteretria scabrida. Spatha caduca pedicellis pluries breviora. Umbella hemisphaerica laxa. Pedicelli subaequilongi 10-18 mm longi, basi ebracteolati. Perigonum campanulatum albidum, nervis viridibus. Tepala elliptico-ovata subacuta, 4-4,5 mm longa. Filamenta albida tepalis longiora, exteriora anguste-triangularia; interiora basi late triangulari, ad ca 2/3 partis liberae utrinque denticulo distincto provisa. Antherae violaceae. Capsula ignota.

Diffr. ab *A. caesioides* WENDELBO filamentis existentis, bulbulis violaceis (nec nullis).

Habitat ad montium Kuramense (Asia Media Tian-Shan Occidentalis).

**Type:** Tien-Shan Occidentalis, montes Kuramensis, prope pagum Chadak, N 41°06'51,7" E 70°36' 57,4", 2169 msm, 28.06.2009, Tojibaev (TASH, isotype LI).

**Etymology:** Species in honorem Dr. Scharobitdin Tojibaev Namanganensis denominata est.

Bulb solitary, ovate 10-15 mm long, 5-10 mm wide, outer tunics papery, blackish. Bulblets violet ovate, about 1 cm long. Scape smooth, straight 15-30 cm long. Leaves 2-4, 1-2 mm thick, nearly terete, smooth, coarse. Spathe shorter than pedicels, deciduous. Inflorescence semiglobose, lax. Pedicels nearly equal, 10-18 mm long, with basal bracts. Flower cup shaped, whitish with green nerve. Tepals elliptic ovate obtuse, 4-4,5 mm nearly acute. Filaments whitish, longer than tepals, outer ones simple narrow triangular, inner ones wide triangular with small lateral cusps at 2/3 of the filament. Anthers violet. Capsule unknown.

#### *Allium chorkessaricum* F. O. Khass. & Tojibaev sp. nov. (sect. *Campanulata* Kamelin)

Bulbi gregari conico-cylindrici, 5-15 mm alti, 5-10 mm crassi; tunicis brunneis vel rufescenti brunneis reticulate fibrosis tecti. Caules graciles, laevis, 15-30 cm alti, basi vaginis foliorum scabridis involuti. Folia in numero 2-4, canaliculata, ca 1 mm lata, glabra. Spatha persistentia, rostrata, bipartita, quam umbella sesque breviora. Umbella hemisphaerica, plurifolia. Pedicelli subaequilongi, 8-12 mm longi, ebracteolati. Perigonii anguste campanulati phylla rosea, nervo intensiore violaceo percursa, 3,5-4,5 mm longa, declinata, acuta. Filamenta simplicia, perigonio manifeste longiora, basi inter se ut cum perigonio connata, rosea. Antherae violaceae. Stylus longe exsertus. Ovarium globosum purpureum. Capsula globosa vix perigonio breviora.



**Fig. 1:** Bulb and bulblet of *A. scharobitdinii* sp. nov.



**Fig. 2:** Inflorescence of *A. scharobitdinii* sp. nov.



**Fig. 3:** Inflorescence of *A. chorkessicum* sp. nov.

Diffrerit ab *A. tenuicaule* VVED. filamentis existentis.

Habitat ad montium Kuramense (Asia Media Tian-Shan Occidentalis).

**Type s:** Tien-Shan Occidentalis, montes Kuramensis, Parda Tursun fl., N 41°07'13.9", E 70°48'24,0', 2900 msm, 28.06.2009, Tojibaev (TASH, isotypus LI).

Bulbs several, cylindrical, 5-15 mm long, 5-10 mm wide, tunics brownish, reticulate-fibrose. Scape 15-30 cm, smooth, lower part covered by slightly scabrid leaf sheaths. Leaves 2-4, ca. 1 mm wide, glabrous. Spathe bipartite, shorter than inflorescence. Inflorescence hemispherical, many flowered. Pedicels equal, 6-10 mm long, without bracts. Tepals campanulate, pink, with purple mid vein, 3,5-4,5 mm long, sharp. Filaments long exerted simple, basally connate with tepals, pink. Anthers purple. Style long exerted. Ovary globose, purple. Capsule globose, shorter than flowers.

## Discussion

*Allium scharobitdinii* is close to the Afghanian species *A. caesioides* by its exerted filaments (WENDELBO 1971; Fig. 1), but it can easily be identified by its deciduous spathe, as well as the violet bulblets (Fig. 2). On the other hand *A. scharobitdinii* is rather close to the incomprehensible Tien-Shanian taxon *A. re-nardii* REGEL, previously treated by VVEDENSKY & KOVALEVSKAYA (1971) as a synonym of *A. caesium* SCHRENK, but the tepals and filaments of the last two species are rather identical. Moreover, all species of sect. *Caerulea* can be characterized by their de-

ciduous spathe and *A. caeruleum* PALL. normally has several bulblets, as well as exerted filaments like *A. scharobitdinii*.

The second new species *A. chorkessicum* can be allied to *A. tenuicaule* REGEL, having long exerted filaments (Fig. 3).

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