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## CERASTIUM PONTICUM, A NEW RECORD FOR THE FLORA OF IRAN

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During a revision of the genus *Cerastium* L. in Iran, *Cerastium ponticum* Albov was identified and is reported as a new record from Iran and Flora Iranica area. Morphological characteristics, as well as a full description and distribution of the new record are provided. This taxon is also compared with its close relative species.

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Key words: Caryophyllaceae; Alsinoideae; Cerastium, Kaleybar; Flora of Iran

گزارش جدید گونه Cerastium ponticum Albov برای فلور ایران

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در بازنگری جنس .Cerastium L در ایران، گونه Cerastium ponticum Albov به عنوان گزارش جدید برای فلـور ایران و محدوده فلـورا ایرانیکا معـرفی میگردد. ویژگیهای مورفولوژیکی، شرح کامل و پراکنش این گـزارش جدید ارایه میگردد. این تاکسون با گونه نزدیک نیز مقایسه میشود.

#### INTRODUCTION

The genus *Cerastium* L. belongs to the subfamily Alsinoideae Fenzl. This genus is represented by three sections (sect. *Cerastium* sect. *Strephodon* Ser. and sect. *Schizodon* (Fenzl) Shishkin) in the Iranian plateau, of which 22 species and 1 subspecies were reported from Iran (Möschl 1988; Poursakhi & al. 2012; Poursakhi & al. 2013; Poursakhi & Assadi 2017). Poursakhi & al. (2014) also reported *C. pentandrum* as a new record of this genus for the flora of Iran.

During preparation the taxonomic treatment of the genus *Cerastium* for the Flora of Iran, *Cerastium ponticum* Albov was identified and is reported as a new record for Iran and Flora Iranica area. The new record belongs to sect. *Cerastium*. In this section, with 15 species in Iran, teeth of the capsule are elongated, straight or reflexed, with flat or recurved margins.

#### **MATERIALS AND METHODS**

Specimens preserved in Iranian Research Institute of Plant Protection herbarium (IRAN) were examined using an Olympus SZH stereomicroscope. The vegetative and reproductive characteristics of specimens were studied. Local and neighboring Floras are also considered (Shishkin 1936; Cullen 1967; Möschl 1988).

# **RESULTS AND DISCUSSION**

New record

Cerastium ponticum Albov in Bull. Herb. Boiss. II (1894) 449.

**Specimen examined:** Azerbaijan province, Ahar, Kaleybar, 1800-2600 m, 4.8.1968, Termeh (4341 IRAN!).

Perennial, up to 16 cm high, lanuginose with crisp

hairs. Stems ascending. Lower and middle internodes 10-12 mm long; upper internodes up to 23 mm long. Leaves 20-27 mm long, 5.5-7 mm wide; with prominent midrib; lower and middle leaves oblanceolate; upper leaves ± elliptic-oblong. Lower bracts 8-9 mm long, 1.5-3.5 mm wide, often lanceolate-ovate, long scarious at tips and at margins. Sepals slightly concave, long scarious at tips and at margins; outer sepals 6-8 mm long, 1.5-2.5 mm wide, lanceolate; inner sepals 6.5-8 mm long, 2.5-3 mm wide, lanceolate-ovate. Petals 5, 10-12 mm long, 5-5.5 mm wide, obovate with long claw, up to 1/3 bilobed, glabrous or with several hairs. Stamens 10; filaments 4-4.5 mm long, glabrous or with one or two hairs; anthers 0.7-0.9 mm long, elliptic, pale yellow. Styles 5, 2.2-3.5 mm long. Capsules cylindrical, straight, up to 1.5 times as long as sepals; teeth 10 (fig. 1).

**Geographical distribution:** Caucasus, W. part of the Main Range and northwest Iran in Irano-Turanian region (map 1).

#### **Taxonomic notes**

While examining the herbarium specimen with number 4341 (*C. gnaphalodes* Fenzl) in IRAN herbarium, I noticed that a different specimen is next to *C. gnaphalodes* on the sheet, which was identified as *C. ponticum. Cerastium ponticum* differs from *C. gnaphalodes* in having longer lower and middle internodes (10-12 vs. 5-10 mm), shape of upper leaves (± elliptic-oblong vs. oblong-lanceolate), longer upper leaves (20-23 vs. 3-9 mm) and wider (6-6.5 vs. 1-3 mm), longer lower bracts (8-9 vs. 5.5-6 mm), shorter outer sepals (6.5-8 vs. 7.5-9 mm) and narrower (1.5-2.5 vs. 3.2-3.5 mm), shorter filaments (4-4.5 vs. 5-6 mm), shorter styles (2-2.5 vs. 3.5-4 mm).



Fig. 1. Image of herbarium specimen of Cerastium ponticum.



Map 1. Distribution map of Cerastium ponticum.

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## REFERENCES

Cullen, J. 1967: *Cerastium* L. In Davis, P.H. (ed.) Flora of Turkey and the East Aegean Islands, vol. 2: 73-85. -Edinburgh University Press, Edinburgh.

Möschl, W. 1988: Cerastium L. In Rechinger, K.H. (ed.) Flora Iranica, vol. 163: 85-108. Akademische Druck- u. Verlagsanstalt, Graz, Austria.

Poursakhi, K., Assadi, M., Ghahremaninejad, F., Nejadsattari, T. & Mehregan, I. 2012: A new subspecies of the genus *Cerastium* L. (Caryophyllaceae) from Iran. -Iran, J. Bot. 19 (1): 47-53.

Poursakhi, K., Assadi, M., Ghahremaninejad, F., Nejadsattari, T. & Mehregan, I. 2013: A new species of *Cerastium* L. (Caryophyllaceae) from the Kiamaki-Dagh Mountain, Iran.-Phytotaxa 144 (1): 22-26.

Poursakhi, K., Assadi, M., Ghahremaninejad, F., Nejadsattari, T. & Mehregan, I. 2014: A new record of *Cerastium* L. (Caryophyllaceae) from Iran with emphasis on its micromorphological characteristics. -J. Sci. Kharazmi University 14 (3): 239-248.

Poursakhi, K. & Assadi, M. 2017: A new endemic species of *Cerastium* L. (Caryophyllaceae) from Iran. -Phytotaxa 312 (2): 287-292.

Shishkin, B. K. 1936: *Cerastium* L. In Komarov, V.L. (ed.) Flora of the U.S.S.R., vol. 6: 430-466. -Leningrad.