A NEW RECORD OF PRIMULA L. (PRIMULACEAE) FROM IRAN.

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*Primula fedtschenkoi* Regel that was reported from Afghanistan and Uzbekistan in Flora Iranica is recorded from Khorassan Province in NE of Iran for the first time. It is compared with its nearest species based on morphological characters. The distribution map of the new record is presented.

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INTRODUCTION

The genus *Primula* L. has provided multiple facets for study and enjoyment to taxonomists, ecologists, geneticists, and gardeners. Known in European gardens since the time of the medieval herbalists, *Primula* received early scientific recognition in Darwin’s (1877) pioneering work on heterostyly, the dominant breeding system in the group. Today, heterostyly is recognized as a complex reproductive syndrome with significant ecological and evolutionary implications and it is known from 28 flowering plant families (Barrett et al. 2000). In the Primulaceae, heterostyly and the alternative system, homostyly have played important roles in systematic treatments at thegeneric and infrageneric levels (Richards 1993).

*Primula* L. (Primulaceae), comprising of approximately 500 species is one of the largest genera in Primulaceae (Hu & Kelso, 1996). Members of *Primula* distributed outside of the Asian highland center of diversity occupy the mountains or high latitudes of North America, Europe, and Asia; a few species also extend into South America, Ethiopia, Java, and Sumatra (Richards 1993).

This genus includes 17 species in Flora Iranica area which among them 5 species (*P. gaubaeana* Bornm., *P. heterochroma* Stapf, *P. macrocalyx* Bunge, *P. auriculata* Lam., *P. capitellata* Boiss. are found in Iran (Wendelbo 1965). After working on Iranian species collected from different area of Iran, *P. algida* Adams was added to this list and because of some similarities; this species has been synonym with *P. capitellata* Boiss. (Jamzad 1999).

MATERIALS AND METHODS

Herbarium specimens of the genus *Primula* L., collected from different places of Khorassan Province were examined and identified by relevant literatures (Federov 1967; Wendelbo 1965). All the specimens (8) are preserved in Herbarium of Ferdowsi University of Mashhad (FUMH).
RESULTS

New record


Perennial, farinose, 8-15 cm long; rootstock short, with a tuft of rather thick somewhat fusiform brown root. Leaves basal, 3-5 (-7) × 0.5-2 cm, pale green with a whitish prominent midrib, farinose rarely glabrescent, fairly thin, oblong-ovate, dentate to crenate rarely undulate, blade at base gradually attenuate into petiole. Scape 5-12 cm long, slender, nearly farinose. *Umbel* few-flowered. Pedicels short, 2-13 mm long, erect, farinose. Bracts 1-5 mm long, lanceolate, acute, farinose, pubescent sometimes glandular in margins. Calyx short, 3-5 mm long, campanulate, pale green with purple spots, parted to the middle into lanceolate acute teeth, more farinose inside. Corolla large, purplish-lilac, the flat limb 10-18 mm across, the lobes elliptic or obovate nearly entire or erose, the narrow tube 2-3 times the length of the calyx somewhat enlarged at throat. Capsule 5-6 mm in diameter, ovoid-globose, enclosed to the top by the closely adhering calyx. Seeds almost 0.8 mm long, with prominent angles, bireticulate, pale brown (fig 1).

Studied specimens: Khorassan province: Sarakhs, Mountains of Qorqoreh, 900 m, Faghihnia & Zangooei 21412 [FUMH]; Mashhad, Reaza-shahr, elevations of village Najafi, 1150 m, Safavi & Joharchi 10767 [FUMH]; Sarakhs, Gonbadli, towards Shuricheh, km 48, 480 m, Ayatollahi 15077 [FUMH]; S Mashhad, mountains of Park-e Khorshid (Sun Park), 1292 m, Joharchi 45153 [FUMH].

*Primula fedtschenkoi* is similar to *P. auriculata* but there are some differences between them that are listed in table 1.

**Geographical distribution:** Generally *P. fedtschenkoi* grows on grassy and mountain slopes, sometimes among junipers and along the banks of streams but in Iran, it grows on dry lands and it is xerophyte. Previously reported from Afghanistan, and Uzbekistan, it is now reported from Iran (Map. 1).

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**References**


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Fig. 1. *Primula fedtschenkoi*
(photo by Joharchi, 20 April 2014).