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New and interesting records for the flora of Iran

Abstract

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Eleven species of flowering plants are reported as new or interesting for the flora of Iran: Amaranthus viridis, Coronopus squamatus, Cousiniopsis atractyloides, Digera muricata, Haplophyllum obtusifolium, Lachnophyllum gossypinum, Launaea korovinii, Rindera cyclodonta, Sphenoclea zeylanica, Trigonella grandiflora and Tournefortia sogdiana.

Introduction

During our botanical expeditions in Iran as well as in the course of determining of unnamed plants in Iranian herbaria, particularly in the Natural History Museum of Iran and the Mashhad University Herbarium, we detected several new records of flowering plants for Iran. They are listed below with quotation of the respective herbarium specimens and in some cases, comments on the distribution and taxonomy. The specimens are preserved in the Natural History Museum of Iran (MMTT*), Mashhad University Herbarium (MUH*), Herbarium of Shahid Beheshti University (SBUH*), TARI, IRAN and B.

Enumeration of species

Amaranthaceae

Amaranthus viridis L.

Azarbayjan: Tabriz, along Talkheh-Rud river, c. 1500 m, 4. 10. 1987, Assadi & Akhani 61519b (TARI). – Tehran: Shahid Beheshti University Campus, 1500 m, 5. 7. 1988, Akhani 65365 (TARI); Varamin, cultivated lands, c. 950 m, Akhani 65353 (TARI); c. 20 km SE of Varamin, Abardezh, 826 m, 10. 8. 1988, Akhani 65345 (TARI). – Hormozgan: Isin, 1000 m, 27. 4. 1987, Mozaffarian 59129 (TARI).

^{*}The abbreviations marked with an astrisk are not used and the herbaria not listed in the latest edition of "Index herbariorum" (Holmgren, Holmgren & Barnett 1990).

A. viridis is a widespread weed. In "Flora Iranica" (Aellen 1972) no material of this species from Iran was quoted. Parsa (1950: 1105), however, reported this species from Bandare-Gaz in N Iran (leg. Freyn) and its occurrence in Iran can be confirmed now. Probably this species has been introduced in Iran only during the recent decades, meanwhile being a widespread weed in most parts of the country.

Digera muricata (L.) Mart.

Kerman: Jiroft, 29. 7. 1968, Sagheri 6 (IRAN, det. M. Iranshahr).

D. muricata is a weed widespread in tropical areas of Asia and Africa. In the "Flora Iranica" area it was previously known only from Pakistan and Afghanistan (Aellen 1972).

Asteraceae

Cousiniopsis atractyloides (C. Winkl.) Nevski - Fig. 1.

Khorassan: Between Mashhad and Sarakhs, hills SW of Mazdavand, 900 m, 4. 6. 1988, *Joharchi & Zangooei 16736* (B, MUH).

The monotypic genus *Cousiniopsis* is reported in the "Flora Iranica" area only from Turkmenistan and Afghanistan (Rechinger 1979). From there its distribution area extends into Central Asia.

C. atractyloides is a delicate annual species which is easily distinguished by its peculiar arrangements of capitules: they are situated (sub)sessile, partly at the base of the plant, partly in the following bifurcations of the branches. The subtending leaves are two times longer than the capitules, their phyllaries have five spines and the flowers are blue.

Lachnophyllum gossypinum Bunge

Khorassan: Between Mashhad and Sarakhs, Ghichdar hills, 700-750 m, 20. 11. 1991, *Joharchi & Zangooei 21194* (B, MUH).

Hitherto L. gossypinum was known only from Turkmenistan, Afghanistan, Pakistan and Central Asia (Grierson 1982).

Launaea korovinii (M. Pop.) M. Pop. ex Pavl.

Esfahan: C. 30 km ESE of Kashan, 2 km N of Abu-Zeidabad, sandy soils at margin of fields, c. 900 m, 9. 9. 1989, Akhani 5773 (B, MMTT).

L. korovinii was previously known only from Central Asia southwards to Turkmenistan (Rechinger 1977). Freitag (1986) then reported this species as a psammophyte growing in the sand deserts of Iran, based on own observations and herbarium specimens from the Touran Protected Area (Freitag, pers. comm.). We gathered the species together with another rare plant, Piptoptera turkestana Bunge (Chenopodiaceae) (Akhani & Ghorbanli 1993).

Boraginaceae

Rindera cyclodonta Bunge

Khorassan: 22 km at the road from Kashmar to Neyshabour, 9. 5. 1985, Ayatollahi & Joharchi 12663 (MUH).

The species is not reported from Iran in "Flora iranica" (Riedl 1967) though recorded already by Popov (1953) from Central Asia, Turkmenistan as well as Iran.

R. cyclodonta is superficially similar to R. lanata (Lam.) Bunge but it differs by the absence of scales on the corolla tube and the shorter corolla divisions being up to 1/2 of the tube length only.

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Fig. 1. Cousiniopsis atractyloides (C. Winkl.) Nevski (Joharchi & Zangooei 16736)

Tournefortia sogdiana (Bunge) M. Pop. ≡ Messerschmidia sogdiana (Bunge) H. Riedl – Fig. 2. Khorassan: S of Sarakhs, between Doulatabad and Nouruzabad, 300 m, 14. 4. 1988, Joharchi & Zangooei 16112 (B, MUH); Sarakhs, Agh-Dar-Band junction, 550 m, 24. 4. 1975, Zargari 284 (MUH); Sarakhs, 220 m, Foroughi 3733 (TARI).

T. sogadiana was not reported from Iran in "Flora Iranica" (Riedl 1967). The localities mentioned here are near the border of Turkmenistan on sand dunes along the Tajan (Hari-rūd) river.

Brassicaceae

Coronopus squamatus (Forssk.) Aschers.

Mazandaran: Miankaleh Protected Area, Sasan Environmental Protection Station, c. -20 m, 8. 6. 1987, *Akhani 5277* (B, MMTT). - Azarbayjan: 28 km NE Germi to Kord-Lar and Van villages, 600 m, 6. 1980, *Mozaffarian & Nourouzi 34824* (TARI).

C. squamatus was not reported from Iran in "Flora Iranica" (Hedge 1968). Its quotation for Iran under the headline 'general distribution', in the "Flora of Iraq" (Hedge & Lamond 1980) can be confirmed herewhith. The species is widely distributed in Europe, SW Asia, N Africa and introduced in N America, S Africa and Australia.

Fabaceae

Trigonella grandiflora Bunge

Khorassan: S of Sarakhs, Shir Tappeh, 250 m, 15. 4. 1988, Joharchi & Zangooei 16125 (B, MUH).

T. grandiflora is an annual species hitherto known from Afghanistan, Turkmenistan and Central Asia (Rechinger 1984). It is easily distinguished by its large, deep yellow corolla (c. 13-16 mm long) and its up to 6 cm long, linear legumes.

Rutaceae

Haplophyllum obtusifolium (Ledeb.) Ledeb.

Khorassan: S of Daregaz, Gharkh Gaz Mountains, 450 m, 7. 7. 1985, Ayatollahi & Zangooei 13325 (MUH); ibid., 2. 6. 1988, Joharchi & Zangooei 16876 (B, MUH).

H. obtusifolium was known so far only from Kazakhstan, Turkmenistan and Uzbekistan. The localities mentioned above are close to the localities in Turkmenistan, and its occurrence in Iran has been already expected by Townsend (1986).

Characteristic features of this species are the thickened, linear-oblong leaves with involute margins and the edges conspicuously crenate with large tuberculate glands. The illustration and description given by Townsend (1988: t. 3926, 133–134) are very helpful for identification.

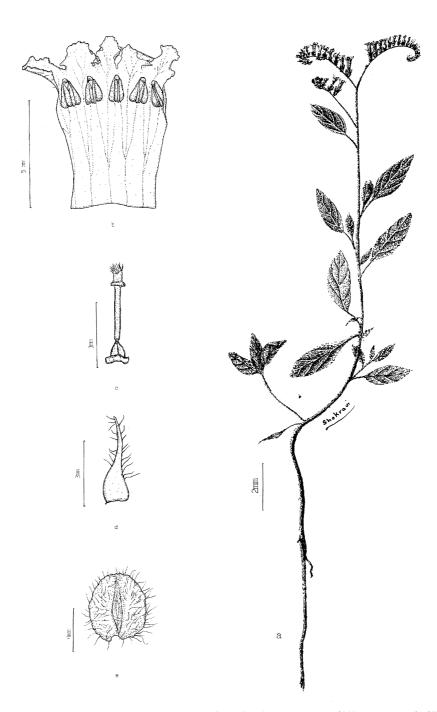
Sphenocleaceae

Sphenoclea zeylanica Gaertn.

Khuzestan: C. 95 km N of Ahvaz, rice fields near Sadde-Shavor (Shavor Dam), 16. 4. 1987, Zehzad & Akhani 6504 (B, MMTT, SBUH).

As stated by Podlech (1971, and pers. comm.) no specimens was seen and the record of this species from Iran was based on Boissier (1875) and on "Flora SSSR" (Fedorov 1957). Its occurrence in Iran can be confirmed now with the collection cited.

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