

STUDIES ON SAXIFRAGACEAE IN FLORA OF IRAN

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Saxifraga ramsarica is described as a new species for the flora of Iran. *S. afghanica* Aitch. & Hemsl. var. *racemiflora* Parsa is treated as a synonym of *S. iranica* Bornm. and *S. mazanderanica* Rech. f. is considered as a synonym of *S. exarata subsp. moschata* (Wulf.) Cavillier

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مطالعاتی در باره تیره Saxifragaceae در ایران

زیبا جمزاد

گونه *Saxifraga ramsarica* به عنوان گونه جدید نامگذاری و شرح داده می شود. گونه های *S. iranica* مترادف با گونه *S. afghanica* Aitch. & Hemsl. var. *racemiflora* Parsa *S. mazanderanica* Rech. f. و *Bornm.* مترادف با *S. exarata subsp. moschata* (Wulf.) Cavillier در نظر گرفته می شوند.

INTRODUCTION

Revising Saxifragaceae for the Flora of Iran revealed a new species which will be described. By examining the type specimen of *S. mazanderanica* in Rechanger collection in Wien and *S. exarata*, *S. adenophora*, *S. moscooides* and other related species in Boissier herbarium in Geneva and recollecting the specimen from Darfak in north of Iran, it became clear that *S. mazanderanica* should be considered as a synonym of *S. exarata* subsp. *moschata*. Meanwhile examining the type specimen of *S. afghanica* var. *racemiflora* Parsa revealed that it is a synonym of *S. iranica* Bornm.

NEW SPECIES

Saxifraga ramsarica Jamzad sp. nov.

Planta caespitosa, caudiculis dense imbricatis foliatis. Folia basalia 3.5-4.5x2-3mm, oblonga, obtusa, a basi ad $\frac{3}{5}$ marginis ciliata. Caulis floriferus 1.5-3cm longus, tota longitudine pilis nigro-glandulosis obsita. Inflorescentia monoflora. Calycis lacinae 3-4mm longae, triangulari-ovatae, margine apicem versus glabrae; petala 11mm longa, Obovato-cuneata, margine undulata, 7-10

nervia, prima alba demum subrosea. Stamina petalis breviora. Ovarium semiinferum, pilis glanduliferis obsitus. Styli divaricatis, staminibus aequantibus. *Typus*: Mazanderan; 6 km SW. of Javaherdeh (SW of Ramsar) N. exposed slope, 2750m, Runemark & Maassoumi, no. 20903 (Holo. TARI).

other specimen seen:

Mazanderan: Ramsar, Javaherdeh Maassoumi, sine numero.

Perennial, caespitose, caudicle branched, covered by dense imbricate leaves. Basal leaves 3.5-4.5x2.3mm, oblong, obtuse, with 3(5) pits, covered by ciliate hairs on the margin at $\frac{3}{5}$ of the length. Flowering stem 1.5-3cm long, covered by glandular hairs, glands dark, the leaves linear, purple, glandular hairy. Calyx dents 3-4mm long, triangular-ovate, obtuse, glabre. Petals 11x6-7mm, obovate cuneate, undulate with 7-10 nerves, white in young state turning to pale rose later, longer than stamens. Ovary semiinferior, covered by glandular hairs. Style bifid, divaricate, more or less equaling the stamens.

It is close to *S. iranica* but differs from it in inflorescence which consists of one flower, petals with 7-10 nervs, leaves with 3(5) pits.

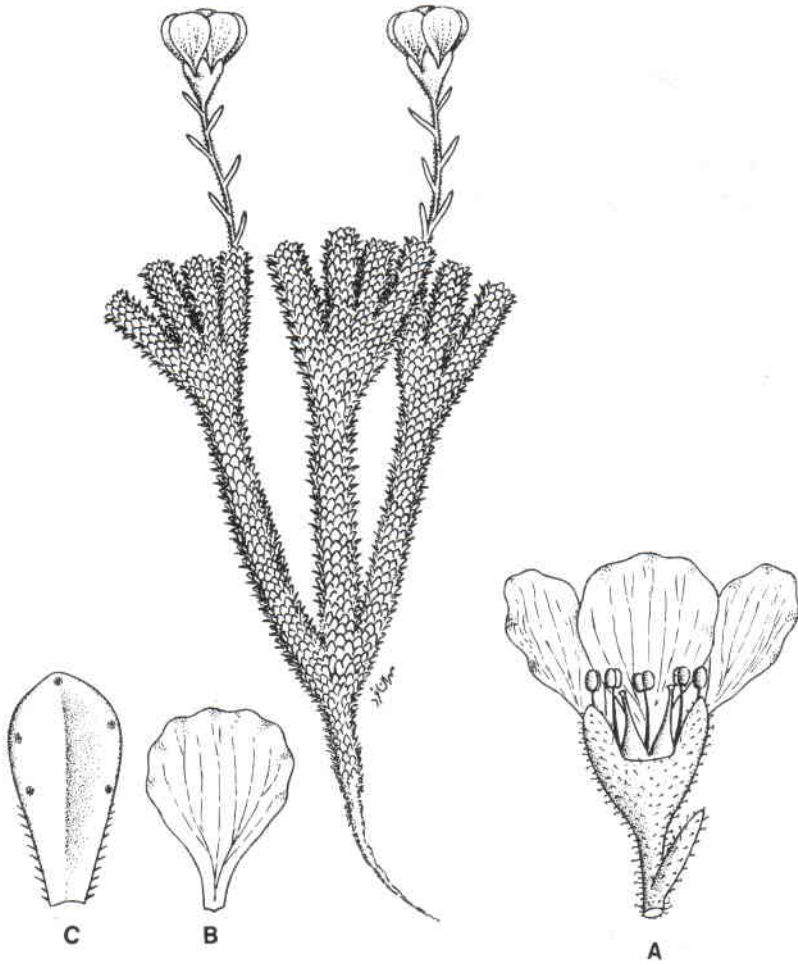


Fig.1. *Saxifraga ramsarica* Jamzad (nat. size; A. flower x3; B. Petal x3; C. leaf x6)

NEW SYNONYMS

Saxifraga exarata Vill subsp. **moschata** (Wulf.) Cavillier, Fl. Alp. Marit., 5: 81(1913)

Syn.: *S. mazanderanica* Rech. f. Anz. Math.- Nat. Kl. Österr. Akad. Wiss. 87/4:87(1950).

The *S. exarata* and *S. moschata* complex have been discussed by several authors such as Briquet (1915), Engler & Irmischer (1916), Webb (1987) and Webb & Gornal (1989). These authors mainly concentrated on the materials collected from Europe. In this work the Iranian specimens were studied and compared with the specimens seen in herbarium Boisser and herbarium Rechinger. I came to the conclusion that they belong to *S. exarata* Vill subsp. *moschata* (Wulf.) Cavillier

Specimens seen:

Gillan: Djulfeck, Aucher 4545, Lahijan, Siahkal, Kuh-e Darfak 1500-2000m, Jamzad & Asri 71791.- Mazanderan: In valle fluvii Chalus, Pol-e Zanguleh 2200m, Rech. 6323. (typus *S. mazanderanica*); *S.* of Ramsar, between Bagh-e dasht and Lapasar, 2900m, Runemark & Maassoumi, 21749; Ca. 50km SW. of Chalus, above the village Delir, 2800m Assadi & Maassoumi 51631; 6km SW. of Javaherdeh, N. exposed

slope, 2750m Runemark & Maassoumi 20904; Sang-Deh, 30km SE. Pol-e Sefid, in rocky mountain, 2500-3000m, Renz & Iranshahr 16789-E; Tunekabon, between Janat Rudbar & Chorte to Temel, 1100-2450m Ghahreman & Mozaffarian, no. 9608.

The above mentioned specimens collected from North of Iran can be distinguished by following characters:

They have leaves with three lobes which each of them may sometimes be divided to smaller divisions, none of them have furrows on the upper surface of the lobes, but some veins are seen on undivided part of the leaves. The flowers are cream to greenish white; petals 3-4x1.5-2mm, oblong to narrowly elliptical, obtuse to somewhat acute, slightly longer to 1.5 times as long as sepals.

Glandular hairs are seen with different density and the plants are \pm viscous and aromatic.

Saxifraga iranica Bornm. Bull. Herb.

Boissier, Ser. 2,6: 619 (1906)

Syn.: *S. afghanica* var. *racemiflora* Parsa in Flore de l'Iran vol. 2: 674.

Specimens seen:

Mazanderan: Ca. 50km SW. of Chalus,

above the village Delir (WA4,WA2), 2800m Assadi & Maassoumi, 51591; Kelardasht, Kuh-e Thakhte Solyman, 3500m, Fotowat, 10156; Ibidem 3600-4200m, Termeh, s.n.; Kojur distr. M. Uloj, 3200-3400m, Rech. 6529; Kojur, Namazgah, 3400m Parsa, s.n. (Typus *S. afghanica* var. *racemiflora* Parsa.)

The type specimen of *S. afghanica* var. *racemiflora* was studied in Parsa herbarium in Tehran University, all the characteristics are identical with *S. iranica* Bornm.

ACKNOWLEDGEMENTS

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