

## NEW SPECIES AND NEW PLANT RECORDS FROM IRAN

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*Hypericum dogonbadanicum* Assadi sp. nov. is described from S. Iran as a new species to the science. Its most close affinity is suggested to be *H. balearicum* L. from the Sec. *Psorophytum* (Spach) Nyman, but due to presence of persistent petals and stamens, necessity of a new section for the new species is considered.

*Allium szovitsii*, *Arabis christiana*, *Briza humilis*, *Caragana grandiflora*, *Chrozophora oblongifolia*, *Erodium armenum*, *Gypsophila graminifolia*, *Helianthemum kahiricum*, *Minuartia umbellulifera*, *Paeonia* cf. *mlokosewitschi*, *Silene cyri* and *Zygophyllum miniatum* are recorded as new to Iran. Larger distribution area is recognized for *Primula gaubaeana*.

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گونه‌های گیاهی جدیدی از علم گیاه‌شناسی و ایران  
از: مصطفی اسدی

گونه گیاهی *Hypericum dogonbadanicum* بعنوان گونه جدید برای دانش گیاهی از جنوب ایران نامگذاری و توضیح داده میشود. نزدیکترین گونه به گونه فوق داده *Psorophytum* (Spach) Nyman از بخش *H. balearicum* L. لیکن بعلت وجود گلبرگ و پرچمهای بادوام ضرورت نامگذاری بخش جدیدی برای این گونه مورد توجه قرار میگیرد. علاوه بر این گونه‌های گیاهی:

*Allium szovitsii*, *Arabis christiana*, *Briza humilis*, *Caragana grandiflora*, *Chrozophora oblongifolia*, *Erodium armenum*, *Gypsophila graminifolia*, *Helianthemum kahiricum*, *Minuartia umbellulifera*, *Paeonia* cf. *mlokosewitschi*, *Zygophyllum miniatum*.

بعنوان گونه‌های گیاهی جدید برای ایران گزارش داده میشوند که در بعضی مواقع نقطه نظرهای خاصی در مورد مسایل گیاه‌شناسی آنها اضافه میگردد. پراکندگی جغرافیائی وسیع تری برای *Primula gaubaeana* تشخیص داده میشود.

### Introduction

In the course of working in the herbarium of Research Institute of Forests and Rangelands, several new plant records were found from Iran. Also, a new species of the genus *Hypericum* was gathered from S. Iran. This plant first was collected by the author and N. Abouhamzeh in April 1982 in fruiting stage which belonged to preceding year. A year later in July 1983 another excursion again by the same collectors made to the area and good flowering as well as fruiting specimens collected which further investigations proved it to be new species to the science. All materials discussed here are preserved in TARI.

### *Allium szovitsii* Regel

Semnan: ca. 50 km N of Shahmirzad, between Sheli and Hikuh villages (YU1), 2400 m, Assadi and Mozaffarina 40569. — Azarbayejan: Kuh-e Sablan, 2730 — 2850 m, Foroughi 5840; Rajamand 5838, Foroughi & Assadi 13841 (det.: P. Wendelbo).

Specimen no. 40569 resembles to *A. brachyodon* Boiss. from Kuh-e Dinar (Keh-e Dena) in S. of Iran, but inner filaments are entire. Even certain differences between this number and true *A. szovitsii* can be recognized which

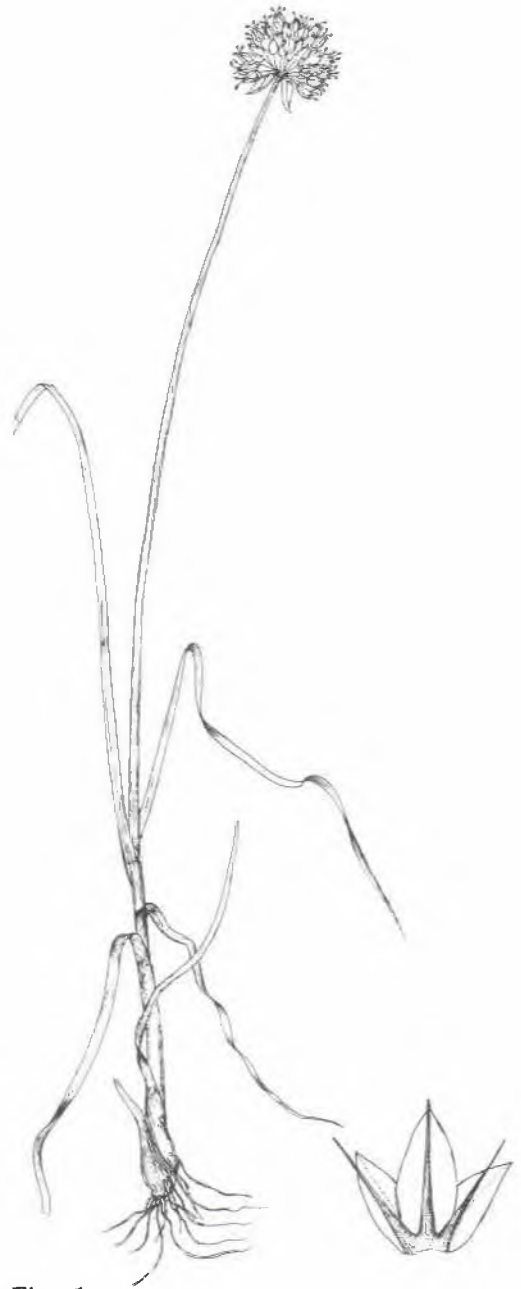


Fig. 1.  
*Allium szovitsii* (x 1/2; flower x2.5).

are: tunics greyish brown, tepals obscurely nerved, filaments entire. In *A. szovitsii*; tunics light brown, tepals prominently nerved, filaments sometimes entire. Therefore further investigation might reveal necessity of a new subspecific taxon for this number.

### *Arabis christiana* N. Busch

Azarbayejan: Pass ca. 20 km S. of Ahar on road to Tabriz, 1700 — 1800 m, Wendelbo & Assadi 27924; Arasbaran protected area, between Kharil and Makiidi, ca. 2000 m, Assadi and Vosoughi 24882.

This species supposed to be endemism of Caucasus (cf. N. A. Bush 1939 P. 177) and not previously recorded from Iran. Two mentioned specimens differ from each other to some degree. In specimen no. 27945: old petiolar remaining of basal leaves well present, cordate-orbicular basal leaves with about 13 teeth, stem leaves remotely and shallowly toothed; whereas in the other specimen old petiolar remaining  $\dagger$  absent, truncate-ovate to cordate-ovate basal leaves with about 18 teeth, stem leaves regularly and deeply toothed. Comparing with the illustration of *A. graellsiiiformis* in (Hedge 1959) especially no. 27945 looks very much like the illustration, but due to presence of winged seeds in both specimens i prefer



Fig. 2. *Arabis christiana* (x 1/2).

to name both of them *A. christiana*. In *A. graellsiformis* seeds are without wing.

***Briza humilis* M. B.**

Ilam: ca. 1 km N. of Ilam, ca. 1600 m, Neamatollahi 33385.

In Bor (1970 P. 14) not recorded from Iran. It is distributed to sothern USSR, Anatolia, Kurdistan of Iraq and W. Iran.

***Caragana grandiflora* (M. B.) DC.**

Azarbajejan: ca. 20 km to Jolfa on the road from Marand, 1200 m, Assadi & Mozaffarian 30035.

A small shrub not previously recorded from Iran. It is distributed to Caucasus, Transcaspica, Anatolia and NW. Iran.

***Chrozophora oblongifolia* (Del.) A. Juss. ex. Spreng.**

Hormozgan: 30 km to Bandarabbas on the road from Lar, 1000 m, Assadi & Sardabi 42057. — Fars: 8 km S. of Lar, 1000 m, Assadi & Sardabi 41716.

New record for Iran. The closest locality to Iranian collections seems to be N. and NE. of Saudi Arabia (cf. A. M. Migahid 1978 P. 153 sub. *Ch. obliqua* (Vahl) Ad. Juss ex Spreng.)

***Erodium armenum* (Trautv.) Woron.**

Azarbajejan: Maku to Khoy, moun-

tains SW. of Kelisa-Kandi, 2400—2650 m, Assadi & Mozaffarian 30323; pass ca. 20 km S. of Ahar on the road to Tabriz, 1700 — 1800 m, Wendelbo & Assadi 27925.

A very rare plant in mentioned localities which not previously recorded from Iran. It is distributed from Caucasus through NW. Iran to western Anatolia.

***Gypsophila graminifolia* Barkoudah**

Azarbajejan: Urmia, Ghooshchi pass, 1530 — 1800 m., Kuhafkan & Amini 1980.

New record for the Flora of Iran. This is the second collection of the species, first and in fact type gathering is from Turkey (Van district) † close to the Iranian border.

***Helianthemum kahiricum* Del.**

Hormozgan: ca. 100 km SEE. of Lar, above the village Sartang, Kuh-e Shab, 500 — 900 m, Assadi & Sardabi 42036.

A new record for Iran. The closest locality to the Iranian gathering is in Saudi Arabia (cf. Mighahid 1978 P. 102 and S.M.H. Jafri 1977 P. 20). In the locality mentioned at lower altitudes *H. lippii* (L.) Pers. frequently seen and from an altitude about 700 m both sp-



Fig. 3. *Caragana grandiflora* (x 1/2).



Fig. 4. *Erodium armenum* ( x 2/3).



Fig. 5. *Gypsophila graminifolia* (x 1/2; calyx, petal, ovary x3).

ecies growing together. *H. kahiricum*, well distinguished from *H. lippii* by long pedicels.

***Hypericum dogonbadanicum* Assadi, sp. nov.**

Frutex saxatilis ad 100 cm altus, interdum a scupulis dependens, glaber, omnino ramosus. Rami primo quadrangulati, demum teretes, rami hornotini viridi-grisei, annotini brunnei, vetustiores atro-brunnei. Folia 10 — 16 x 7 — 12 mm, decussata, sessilia, ovato-orbicularia, valde undulata, glauca, utrinque pauci vesiculae resinaceorum praedita, ad margines omnino resinacea. Bracteloeae 2, 3 mm longae, triangulares, membranaceae, acutae. Flores solitarii. Sepala 5, ca. 5 mm longa, imbricata, ovata vel ovato-orbicularia, obtusa vel acuta vel breviter mucronata. Petala 5, inaequalia, ca. 15 mm longa, flava, oblongo-spathulata vel obovata, persistentia. Stamina numerosa in 5 fasciculos, persistentia; filamenta ad bases connata; antherae luteae. Ovary ovoideum, 5 loculare; styli 5. Capsula ca. 6 mm longa, ovoidea. Semina 1.3 mm longa, brunnea, curvato-cylindrica; testa obscure reticulata.

Typus: Persia, prov. Kohgilouyeh-Boirahmad, 16 km from Dogonbadan to Choram, near Deel (VP3) 1500 — 1900

m, 23.7.1983, Assadi & Abouhamzeh 46570 (holotypus TARI). — Kohgilouyeh-Boirahmad: 11 km from Dogonbadan to Choram (VP1), 1100 — 1400 m, 15.4.1982, Assadi & Abouhamzeh 38585; ca. 20 km to Dogonbadan on the road from Choram, near Deel (VP3), 1000 m, 22.7.1983, Assadi & Abouhamzeh 46566.

Saxatile shrub to 100 cm tall, sometimes hanging from cliffs, glabrous, branched throughout. Branches at first year 4 angled later terete. Branches of first year greenish-grey, second year brown and aged branches dark brown. Leaves 10 — 16 x 7 — 12 mm, decussate, sessile, ovate-orbicular, very strongly undulate, glaucous with few resinous vesicles on both sides, continuously resinous at margin. Bracteoles 2, 3 mm long, triangular, membranous, acute. Flowers solitary. Sepals 5, ca. 5 mm long, imbricate, ovate or ovate-orbicular, obtuse or acute or shortly mucronate. Petals 5, unequal, ca. 15 mm long, yellow, oblong-spathulate or obovate, persistent. Stamens numerous in 5 fascicles, persistent; filaments connate at base; Anthers bright yellow. Ovary ovoid, 5 locular; styles 5. Capsule ca. 6 mm long, ovoid, Seeds 1.3 mm long, brown, curvate-cylindric; seed-coat obscurely reticulate.



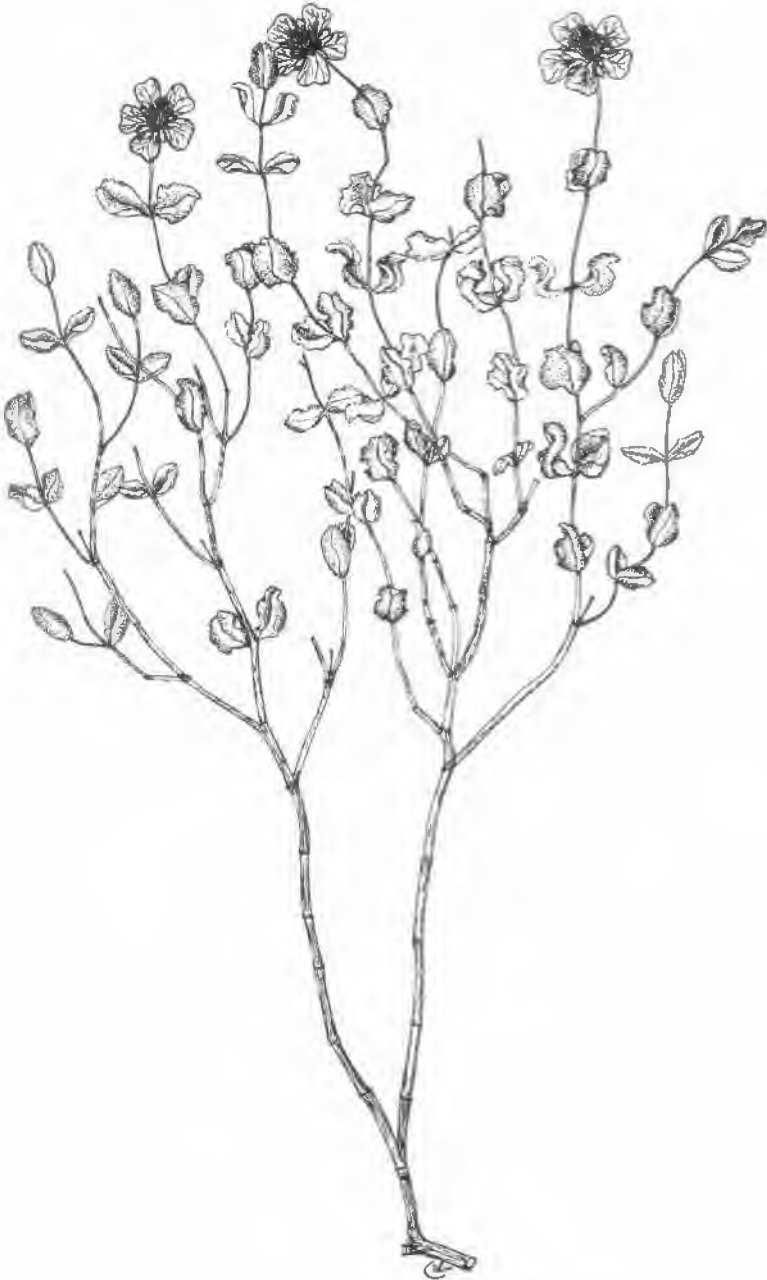


Fig. 6. *Hypericum dogonbadanicum* (x 2/3).



The new species is a very distinct and characteristic plant with no close affinities in the genus *Hypericum* in Iran. It resembles in habit, shape of leaves and flowers to the only species of the section *Psorophytum* (Spach) Nyman, *H. balearicum* L. from Balearic Islands, but differs mainly in having persistent petals and stamens. Further investigation may reveal necessity of a new section for the new species too.

*H. dogonbadanicum* found in a small area near the town Dogonbadan. It grows mostly on eastern slopes among rocks in a *Quercus brantii* Lindl. forest.

**Minuartia umbellulifera** (Boiss.) Mc Neil  
ssp. **umbellulifera**

Azərbaycan: Urmia, Rhazan, 2800 — 3000 m., Zehzad 2733.

Not previously recorded from Iran. Mc Neil (1967 P. 52) recognized 4 subspecies and 2 varieties for *M. umbellulifera* from Turkey. Above mentioned specimen fits rather well to the description of subsp. *umbellulifera* var. *kurđica* (Mc Neil l. c.) which even seems to have closest collecting stations to above record within the records mentioned for the different subspecific ranks of the species.

**Paeonia cf. mlokosewitschi** Lomak

Azərbaycan: near Khalkhal, 2000 m, Wendelbo & Assadi 27809; Assadi 30834.

This plant was first collected in 1978 by P. Wendelbo and the author from near Khalkhal. It took our attention at first sight and its differences from the other species recorded from Iran, namely *P. wittmanniana* Hartw. (cf. Riedl 1969 P. 4) was clear. Later in the year in autumn, fruiting herbarium specimen and also roots taken to the Iranian Botanical Garden which are still alive and flower. We, P. Wendelbo (while he was still alive) and me, have tried several time to name the plant and finally we or at least i came to the conclusion that it should be *P. mlokosewitschi* or something around it, even a new taxon.

I have not seen any authentically named material of *P. mlokosewitschi*, but characters of specimens cited somewhat even diverge from the description of it (cf. Shipchinskii P. 268 and Grossheim P. 13). This plant is a dominance on an open slope in a small population. Its height is up to 40 cm; leaves glaucous; leaflets rounded to oval-ovate or obovate, 5—7 x 4—6 cm with rotundate apex; flowers sulphur yellow; fruits densely tomentose. These characters well distinguish it from the other Iranian species, *P. wittmanniana* with ovate,



Fig. 7. *Silene cyri* (x 2/3).

ovate-lanceolate or ovate-oblong leaflets; larger leaflets 8–15 x 5–8 cm; white or pale yellow flowers, etc.

This plant with its big yellow flowers to about 9 cm in diameter could well be introduced to botanical gardens and parks as an ornamental plant.

#### *Primula gaubaeana* Bormm.

Fars: N side of kuh-e Dena, Ab-Malakh, 1700 m, Assadi & Mozaffarian 31556.

This species in P. Wendelbo (1965 P.4) supposed to be a endemism of the prov. Luristan. Above locality shows its distribution to the prov. Fars. It is also noticeable that according to P.Wendelbo (private communications) this species has been found in the prov. Kerman at Dehbakri and even out of Iran from Afghanistan. Therefore *P.gaubaeana* has much wider distribution area that previously thought.

#### *Silene cyri* Schischk.

Mazandaran: Savadkuh, Zabihi 123

Not previously recorded from Iran. It is distributed from European part of the USSR through central Asia, Caucasus and N. Iran. *S. cyri* within Iranian species of the genus *Silene* is very characteristic with very small calyx to 4 mm.

*Zygophyllum miniatum* Cham. & Schlechtend. var. *englerianum* M. Pol.

Khorasan: 60 km N. of Torbate-Heydarieh, Robat-Sefid(GH1), 1750—1900 m, Assadi and Mozaffarian 35830.

This species in Nabil El Hadidi 1972 not recorded from Iran. Its distribution extends from central Asia to Afghanistan and NE. Iran.

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