

FOUR NEW TAXA FROM ANATOLIA

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ABSTRACT. Three new species and one new variety are described from Anatolia: *Aubrieta anamasica* Peşmen & Güner (Cruciferae), *Lathyrus bitlisicus* Peşmen (Leguminosae), *Sempervivum pisidicum* Peşmen & Güner (Crassulaceae) and *Geranium cinereum* Cav. subsp. *subcaulescens* (L'Hérit. ex DC.) Hayek var. *pisidicum* Peşmen & Güner (Geraniaceae). Holotypes and most other specimens cited are deposited in HUB; some duplicates are in E.

CRUCIFERAE

Aubrieta anamasica Peşmen & Güner, sp. nov.

Affinis *A. olympicae* Boiss. et *A. canescenti* (Boiss.) Bornm.; a priori foliis integris, siliquis magis angustioribus semper canescentibus; ab altera siliquis longioribus compressis, foliis angustioribus integris differt.

Herba perennis caespitosa. *Indumentum* (corolla glabra exclusa) e pilis stellatis et in parte simplicibus canescenti-pubescentibus. *Caules* floriferi adscendenti-erecti, 5-15 cm alti, surculis axillaribus brevibus. *Folia* basalia sessilia, spatulata, 5-10 × 1.5-2 mm; folia caulina lineari-spatulata vel lanceolata, 10-20 × 1.5-5 mm, obtusa, uninervia, ad marginem pilis simplicibus obsiti; folia surculorum axillarum breviter conferta. *Pedunculi* 2.5-3.5 cm longi. *Racemi* ebracteati, 2-6 cm longi, 5-11-flori. *Pedicelli* 7-10 mm longi, crassi, adscendenti-erecti. *Sepala* 8-10 mm longa, apice obtusa, interiora valde saccata. *Petala* intense purpurea, 13-16 mm longa, ungue longissimo, limbo obovato 4 mm lato. *Filamenta* anguste alata, longiora, edentata, ad 8 mm longa; breviora ad 5 mm longa, apice cuspidata. *Antherae* pallide luteae, 1 mm longae. *Ovarium* lineari-oblongum, 3-4 mm longum, compressum. *Stylus* 3-3.5 mm longus, inferiore pilis stellatis obsitus; stigma globoso-capitatum. *Siliqua* lineari-oblonga, 17-18 × 2 mm, compressa, substipitata. utrinque longitudinaliter uninervia, indumento e pilis stellatis densis composito obsita. *Semina* in utroque loculo 8-9, ovoidea, 1 × 0.8 mm, brunnea. *Fl.* Mai.-Jul.

Turkey. C3 Isparta: distr. Eğridir, Anamas, Yaka köyü, Yukari Sayacak, N slope of Dedegöl Da., limestone cliffs, c. 2550 m, 10 vi 1974, *H. Peşmen & A. Güner* 1716 (holo. HUB; iso. E); Yaka Köyü, between Melikler Mezarlığı and Melikler Taşı, N slope, limestone cliffs, c. 2000 m, 9 vii 1974, *H. Peşmen & A. Güner* 1689.

The new species is closely related to *A. olympica* Boiss. (from NW Anatolia: Bursa) and *A. canescens* (Boiss.) Bornm. (from C, E and S Anatolia). It differs from the first in its narrower and always hairy fruits, and entire leaves; and from the second in its compressed and longer fruits, and narrower, entire leaves. *A. canescens* subsp. *canescens* grows in the same locality.

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GERANIACEAE

Geranium cinereum Cav. subsp. *subcaulescens* (L'Hérit. ex DC.) Hayek var. *pisidicum* Peşmen & Güner, var. nov.

Ab omnibus varietatibus speciei petiolis, pedunculis et pedicellis longe patenter villosa-hirsutis differt.

Turkey. C3 Konya: dist. Beyşehir, Kurucuova, above Suludere, E slope of Dedegöl Da., 1500–2000 m, calcareous alpine pasture, 8 vi 1975, *H. Peşmen* & *A. Güner* 2209 (holo. HUB; iso. E).

In addition to the indumentum character, this variety is distinguished from var. *subcaulescens* (from the same distributional area) by its larger and more dissected leaves. It approaches var. *ponticum* Davis (endemic to NE Anatolia) in its leaf shape but differs in its indumentum and acute sepals.

LEGUMINOSAE

Lathyrus bitlisicus Peşmen, sp. nov. [Sect. *Orobis* (L.) Gren. & Godr.]

Affinis *L. satdaghensi* Davis, sed foliolis 3–5-jugis (nec 4–8) majoribus, pedunculis longioribus differt. A *L. karsiano* Davis indumento canescenti-pubescenti, racemis paucifloribus, rhachidibus foliorum longioribus diversa.

Herba perennis. *Caules* erecti, 60–70 cm alti, quadrangulati, striati, superne ramosi, omnino canescenti-pubescentes. *Folia* paripinnata; petioli 2–5 mm longi; stipulae semi-sagittatae, subulatae, 5–15 mm longae; rhachis 15–25 mm longa, mucronata; foliola 3–4(–5)-juga, lineari-lanceolata, 40–70 × 3–8 mm, mucronata, longitudinaliter 5-nervia, canescenti-pubescentia. *Pedunculi* 3–5 cm longi. *Racemi* 3–5-flori, 1–3 cm longi. *Pedicelli* calycibus breviores, 2–5 mm longi. *Calyx* subadpresso-pubescentis, campanulatus, obliquus, 6–9 × 4–5 mm, dentibus superioribus triangularibus 2 mm longis, caeteris triangulari-subulatis tubo aequantibus vel longioribus. *Corolla* intense caerulea, glabra; vexillum 23–25 mm longum, limbo suborbiculari; alae 20 mm longae, unguibus e calyce breviter exsertis; carina navicularis. *Ovarium* lineare, 12–15 mm longum, dense adpresso-pubescentis; stylus linearis, 8 mm longus sursum vix dilatatus dorso pubescens. *Legumen* ignotum. *Fl.* Jul.

Turkey. B9 Bitlis: distr. Tatvan, SE slope of Kirkor Da., igneous rocks, amongst *Quercus* scrub, 2500 m, 18 vii 1972, *H. Peşmen* 3055 (holo. HUB; iso. E).

The new species is somewhat intermediate between *L. satdaghensis* Davis (from extreme SE Anatolia) and *L. karsianus* Davis (from NE Anatolia). It differs from the first in its fewer larger leaflets and longer peduncles; and from the second in its pubescence, few-flowered raceme and longer leaf rachis. These three vicarious species appear to merit independent specific

status even though the differences between them are small. Further collecting from the Lake Van area might, however, lead to a reassessment of their status.

CRASSULACEAE

***Sempervivum pisidicum* Peşmen & Güner, sp. nov.**

Affinis *S. gilliana* Muirhead, sed foliis majoribus, floribus et sepalis parvis, rosulis latioribus differt. A *S. armeno* Boiss. & Huet foliis majoribus semper glanduloso-pubescentibus, floribus 13-15-meris, rosulis latioribus recedit.

Herba perennis rosulata. *Rosulae* primariae 5-9 cm latae, laterales paucae 2-5 cm latae, stolonibus 2-5 cm longis. *Caulis* florifer 12-45 cm altus, erectus, dense glanduloso-pubescentis. *Folia* basalia rosulata, sessilia, oblongo-spathulata, 3-5(-8.5) × 1.0-1.8 cm, pallide viridia, apice purpurea, breviter acuminata, utrinque glanduloso-pubescentia, margine ad apicem ciliata (cilia 0.5-0.75 mm longa); folia caulina breviora, oblongo-lanceolata, longa acuminata. *Inflorescentia* ad 135-flora, ramosa, rami ad 15 cm longi, dense glanduloso-pubescentes. *Pedicelli* 3-15 mm longi, crassi. *Flos* 13-15-merus, 18-22 mm diam. *Sepala* ad ¼ coalita, triangulari-acuminata, 4-5 mm longa, erecta, extus glanduloso-pubescentia, viridia. *Petala* lineari-lanceolata, 8-10 × 2-2.5 mm, carinata, inferne purpurea, superne viridia, extus glanduloso-pubescentia ad marginem ciliata. *Stamina* 26-30, filamenta triangulari-subulata, 5 mm longa, sparse glanduloso-pubescentia, intense purpurea; antherae luteae, glabrae. *Squamulae* parvae, semi-orbiculatae. *Folliculi* 13-15, liberi, erecto-adscedentes, 6-7.5 × 2 mm, dorso longitudinaliter 3-costati, sparse glanduloso-pubescentes; stylus 2 mm longus, glaber; stigma capitatum. *Semina* numerosa, ovoidea, c. 1.0 × 0.6 mm, pallide brunnea. *Fl.* Jul.-Sept. Turkey. C3 Isparta: distr. Eğridir, Anamas, Kapiz Deresi near Yaka köyü, N facing slope of deep valley, limestone rocks, 1250-1450 m, 5 viii 1974, H. Peşmen & A. Güner 1902 (holo. HUB; iso. E); *ibid.*, 25 ix 1975, H. Peşmen & A. Güner 2341; Anamas, Melikler Mezarlığı to Karagöl, E slope of Dedegöl Dağı, metamorphic rocks, c. 2400 m, 8 viii 1974, H. Peşmen & A. Güner 1991.

The new species is closely related to *S. gilliana* Muirhead (endemic to N Anatolia), but differs in its larger rosettes and leaves, smaller flowers and shorter sepals. It is also allied to *S. armenum* Boiss. & Huet (N & NE Anatolia) from which it is distinguished by its always glandular-pubescent and larger leaves, and 13-15-merous (not 12-14-merous) perianth. It appears to have little affinity with the much smaller *S. ispartae* Muirhead, the only other species known from C3.

Some dwarf specimens (5-8 cm tall) from near the type locality of *S. ispartae* (above Oruçgazi pass, S slope of Dedegöl Dağı, metamorphic rocks, 2100 m, 7 viii 1974, H. Peşmen & A. Güner 1934), with always 13-merous and smaller flowers, and with purple anthers, seem to belong to the new species, not to *S. ispartae*. Sterile rosettes collected in 1949 (C3 Isparta: Dedegöl Da., between Selköse and Oruçgazi yayla, 1300 m, Davis 15923a) can also be referred to *S. pisidicum*.

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BOOK REVIEW

Tulips and Irises of Iran. Any book written on the subject of petaloid monocotyledons is enhanced in value if it includes some colour illustrations. The delicate nature of the flowers of these beautiful plants inevitably means that herbarium specimens are often lacking some of their specific features and in consequence are difficult to visualize as living plants. Indeed many species, for example in the genus *Iris*, are distinguished by flower colour, perianth shape or general aspect and it is very difficult to describe the differences between them. It is therefore of great importance that descriptions are accompanied by illustrations.

Professor Per Wendelbo, whose name is well-known in connection with the taxonomy of plants from the Near- and Middle-East, is well aware of the need for illustrated works and his fine accounts of *Allium*, Primulaceae, Fumariaceae and Iridaceae for *Flora Iranica* were all well furnished with photographs and line drawings. 'Tulips and Irises of Iran'* is clearly not intended to compete with *Flora Iranica*, for the descriptions are short and relatively un-technical, keys are not provided and the list of species is incomplete. Nevertheless, much useful information is contained in the short descriptions, including notes about the habitat and distribution of each species, and the introductory chapters deal with the general botanical features of the various families involved. The book contains 84 colour plates depicting about 45% of the Iranian representatives of the Liliaceae, Iridaceae and Amaryllidaceae. Of those not illustrated, over half are *Allium* species. The remainder are mostly mentioned in the text, under the nearest related species, with their diagnostic characters indicated.

If, as we are promised in the introduction, this is the first of a series of similar volumes, then they will be of great value as supplements to the available literature on the flora of Iran. The book is published by the Ariamehr Botanic Garden, "... whose aim it is to promote the interest and knowledge of botany and horticulture ...". This is a very good start, and if the Iranian public can be encouraged to appreciate the rich and beautiful, but threatened, flora of their country through such a book then the project will have been very worthwhile. For those not living in Iran, it is a fine record of bulbous plants in their native habitats, some of them such as *Lilium ledebourii* extremely rare and probably depicted for the first time.

The colour reproduction is on the whole excellent and it is a disappointment to find a lapse in this high standard on page 31, where there are some very blurred photographs of *Fritillaria* species. On the other hand, some of the illustrations such as those on page 71 are among the finest *Iris* photographs I have seen in print, the delicate network of veining on the flowers being reproduced with great accuracy.

This is an exciting publication from a botanically exciting country and one certainly hopes that there will be more to follow.

B. MATHEW

* Tulips and Irises of Iran and their relatives by Per Wendelbo. 83 pp., 3 figs, 84 colour plates. Botanical Institute of Iran, Ariamehr Botanical Garden, Tehran, 1977. Available in Britain from R.H.S. Enterprises, R.H.S. Garden, Wisley. £5.95, plus postage.