

SOME NEW TAXA AND RECORDS FOR TURKEY

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ABSTRACT. Six new taxa are described from different parts of Turkey: two new species of *Silene* (Caryophyllaceae), one new species each of *Astragalus* (Leguminosae) and *Heracleum* (Umbelliferae), a new subspecies of *Silene* and a new variety of *Saponaria* (Caryophyllaceae). *Serratula grandifolia* Boiss. (Compositae) and *Pistacia* × *saportae* Burnat (Anacardiaceae) are recorded for the first time.

Floristic investigations by Turkish botanists have greatly increased since the earlier volumes of the *Flora of Turkey* were published. Initially, much of the collecting was carried out in western Anatolia, but more recently, largely as a result of the establishment of new universities, many collections have been made in the east, particularly the south-east, of the country. These specimens are deposited in such herbaria as Ankara (ANK, HUB etc.), Erzurum (ATA), Konya (Selçuk Üniversitesi) and Elazığ (Elazığ Üniversitesi). Many new records have come to light and several new species. During a visit to Britain I was able to work over some of the critical taxa and the results are presented here.

NEW TAXA

***Astragalus elazigense* Ekim, sp. nov.** (sect. *Rhacophorus* Bunge).

Ab *A. prusiano* Boiss. inflorescentia longissima multiflora, foliolis brevibus et indumento adpresso differt.

Fruticulus horridus, spinosus, ramis 5-6 mm crassis patulis, erecto-ramulosis, pulvinum 20-30 cm altum formantibus. *Stipulae* ovato-orbiculares, c. 1 cm longae, scariosae, dense villosae, praeter marginem et partem liberam papyraceae; parte libera triangulari-lancelolata, c. 33 mm longa. *Folia* erecto-patula 3-4(-5) cm longa, rachide breviter pubescenti, spino 2 mm longo glabrescente. *Foliola* 4-5-juga subdistancia, plano vel leviter carinata, 5-7 × 3 mm, pilis simplicibus canescenti-tomentosis, ad apicem in mucronem c. 1 mm longum abrupte apiculata. *Flores* in axillis 7-numerosi in spicam densam cylindricam confertam dispositi, spica c. 14-15 cm longa, 2-2.5 cm diam. *Bractee* ovato-orbiculares, 7-8 mm longae, naviculares, superne pilosae; bracteolae nullae. *Calyx* 7-10 mm longus, in lacinias usque ad basin divisus, pilis albis simplicibus dense pilosus. *Corolla* in sicco ochroleuca, in vivo coerulea et violacea; vexillum 13-14 mm longum; alae c. 15 mm longae; carina 13-14 mm longa. *Legumen* 4 × 2 mm, ovoideum, pilosum, uniloculare, monospermum. *Fl.* Nov. Type: Turkey. B7 Elazığ: campus of Science Faculty, Elazığ Üniversitesi, c. 1100 m, 3 xi 1980, Y. Altan 3107 (holo. ANK; iso. E, Hb Elazığ Univ.).

This new species is similar to *A. prusianus* Boiss. from W, C, & S Anatolia, which mainly differs in its shorter inflorescence, longer leaves, more numerous leaflets and adpressed leaf indumentum. The inflorescence

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resembles that of *A. antiochianus* Post from Hatay but that species differs in several floral characters.

Heracleum peshmeniana Ekim, sp. nov. (sect. *Wendia* (Hoffm.) I. Manden.).

H. pastinacifolium C. Koch valde affinis sed foliis, foliolis fructubusque majoribus, radiis paulo longioribus.

Caulis 150–200 cm altus, c. 1 cm latus, rotundus, robustus, tenue sulcatus. *Folia inferiora* bicoloria, ovata, bipinnata, 4-juga, segmentis inferioribus lateralibus, petiolaribus, petioli 4 cm, segmentis superioribus sessilibus, omnibus ovatis vel ovato-lanceolatis, haud profunde pinnatisectus; segmentum terminale 5(–7)-lobatum; folia supra rarus pubescentia, ad nervos pilis obsita, margine brevior ciliata, subtus dense pubescentia. *Folia superiora* ternata, pinnata, vix pubescentia. *Umbella principalis* multiradiata (20–25-radiata), radiis umbellae valde inaequalibus 1–13 cm longis, radiis umbellulae ad 13 mm longis, radiis pedicellis glaberrimis folia involucri maturi vel deficientia, involucelli minuti, filiformes, decidua vel deficientia; umbella ad basin vaginis lanceolatis apice trisectis segmentis oblanceolatis serratis; umbellis lateralibus longissime pedunculatis floribus masculis sterilibus. *Dentes calycis* vix conspicui, deflexi. *Petala* alba. *Ovarium* vix pubescens. *Fructus* late obovati, retusi, c. 11 mm longi, 8–10 mm lati, vittis commissuralibus nullis, vittis dorsalibus late clavatis, quam mericarpio $\frac{1}{3}$ – $\frac{1}{2}$ parte longioribus; stylopodium late conicum. *Styli* reflexi, stylopodio sublongiores. *Fl.* Jul.

Type: Turkey. B5 Yozgat: Çayıralan, between Elçi-Toraman village, 2 km after Elçi, W foot of Hamza Sultan Tepe, *Quercus pubescens* community, 1650–1750 m, 17 vii 1980, T. Ekim & R. Ilarslan E. 4733 (holo. ANK, iso E).

Closely related to *H. pastinacifolium* C. Koch and its near allies such as *H. transcaucasicum* Manden. and *H. incanum* Boiss. & Huet but with larger leaves, leaflets and fruits, and somewhat longer rays. The new species appears to be geographically separated from the other taxa of this species-group. Sometimes these taxa have been accorded specific rank, at other times subspecific.

Saponaria pinetorum Hedge var. *elatior* Ekim & Hedge, var. nov.

A var. *pinetorum* caulibus longioribus 20–25 cm, e basi ramosis, inflorescentiis laxioribus differt.

Type: Turkey. C4 Konya: Seydişehir, Şahinkayasi, E of Mortaş, *Abies cilicica* community, 1500 m, 26 vi 1980, H. Ocakverdi 649 (holo. ANK; iso. E, Hb. Selçuk Üniv., Konya).

Var. *pinetorum* was collected in *Pinus brutia* forest in SW Anatolia (C2 Muğla: d. Kemer, Teke Dağ, nr. Ovacık). It differs from our new variety in its smaller structure (up to c. 15 cm tall), simple stems branched only in the region of the inflorescence, and the rather condensed inflorescence. In other characters of indumentum, leaves, calyces, petals and ovary, the two varieties differ little. Both are known only from a few gatherings and further material is desirable.

Silene akmaniana Ekim & Çelik, *sp. nov.* (sect. *Auriculatae* Boiss.).

A *S. rhyncocarpa* Boiss. inflorescentia 1–2-flora, calycibus et anthophoris longioribus refert.

Herba perennis, glauca, ad basin laxe suffruticulosa. *Caules* ascendentes, 35–40 cm alti, crispato-pubescentes; internodii 2–3 cm longi, in parte superiore 6–7 cm. *Folia basalia* lineari-lanceolata, acuminata, c. 50 × 1–1.5 mm, ciliata, ad basin breviter villosa, apiculata. *Inflorescentia* 1–2-flora; bractea ad 8 mm longa, pedicelli calyce multo breviores vel aequales. *Calyx* campanulato-clavatus, c. 35 × 10 mm, circa anthophorum constrictus, conspicue 10-venosus, superne venis pinnatim ramosis; dentes late ovati, 2–3 mm longi, acuti. *Corolla* quam calyx longior, ut videtur crenea, in sicco brunneola, lamina petali ad basin cuneata, c. 10 mm, ad $\frac{1}{3}$ divisa, lobis late ovatis obtusis, basi minute bidentatis; stamina limbo breviora. *Stylus* c. 10 mm, trifidus, ramis 2–3 mm longis. *Anthophorum* 18–20 mm longum, glabrum. *Capsula* oblongo-ovata, 13 × 7 mm, indurata, calyce inclusa. *Semina* reniformia, complanata, reticulato-foveolata. *Fl.* Jul.

Type: Turkey. B6 Kayseri: Pinarbaşı, Hinzir Dağ above Kavak, 1850 m, 16 vii 1981, N. Çelik 1962 (holo. ANK, iso. E).

Closely allied to *S. rhyncocarpa* Boiss. but differing in its 1–2-flowered inflorescence, much longer calyx (35 mm, not 22–27 mm) and anthophore (18–20 mm, not 11–14 mm), eglandular indumentum and narrower leaves.

Silene birandiana Ekim, *sp. nov.* (sect. *Macranthae* (Rohrb.) Chowdh.).

A *S. nuncupanda* Coode & Cullen inflorescentia 2–3-flora (non floribus solitariis), calyce longiore (25 mm, non 18 mm), anthophoro longiore (15 mm, non 9–10 mm) differt.

Herba perennis ad basin suffrutescens, caespitosa. *Caules* erecti, tereti, ascendenti-erecti, ad 25 cm alti, visciduli sed haud pubescentes. *Folia basalia* lineari-oblancoolata, 10–15 × 1.5 mm, glauca, ad basin scariosa. *Folia caulina* minora distantia. *Inflorescentia* laxa 2–3-flora. *Bractae* foliis breviores, scariosae, ciliolatae. *Pedicelli* 1.5–5 cm longi. *Calyx* anguste tubulari-infundibularis, c. 25 mm, glaber, membranaceus, 10-venosus, dentes late triangulares, 1–2 mm, acuti, ciliolati, ad marginem scariosi. *Petala* 13–14 mm, ungue incluso, lamina c. 5 mm, ad medium divisa, lobis oblongis obtusis, in sicco virescenti-luteolis, ad basin breviter bidentatis. *Stamina* limbo breviora, filamentis glabris. *Stylus* c. 4 mm, trifidus, anthophorum ad 15 mm longum. *Capsula* oblongo-ovata, calyce inclusa. *Semina* ignota.

Type: Turkey. B5 Yozgat: Çayıralan, Akdağ, on calcareous rock, 1750 m, 16 vii 1980, T. Ekim R. Ilarslan & H. Dural E. 5195 (holo. ANK, iso. E).

This species closely resembles *S. nuncupanda* Coode & Cullen. The latter differs in having solitary flowers, 18 mm calyx and 9–10 mm anthophore. *S. birandiana* also has affinities with *S. sipylea* O. Schwarz (sect. *Sclerocalycinae* Boiss.) from Kaz Dağ (B1 Balıkesir) and Manisa Dağ (B1 Manisa); the latter differs in having a strongly coriaceous (not thin and semi-membraneous) calyx.

Silene lucida Chowd. subsp. *glandulosa* Ekim, *subsp. nov.* (sect. *Auriculatae* Boiss.).

A subsp. *lucida* planta tota glandulosa, calyce c. 20 mm longo differt. Type: Turkey C3 Isparta: N foot of Davros Dağ, 1700–1750 m, 5 vi 1981, T. Ekim & B. Yildiz E. 5574 (holo. ANK; iso. E, HUB).

The type subspecies was first collected from Hakkari and is also known from Agri and Van vilayets. It differs from subsp. *glandulosa* in having a shorter calyx (13–16 mm) with the glandulosity confined to it. The subspecies are remarkably allopatric.

NEW RECORDS FOR TURKEY

Serratula grandifolia Davis in Notes RBG Edinb. 33:293 (1974). C3 Konya: Seydişehir, N of Tavuktepe, *Quercus libani* community, Ocakverdi 648 (ANK).

This species was originally described by Davis (op. cit., 1974) from NE Iraq (Süleymaniye). It is easily distinguished from all other species of the genus by the large (28–42 cm) hastate terminal segments of its basal leaves. As indicated in the original description, it resembles *S. aznavouriana* Bornm., from Amasya, which is known only from the type material, but *S. grandifolia* differs in its glabrous stems and leaves, condensed corymbose inflorescence, shortly pedunculate smaller capitulum, and 4–5-seriate phyllaries.

Pistacia × saportae Burnat, Flore des Alpes Maritimes 2:54 (1896) & 3:301 (1902).

C1 Muğla: d. Marmaris, between Marmaris and Bozburun, macchie slopes, 50 m, 30 iv 1982, T. Ekim & M. Koyuncu (*Koyuncu* 5058) (ANK).

This hybrid, first described from France, is quite frequent in the Mediterranean parts of Europe; it has also been recorded from Palestine and Cyprus. It is distinguished from its parents (*P. terebinthus* L. and *P. lentiscus* L.) in having some imparipinnate leaves and a panicle inflorescence. *P. × saportae* is quite common in SW Anatolia, according to my observations.

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