

suborbiculari quam lateralibus obovatis saepe majore; folia caulina griseo-lanata, inferiora simplicia vel subpinnatifida, superiora omnia simplicia obovata integra, 1-1.5 cm. longa et 3-5 mm. lata, basi attenuata. *Capitula* pedunculata, ob caules prostrati secunda, unica, raro pauca in ramis brevibus ex axillis foliorum caulinum superiorum orientibus disposita, ovato-cylindrica, 8-12 mm. longa (floribus exclusis). *Involucri bractearum* appressae; exteriores ovatae, acutae c. 5 mm. longae, pallidae, superne arachnoideae, nervis haud prominentibus  $\pm$  7-ciliatopectinatae, mucrone terminali quam ciliis lateralibus albidis vix 1 mm. longis haud longiore; interiores longiores (10 mm. attingentes), lineares, in appendicem subintegrum abeuntes. *Receptaculum* paleis 1.5 cm. longis dense setiferum. *Flores* roseo-lilacini, c. 20, involucri vix duplo longiores, marginales 7 radiantibus, neutri; interiores hermaphroditi, corollis c. 13 mm. longis ad 4 mm. 5-fidis, filamentis dense tuberculato-pilosis, antheris 5.5 mm. longis (appendice sterili 2 mm. longo incluso), stylo 11 mm. longo ramis brevibus obtusis. *Pappus* e setis rigidis supra albidis infra purpurascens externis 2 mm. longis quam internis saltem duplo longioribus compositus. *Achaemia* obovato-elliptica, nitida, fusca (immatura olivacea), hilo supra basin laterali, 3 mm. longa et 1.5 mm. lata.

CYPRUS. Akamas forest: April 1937, *Chapman* 283. Akamas peninsula; locally abundant within the pine forest area, but found only on serpentine, growing in scree and rocky places with *Thymus integer*, *Carlina pygmaea* and *Alyssum* sp. [*A. akamasicum* B. L. Burtt—see p. 100]; 3 May 1941, *Davis* 3315 (type).

This rare and attractive species is apparently entirely confined to serpentine outcrops of the Akamas peninsula, avoiding not only the limestone but also adjacent igneous rocks other than serpentine. Its prostrate habit and undivided upper leaves render it very distinct from the erect *C. cuneifolia* S. & S. which has all its leaves pinnatisect. *C. veneris* is, in fact, an isolated species without any very close affinity.

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#### LACTUCA L.

**L. tetrantha** *Burtt et Davis* sp. nov., *L. vimineae* (L.) Presl valde affinis sed habitu perenni, statura humili, caulibus collo lanigeris, in parte superiore subcorymbosis, foliorum basalium lobo terminali ovato-triangulari, foliis caulinis minus decurrentibus, capitulis semper quadrifloris, ligulis luteis extra cupreis divergit.

*Radix* perennis, ramosus. *Caules* 1-3, erecti, pallidi, glabri, 7-12 cm. alti (solum in umbrosis altiores) inferne haud ramosi, superne in inflorescentiam subcorymbosam abeuntes. *Folia* (axillis lanigeris exclusis) glabra, purpurea: basalia tandem marcescentia, plerumque 2.5-6 cm. longa, lyrata, runcinato-pinnatifida,  $\pm$  5-lobata, lobo terminali ovato-triangulari quam lobis lateralibus triangularibus  $\pm$  reflexis multo majore, lano in axillis petiolorum attenuatorum valde conspicuo; caulina parva, lanceolata, aliquantum breviter auriculato-decurrentia, superiora integra (summa minutissima), inferiora, in axillis lanigera, saepe paucilobata. *Capitula* omnia quadriflora. *Involucrum* cylindricum, ad 1.8 mm. longum, purpurascens, phyllis paucis infimis ovatis internis

linearibus. Flores 17 mm. longi : tubus 8 mm. longus, superne paulo inflatus pilosulus, inferne glaber, ligula 9 mm. longa, fere 4 mm. lata, lutea, extra cuprea, 6-nervata, apice abrupte truncata breviter 5-dentata, in dentes triangulares 0.5 mm. longos fissa ; antherae 5 mm. longae ; stylus 15 mm. longus, in parte superiore pilis ascendentibus pilosulus, apice biramosus, ramis fere 1.5 mm. longis recurvis obtusis. *Achaenia* (cum rostro) 10–12.5 mm. longa, inferne anguste elliptica 5–6 mm. longa, 1 mm. lata, nigra, 10–12 costata, transverse minutissime rugulosa, superne in rostrum aequilongum nigrum disco pallido terminatum sensim attenuata. *Pappus* 6 mm. longus, niveo-bombycinus ; setae sub lente barbellatae, conformes.

CYPRUS. Chionistra, due south ; 1620 m. ; in rock on the bare mountainside ; 20 Aug. 1937, *Kennedy* 997. Kryos Potamos ; 1650 m. ; in rock on the mountainside above the stream ; flowers golden yellow before drying ; 4 Sept. 1937, *Kennedy* 998. Chionistra ; 1890 m. ; in rock on the steep northern slope ; 10 Aug. 1937, *Kennedy* 1008. Kryos Potamos ; 1770 m. ; cracks of rock by the wintertime source of the river, now dry ; rocks joining ; 1 July 1939, *Kennedy* 1480, 1481. Kryos Potamos ; 1620 m., cracks of rock 50 ft. above the river ; 10 July 1938, *Kennedy* 1482. Chionistra, north-east ; 1800 m. ; cracks of rock in a rain gully : 12 July 1938, *Kennedy* 1483. Kryos Potamos ; 1770 m. ; bare rock above the highest source of the river ; petals red outside ; 17 July 1938, *Kennedy* 1520. Kryos Potamos ; 1710 m. ; rock beside the dry river-bed, petals red outside ; 20 July 1938, *Kennedy* 1521. Kryos Potamos, 1680 m. ; bare rock ; flowers reddish ; the most frequent form above 1500 m., many patches of few plants ; 19 Aug. 1938, *Kennedy* 1525. Pass of Troödos, eastward ; 1650 m. ; rock under pine trees ; 26 Sept. 1938, *Kennedy* 1527. Kryos Potamos, 1695 m. ; beneath cool shady rocks on gentle slope to the river bed ; flowers reddish gold ; the usual form in small colonies ; 30 Oct. 1938, *Kennedy* 1531. Chionistra, 1800 m. ; under shrubs ; flowers golden purple yellow ; 6 Oct. 1937, *Syngrassides* 1688. Chionistra ; 1650–1860 ; serpentine screes and in open woods of black pine ; perennial ; capitula 4-flowered, ligules yellow with coppery reverse ; 19 Oct. 1940, *Davis* 1941 (type).

*L. tetrantha*, which is endemic to the high serpentine area of Chionistra (Troödos), can be distinguished at a glance from *L. viminea* (L.) Presl which also occurs there sporadically in a dwarfed but otherwise typical form. The new species can be recognized by the following features ; its perennial habit ; more or less corymbose inflorescence borne on stems unbranched below ; the woolly collar ; the comparatively large terminal lobe of the often purplish basal leaves ; the shortly decurrent cauline leaves ; the constantly four-flowered capitula with their characteristically coloured ligules (bright yellow with a coppery reverse). Although the achene of the new species is indistinguishable from that of *L. viminea* (L.) Presl, we consider the ensemble of other distinguishing characters justifies specific status. Alpine forms of *L. viminea* (L.) Presl have been seen, both in the herbarium and the field, from Morocco, Spain and the Antilebanon, but apparently do not differ from the typical form of that species in anything but their dwarf stature.

In comparison with *L. tetrantha*, it is interesting to note that *L. alpestris* (Gandoger) Rech. fil., with achenes distinct from those of *L. viminea* (L.) Presl, is confined to the high limestone mountains of Crete.

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#### STAEHELINA L.

***S. lobelii*** DC. in Ann. Mus. Paris, 16, 194 (1810). *S. apiculata* Labill. Ic. Pl. Syr. 4, 3, t. 1 (1812).

CYPRUS. Yaila, Northern range; 750 m.; very rare, found only in crevices in large limestone rocks facing west, between Halefka forest station and the summit cliff of Yaila, growing with *Umbilicus cyprius*; forms a saxatile congested shrub up to 4 ft. across, with trunks like those of *S. fruticosa*; flowering stems herbaceous, leaves bright green, viscid when young; not more than 50 plants seen; 27 Mar. 1941, Davis 2834.

This woody Composite has hitherto only been known from cliffs of Lebanon and Southern Anatolia. The species belongs to a small Mediterranean genus of dwarf, late-flowering shrubs; of the six species four occur in the Eastern Mediterranean; these are so distinct from one another that the great antiquity of the group cannot be doubted. The woodiest species in the genus, *S. arborescens* L., is endemic to the shady limestone precipices of Crete, where it occupies the northern side of the island, being replaced by *S. fruticosa* L. (which also occurs in a few small islands in the Dodecanese and S. Cyclades) on the vertical cliffs of the southern part. These two plants are so utterly unlike each other that one can hardly be considered as derived from the other; they are evidently relict types, and their degree of affinity is not comparable to that of several other twin species in Crete [such as *Chionodoxa cretica* Boiss. and *C. nana* (Roem. & Schult.) Boiss., *Helichrysum siculum* (Spreng.) Boiss. and *H. heldreichii* Boiss., *Bellis longifolia* Boiss. et Heldr. and *B. silvestris* Cyr., *Hypericum empetrifolium* Willd. and *H. amblycalyx* Coust. & Gandog.] in which the relationship is very close. It is to one of these Aegean *Staehelinae*—*S. fruticosa* L.—that *S. lobelii* DC. is probably most closely related. In this connection it seems worth noting that the white flowers of both species smell strongly of Cherry Pie (*Heliotropium*). The fourth eastern species is *S. uniflosculosa* Sibth. & Sm. which has a fairly wide distribution in the Balkan peninsula, though not reaching the Cyclades or Crete; it is not a cliff plant, but grows in open rocky woods. In the Western Mediterranean *S. dubia* L. occurs on open calcareous hillsides from Italy to Portugal and Morocco. *S. baetica* DC., a rare plant from Southern Spain (Estepona), is stated to grow in rocky and gravelly places, and is certainly very closely related to the widespread *S. dubia* L. In this calciphilous genus, as in many others, the saxatile habit is directly correlated with the rarity of the species and the development of woody stems. There is no doubt that the saxatile way of life is vital to the survival of such relicts. It reduces competition with larger life-forms, eliminates the effects of grazing and provides shade. Some Mediterranean plants exhibit a not very extreme saxicolous habit which is developed only at the edge of their range (as with *Hypericum lanuginosum* Lam. in Palestine); in such cases this habit is not a characteristic of the species as a whole, but is locally acquired in response to unfavourable