

Centaurea vlachorum sp. nov. (subgen. *Jacea*) from NW Greece

Materials for the Mountain Flora of Greece, 8

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Centaurea vlachorum Hartvig is described from alpine meadows on ophiolitic substratum on Mt. Milea in N Pindhos, Greece. It is a very distinct species related to sect. *Leptoranthus* within subgen. *Jacea*.

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Centaurea vlachorum sp. nov.

Type collection: W Macedonia, N Pindhos: Mt. Milea (Salatoura), 12 km N of Metsovon; meadow on SW-facing rocky slope in open woodland of *Pinus heldreichii*, alt. 1870 m, ophiolitic substratum, 23. Jul 1976, Hartvig, Baden & Christiansen no. 6185 (C holotype, ATH, G, W isotypes).

Other collections: Mt. Milea (Salatoura), 12 km N of Metsovon, summit area, alt. 2150 m; meadow vegetation on NE-facing rock ledges, ophiolitic substratum, 23. Jul 1976, Hartvig cult. 140-02 (C). – Epirus, N Pindhos: Mt. Aftiá, 15 km NW of Metsovon, W slope; meadows and clearings in *Fagus* forest, alt. 1860 m, ophiolitic substratum, 25. Jul 1976, Hartvig, Baden & Christiansen no. 6301 (C).

Herba perennis rhizomate brevi horizontali. Caules erecto-ascendentes, simplices, sub capitulis incrassati, usque ad apices foliiferi. Folia anguste elliptica, viridia; rosularia longe petiolata, denticulata; caulina minora, sursum sensim decrescentia, lyrata, lobata vel incisoserrata, media et superiora sessilia. Capitulum solitarium. Involucrum 18–20 × 14–18 mm magnum; bractea viridulae, ovatae vel oblongae. Appendices bractearum ovate triangulae, semilunatae decurrentes, interdum margine argenteae, pectinate ciliatae, ciliis utrinque 12–18, unguis bractearum non obtegentes. Corollae purpureae, interiores 19 mm longae, lobis dimidiatae tuborum longitudinis, marginales valde radiantes, circiter 25 mm longae. Achenium (non maturum) 2,5 mm longum, pilosum; pappus 1,5 mm longus, sordide albus. – Fig. 1.

Perennial with a short, creeping rhizome. Caudex with several branches. Stems and leaves sparsely arachnoid-tomentose. Stems simple, 20–45 cm, erect-ascending, sulcate, leafy to the apex, thickened below the capitulum. Leaves narrowly elliptic, green; the basal (vegetative rosettes) 6–12 × 1.5–2 cm, remotely denticulate-serrate, attenuate into a (3–)5–8 cm long petiole. Cauline leaves 9–11, gradually decreasing in size towards the apex; the lower lyrate lobed with 1–3 pairs of oblong, up to 10 mm long and 3 mm wide segments, shortly petiolate; the middle and upper lyrate or incised-serrate, sessile; rarely all leaves incised-serrate. Involucre ovoid, 1.8–2.0 × 1.4–1.8 cm. Involucral bracts greenish, smooth, faintly striated; the middle ovate-oblong, 6–9 × 3–3.5 mm. Appendices ovate-triangular, 4–5 mm long, semilunate-decurrent almost to the middle of the bracts, pectinate-ciliate, not covering bracts, blackish-brown. Ciliae 12–18 on each side, up to 2 mm long, brownish or silvery. Corolla purple, glabrous. Inner florets 19 mm long, lobes half as long as tube, with 5 prominent veins; outer florets 25 mm, lobes almost as long as tube, sterile, without staminodes, strongly radiant. Anther-tube purplish-red, glabrous. Stigma 3–3.5 mm. Receptacle with hairs 7 mm long. Achenes (immature) ca. 2.5 mm, hairy. Pappus 1.5 mm, dirty white. Pollen grains subprolate to sphaeroid (length $35.6 \pm 4.6 \mu\text{m}$, diam. $29.2 \pm 2.0 \mu\text{m}$, l/d 1.21 ± 0.12), echinate with spines 1–1.5 μm , the inner layer of



Fig. 1. *Centaurea vlachorum* sp. nov. A, B, D-F: Hartvig et al. no. 6185 (type), C: Hartvig et al. no. 6301. A: Habit. - B, C: Involucre bracts. - D: Marginal, radiant floret. - E: Inner floret. - F: Achene.

rodlets (structural baculae) absent (*Jacea*-type, microechinate in the terms of Wagenitz 1955).

The name refers to "vlachos", the name of the inhabitants of the mountain villages in N Pindhos, originally migrants from Romania.

C. vlachorum is a serpentine endemic known only from two small mountains, Mt. Milea and Mt. Aftiá N of the Katara pass in N Pindhos. It grows in meadows or on rock ledges on ophiolitic substratum between 1860 and 2150 m alt.

The plants from Mt. Aftiá (only two specimens) differ from the plants collected on Mt. Milea in having more silvery appendicular fimbriae and less lobed cauline leaves. However, the material is too small to make any judgements of the taxonomical significance of these differences.

Taxonomical relationship

The combination of morphological characters, particularly the shape and indumentum of leaves, the thickened, leafy upper part of stem, the purple, estaminate, radiant outer florets and the structure of the pollen grains places *C. vlachorum* in subgen. *Jacea* (Miller) Hayek. This subgenus comprises plants rather similar in vegetative morphology, but with much variation in the morphology of the involucre bracts. Species with suborbicular, entire or lacerate-pectinate appendices are kept together in sect. *Jacea* (Miller) DC., while species

with suborbicular, triangular or linear, pectinate to fimbriate appendices with usually recurved apex are treated separately in sect. *Leptoranthus* (DC.) DC. Characteristic for subgen. *Jacea* is however, that the appendix always is clearly separated from, and at most slightly decurrent on the bract. Semilunate-decurrent appendices as in *C. vlachorum* are never seen in the subgenus, at least not on the middle bracts. *C. rhaetica* Moritzi (sect. *Leptoranthus*) from C Europe has decurrent appendices at least on the outer bracts, but the apex is fimbriate and recurved as typical for the section. *C. pratensis* Thuill. of the same section found in W Europe, has ovate-triangular appendices with erect apices, but they are not decurrent.

The presence of a well-developed pappus in most species of sect. *Leptoranthus* and the absence of the pappus in sect. *Jacea* also indicates that *C. vlachorum* is closer related to sect. *Leptoranthus* than to sect. *Jacea*, but the semilunate-decurrent appendices which are not covering the bracts, leaves it in a relatively isolated position among the species within subgen. *Jacea*.

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References

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