

GEORGIA KAMARI & ARNE STRID

Crepis arcuata (Asteraceae), a new species from N Greece

Abstract

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Crepis arcuata from micaceous schist in the summit area of Mt. Kajmakčalan (Voras) on the Greek-Yugoslavian border is described as a species new to science. The relationships with *C. conyzifolia*, *C. schachtii* and other related species is briefly discussed.

Crepis arcuata Kamari & Strid, sp. nova - Fig. 1.
Typus: Strid 24858 (Holo- C; iso- B, G, LD, UPA).

Herba perennis, saepe plures rosulas cauliferas emittens. Caulis a basi unicus, plerumque monocephalus, usque ad 17 cm longus, valde ascendenti-curvatus, simplex vel raro divaricato-ramosus, fere aphyllus, sparse glanduloso-pilosus. Folia basalia 3-8 x 0.5-1.5 cm magna, oblanceolata, runcinate lyrato-pinnatifida segmentis acutis, in petiolum gradatim attenuata, sparse glanduloso-pilosa; folia caulina plerumque nulla, aliter diminuta, lanceolata. Involucrum 12-16 x 8-14 mm magnum, bracteis lanceolatis, acutis, tomentosis, glanduloso-pilosis, pilis brunneis, ad apicem ciliatis. Receptaculum dense ciliatum, ciliis hyalinis usque ad 1 mm longis. Corolla usque ad 20 mm longa, ligulis luteis usque ad 3.5 mm latis. Achaenia ca 15-costata. Pappus 5-6 mm longus, albus.

Affinis *C. grandiflorae* var. *macedonicae* Stoj. & Stefanov (in schedis) et *C. schachtii* Babcock sed caulibus arcuato-adscendentibus, saepe simplicibus, aphyllis differt. A *C. schachtii* insuper involucris valde majoribus, latoribus, campanulatis manifeste differt.

Perennial with a robust woody stock producing a few leaf rosettes. Stems 1-3 from each rosette, 8-17 cm long, rather robust, not or sparingly branched, ascending, arcuate, sparsely canescent-tomentulose with white glandular and yellowish-brown glandular hairs. Basal leaves 3-8 x 0.5-1.5 cm, lanceolate, runcinate-pinnatifid or sublyrate; pubescence as on stem. Cauline leaves lacking or 1-2, small and bract-like. Involucre 10-15 x 8-14 mm, broadly campanulate, dark green, tomentose with white shining glandular and short brownish glandular hairs, usually with some long, blackish-green setae on midvein of bracts. Outer bracts 6-8, unequal, up to half as long as the inner, linear-lanceolate; inner bracts 12-13, lanceolate, white-ciliate at apex, glabrous on inner face. Receptacle densely ciliate with shining hairs up to 1 mm long. Corollas 15-20 mm long; ligules up to 3.5 mm wide, bright to deep yellow. Achenes (not fully mature) 3-4 mm long, fusiform, c. 15-ribbed; ribs smooth or slightly spiculate above. Pappus 5-6 mm, white. Flowering July and August.

Specimina visa: Greece: Nom. Pellis: Mt. Kajmakčalan, E of the summit, 2400 m, dry, gravelly slope, micaceous schist, 22. 7. 1985, *Strid* 24858 (B, C, G, LD, UPA) = *Stamatiadou* 22990 (ATH); montes Kaimaktsalan, in latere austro-occidentali verticis Koutsoumbei, alt. 2400 m, in glareosis et arenosis micaceis, solo gneisico, 13. 8. 1977, *Greuter* 15752 (C, G, herb. Greuter, as *Crepis schachtii*); Nom. Florinis/Pellis: Mt. Kajmakčalan, summit area, 2450–2520 m, alpine grassland dominated by *Nardus stricta* and *Festuca* sp., rocky outcrops at the summit, micaceous schist, 17. 8. 1979, *Strid & Papanicolaou* 16596 (C).

Taxonomic relationships

C. arcuata is related to *C. conyzifolia* (Gouan) A. Kerner, and especially to its variety *macedonica* Stoj. & Stefanov (in schedis). *C. conyzifolia* occurs in S Europe from the Pyrenees to the Carpathians and the mountains of the Balkan Peninsula (including Belles and Rodhopi in NE Greece, cf. Kamari in press). Babcock (1947) recognized several "minor variants" of *C. conyzifolia*, some of which have been treated at species rank by Bulgarian botanists (cf. Stojanov, Stefanov & Kitanov 1967: 1178). Studies in the herbaria in SO and Plovdiv (Higher Agr. Inst. "V. Kolarov") have revealed the following:

- 1) *C. trojanensis* Urum. (type collected by Urumov in 1898, Plovdiv!) differs from *C. arcuata* mainly in the slender stem which usually bears 2–3 cauline leaves similar to the basal ones, and in the longer and denser indumentum.
- 2) *C. grandiflora* var. *macedonica* Stoj. & Stefanov (material from Mt. Belasitza in SW Bulgaria collected by Stefanov in 1920, Plovdiv!) is very close to *C. arcuata* and also grows on micaceous schist; it differs mainly in the narrow involucre and the straight, slender, usually branched stem.
- 3) Specimens referred to *C. orbelica* Velen. (collected by Stříbrný in 1915, by Stojanov & Stefanov in 1928, and by Davidov in 1919, all in Plovdiv!; collected by Stříbrný in 1906 and by Stefanov in 1919, all in SO!) and *C. balcanica* Velen. (collected by Stefanov in 1929, Plovdiv!) certainly belong to *C. conyzifolia*.
- 4) In addition, many sheets determined as *C. grandiflora* Tausch (in SO!) belong to *C. conyzifolia*; some specimens from Stara Planina are unusually short (up to 20 cm), but match *C. conyzifolia* in all essential characters.

Another related species is *C. schachtii* Babcock from the Bulgarian side of Orvilos (Alibotusch). According to the original description (Stefanov 1934) and herbarium material from the locus classicus (collected by Popova & Delipavlov in 1966, Plovdiv!) it differs significantly from *C. arcuata* in the lower height (up to 9 cm), straight slender stems, smaller heads (involucre up to 8 mm wide), and narrower, paler ligules. *C. macedonica* Kitanov from the border area of Albania and S Yugoslavia (Kitanov 1950; type collected by Kitanov, SO 42349!) is close to *C. baldaccii* Halácsy and more distantly related to *C. arcuata*.

Acknowledgements

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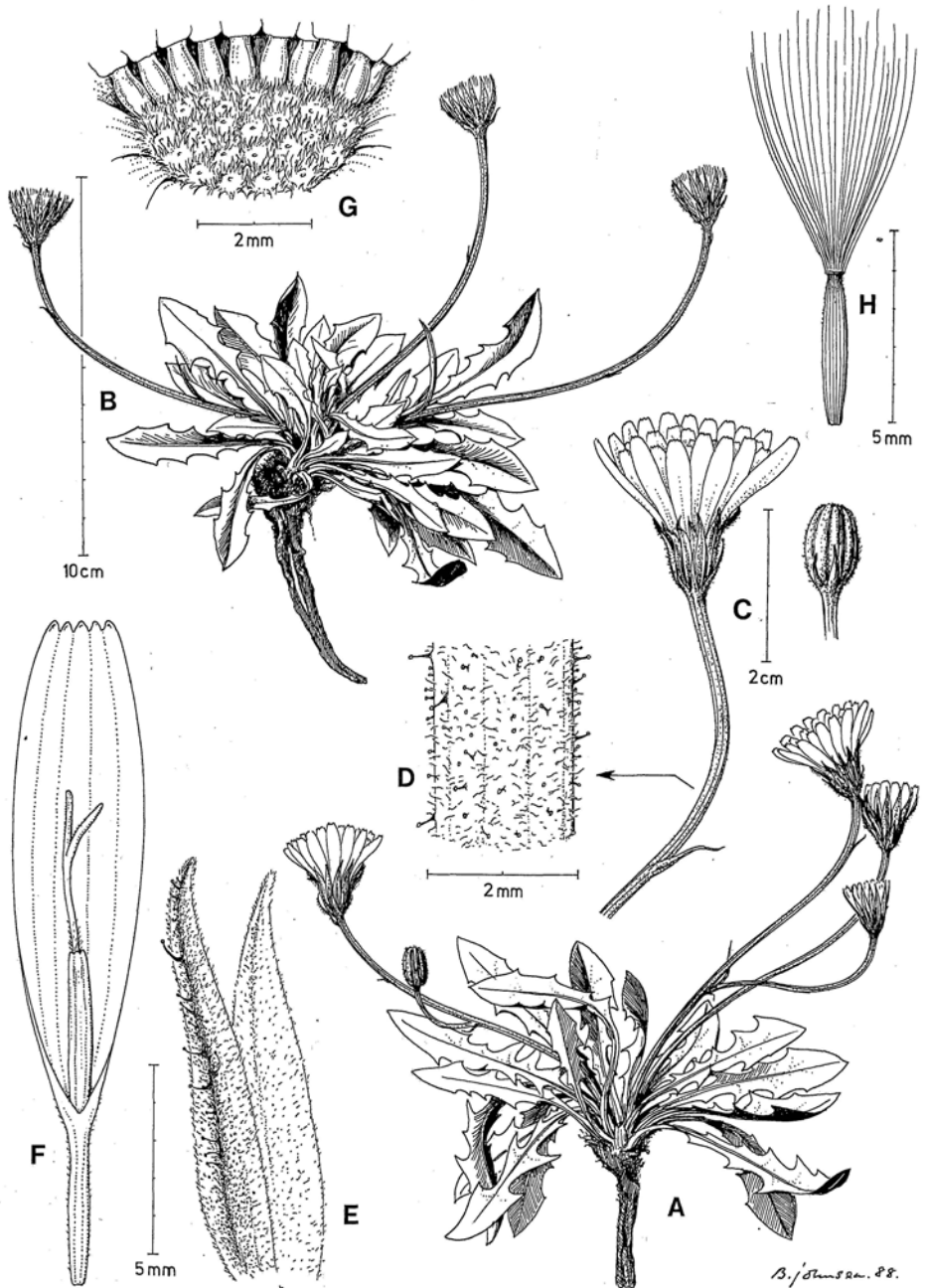


Fig. 1. *Crepis arcuata* Kamari & Strid (Strid 24858). - A, B: Habit; C: Flowering head and bud; D: Part of stem below capitulum; E: Two of the inner involucre bracts, outer face; F: Floret; G: Part of receptacle with young achenes above; H: Unripe achene with pappus.