

GEORGIA KAMARI &amp; PER HARTVIG

*Crepis merxmuelleri* (Asteraceae), a new species from NW Greece

## Abstract

Kamari, G. & Hartvig, H.: *Crepis merxmuelleri* (Asteraceae), a new species from NW Greece. - Willdenowia 18: 63-66. 1988. - ISSN 0511-9618.

*Crepis merxmuelleri* from serpentine substrates on Mt. Smolikas, NW Greece is described as a species new to science. The relationship with *C. turcica* and other species in the area is briefly discussed.

*Crepis merxmuelleri* Kamari & Hartvig, sp. nova - Fig. 1.

Typus: *Hartvig & Seberg 5104* (Holotypus C; isotypus G, UPA).

Herba perennis, omnino glandulosa, 20-50 cm alta. Caulis primarius in duabus tertiis partibus superioribus divaricate ramiger, saepe etiam e base ramos caulibus similes emittens. Folia basalia acute sinuato-dentata vel pinnatiloba, in petiolos alatos attenuata. Folia caulina inferiora et media iis similia, sessilia, semiamplexicaulia. Capitula 9-20(-30) pedunculis subpatentibus, curvis, (1.5-)3-6(-10) cm longis portata. Involucrum 10-15 × 7-9 mm magnum. Involucri phylla linearilanceolata, albo-tomentosa, pilis glanduliferis fuscis. Receptaculum fimbriate alveolatum, fimbriis brevibus, ciliatis. Ligula flava, tubus apice subtomentosus. Achaenium 4-5 × 0.7-1.0 mm longum, 10-12 costis muriculatis. Pappus 5-6 mm longus, albus.

*C. turcicae* Degen & Bald. satis similis, sed indumento omnino dense glanduloso, pedunculis et ramis inflorescentiae plerumque longioribus, magis patentibus, foliis caulinis magis numerosis, phyllis exterioribus brevioribus, tubo corollae subtomentoso ab ea diversa.

Perennial with a slender, woody tap root. Caudex slender, simple, up to 5 mm thick, sometimes slightly prolonged so each shoot generation appears distinct, clothed with either thick, spongy, yellowish-brown, or thin, papery, blackish-brown remains of old leaf bases. Stem 20-50 cm tall, striate to slightly angled, densely covered with brownish glandular hairs, with several suberect branches in upper 2/3, sometimes with 1-2 stem-like branches from the very base. Basal leaves numerous, sometimes persistent until the time of fruiting, 10-20 × 2-4.5 cm, oblanceolate, sharply sinuate-dentate or runcinate to pinnately lobed with a large triangular-ovate terminal segment and smaller triangular, acute lateral segments, gradually attenuate into a winged petiole, densely covered with brownish glandular hairs 0.3-1.0 mm long, often mixed with few white eglandular hairs; lower cauline leaves like the basal ones, the middle ones sessile with a wide semiamplexicaule basis; upper leaves smaller, triangular-lanceolate, more or less hastate, the uppermost linear and bract-like, scarcely more than 1 cm long. Capitula 9-20(-30) on subpatent, arcuate peduncles (1.5-)3-6(-10) cm long. Involucre 10-15 × 7-9 mm, cylindrical-campanulate. Inner bracts 12-13, linear-lanceolate,

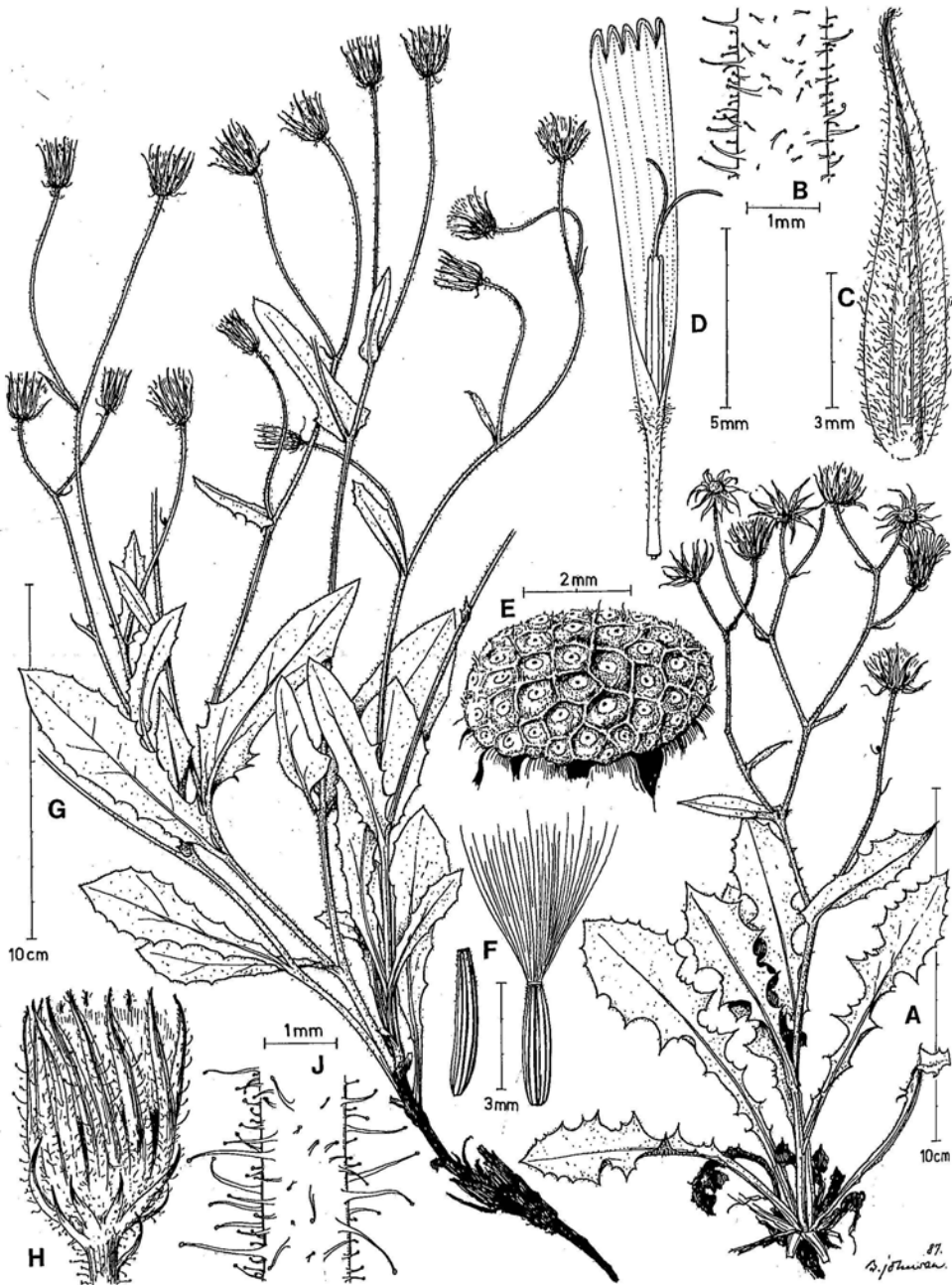


Fig. 1. *Crepis merxmulleri*. A-F: Hartvig & Seberg 5104. A: Habitus. B: Part of stem with indumentum. C: Inner bract. D: Corolla. E: Receptacle. F: Achenes viewed from the side and from the back. G-J: Hartvig & Seberg 5059. G: Habitus. H: Capitulum. J: Part of stem with indumentum.

10-13 × 1.5-2 mm, white-tomentose with greenish to hyaline, more or less glabrous margins, brownish at apex, mid-region densely clothed with unequal brownish glandular hairs up to 0.5 mm long, yellowish and somewhat spongy-thickened at the base. Outer bracts 6-8, 2-4 mm long, linear, blackish-green with brownish glandular hairs, up to 1/5-1/3 as long as the inner bracts. Receptacle 4.5-5.5 mm in diameter, alveolate-fimbriate, fimbriilla up to c. 0.4 mm long, sparsely ciliate with soft white hairs. Corolla up to 15 mm long, ligules up to 2 mm wide, tube pubescent with white, woolly hairs, almost tomentose in upper part. Anther tube c. 5 mm long, appendices c. 0.6 mm long. Style branches about 2 mm long. Achenes brown, 4-4.5(-5) × 0.7-1.0 mm, slightly curved, subattenuate at both ends, with slightly expanded whitish pappus disc, 10- to 12-ribbed, ribs close or separated, muriculate. Pappus 5-6 mm long, white.

Like *C. turcica* Degen & Bald. but differing in the dense, brownish, glandular indumentum, generally longer and more patent inflorescence branches and peduncles, more numerous stem leaves, shorter outer bracts and subtomentose corolla tube.

The epithet commemorates the distinguished botanist Prof. Dr. H. Merxmüller (1920-1988).

Specimina visa: Macedonia/Epirus: Mt. Smolikas, great SE ravine, 3.5 km SW of Samarina by the forest road along the river, 1250-1300 m, rocky and marshy slopes, roadsides and stony river beds in mixed forest (*Pinus nigra*, *Fagus*, *Acer obtusatum*, *Sorbus aucuparia*, *Fraxinus excelsior*, etc.), serpentine substr., 1. 9. 1975, *Hartvig & Seberg 5104*; *ibid.*, c. 3 km SW of Samarina, SW-facing steep, rocky slopes and ravines in *Pinus nigra* woodland, 1300-1550 m, serpentine substr., 31. 8. 1975, *Hartvig & Seberg 5059* (B, C, G, UPA).

#### Variation

The two known collections, which comprise 5 (*Hartvig & Seberg 5059*) and 6 plants (*Hartvig & Seberg 5104*) respectively, differ significantly from each other with respect to several correlated characters. All plants in *Hartvig & Seberg 5104* have 1) a short vertical caudex clothed with pale, rather thick remains of leaf-bases, 2) more or less persistent pinnately lobed lower leaves, 3) they are branched only in the upper 2/3 of the stem and 4) the peduncles are rarely more than 5 cm long. Plants from collection *Hartvig & Seberg 5059* have 1) a somewhat prolonged, ascending caudex with distinct shoot-generations crowned with brown, papery leaf-remains, 2) caudal leaves not persistent, the lower cauline leaves remotely denticulate to sinuate-dentate, 3) usually 1-2 stem-like branches from the very base and 4) peduncles often more than 5 cm long. No essential differences in floral characters have been observed between the two collections, and most of the morphological divergences are connected with growth of the caudex and with the manner of branching, which are likely to be affected by habitat factors. More material is needed to judge whether these differences have any taxonomical significance.

#### Taxonomic relationship

*C. merxmülleri* is obviously closely related to *C. turcica* Degen & Bald. within sectio *Berinia* subsectio *Subcorymbiforma* sensu Babcock (1947), a species which occurs in calcareous sites in the mountains of N and S Pindhos. *Hartvig & Seberg 5104* in particular matches *C. turcica* in most essential characters, especially the achenes which in both species are short with only slightly attenuate ends and 10-12 ribs. *C. merxmülleri* has, however, a subtomentose corolla-tube, shorter outer bracts (up to 1/5-1/3 as long as the inner), longer and less patent inflorescence-branches and peduncles, more numerous stem-leaves, and is in all parts covered with an indumentum of brownish, glandular hairs. However, the newly described subspecies *C. turcica* subsp. *murganica* Kamari from Mt Murganica on the Greek-Albanian border (Kamari 1984) has an indumentum resembling that of *C. merxmülleri*. The long branches and peduncles, and the numerous stem-leaves (particular in *Hartvig & Seberg 5059*) point to relationships also with *C. albanica* (Jav.) Babcock. The latter has, however, like *C.*

*baldaccii* Hal., a third relative in the area, 20-ribbed slender achenes, longer outer bracts and unwinged petioles as the most significant differences.

#### Acknowledgements

We are thankful to Dr. Tyge Christensen for checking the latin diagnosis and to the artist Bent Johnsen for preparing the drawings.

#### References

- Babcock, E. B. 1947: The genus *Crepis* 2. Systematic Treatment. - Univ. Calif. Publ. Bot. **22**.  
Kamari, G. 1984: Notes on some species of *Crepis* subsect. *Subcorymbiforme* in Greece. - Bot. Jahrb. Syst. **104**: 401-404.

#### Addresses of the authors:

Georgia Kamari, Botanical Institute, University of Patras, 260 00 Patras, Greece.

Per Hartvig, Botanical Laboratory, University of Copenhagen, Gothersgade 140, DK-1123 K, Copenhagen, Denmark.