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A new species of *Crepis* (Compositae) from Calabria (S. Italy)

Abstract

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Crepis aspromontana, growing on rocky places along the Ionian slope of Aspromonte (S. Italy), is described and illustrated as species new to science. Its morphology, ecology and relationships with *Crepis vesicaria* are examined.

In the framework of a floristic investigation of the Aspromonte area (S Italy), a chasmophilous taxon of *Crepis*, that cannot be matched with any of the known species in the genus, was collected. For its habit and capitulum morphology it belongs to the *C. vesicaria* L. group, but the occurrence of numerous very peculiar characters allow to treat it as new species.

Crepis aspromontana Brullo, Scelsi & Spampinato sp. nov. (Fig. 1, 2). - Type: Italy, Aspromonte, rupi di Pentadattilo, 4.5.1993, Brullo, Scelsi & Spampinato (holotype CAT).

Herba perennis, 12-35 cm alta, radice valde lignosa, robusta, palari. Caulis robustus, piloso-glandulosus, e basi ramosus, ramis rectis vel arcuatis, inferioribus elatis, ad summitatem cymis dispositis. Folia basalia rosulata, subglabra vel sparsim pilosa, spathulata vel oblanceolato-spathulata, rare spathulato-runcinata, 5-14 cm longa, 12-35 mm lata, irregulariter inciso-dentata, dentibus longe acuminatis, rotundata vel obtusa apice, generaliter in longum petiolum alatum attenuata. Folia caulina 2-6 cm longa, amplexicaulia, late auriculata, lanceolata usque longe lanceolata, acuminata apice, irregulariter inciso-dentata margine. Inflorescentia cymosa laxa, pedunculis 1-6 cm longis, rectis vel arcuatis, dense piloso-glandulosus. Capitula erecta, numerosa usque 40, involucri cylindrico-campanulato, 8-10 mm longo, squamis exterioribus 6-8 (10), imbricatis, ovatis vel subrotundo-ovatis, 5-8 (14) mm longis, 3-6 (8) mm latis, apice obtusiusculo vel apiculato, extra minute pubescentibus, margine leviter undulato et minute ciliolato, costa setulis nigris 0,5-2 mm longis (longioribus versus apicem) praedita, squamis interioribus 10-12, lanceolatis vel lineari-lanceolatis, 8-10 mm longis et 1,6-2,8 mm latis, carina piloso-glandulosa, lato margine membranaceo et glabro, setulis nigris 0,5-1,5 mm longioribus versus apicem. Receptaculum planum, alveolatum fibrillis dense ciliatis. Corolla 9-11 mm longa, lutea, ligula 6,5-8 mm longa, 1,2 mm lata, dentibus 0,2-0,3 mm longis, tubo 2,5-4 mm longo, sparsim piloso. Tubus antherae 3,5-4 mm longus. Cypselae brunneae, 5,5-6 mm longae, corpore 0,6-0,7 mm lato, fusiformi, 10 costis spiculatis, attenuato in subtile rostrum 2-2,5 mm longum, pappo 5-5,5 mm longo, caduco, albo, supra callum basalem inserto; interdum cypselae interiores subcylindricae, 7 mm longae, pallido-brunneae, sine rostro.



Fig. 1. Habit of *Crepis aspromontana* Brullo, Scelsi & Spampinato.

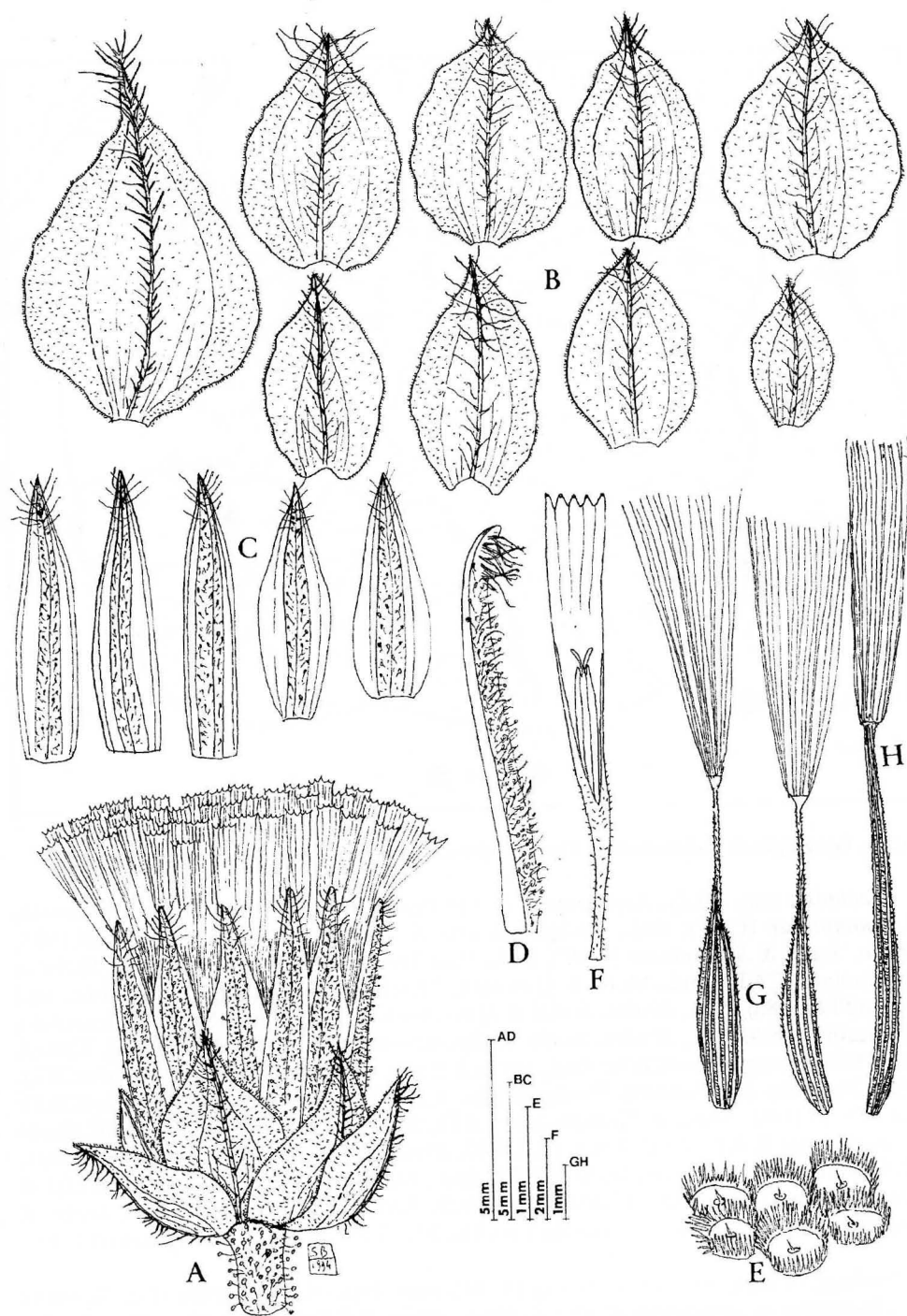


Fig. 2. *Crepis aspromontana* Brullo, Scelsi & Spampinato. A: capitulum; B: outer bracts; C: inner bracts; D: inner bract lateral view; E: detail of receptacle; F: floret; G: marginal cypselae; H: inner cypselus.

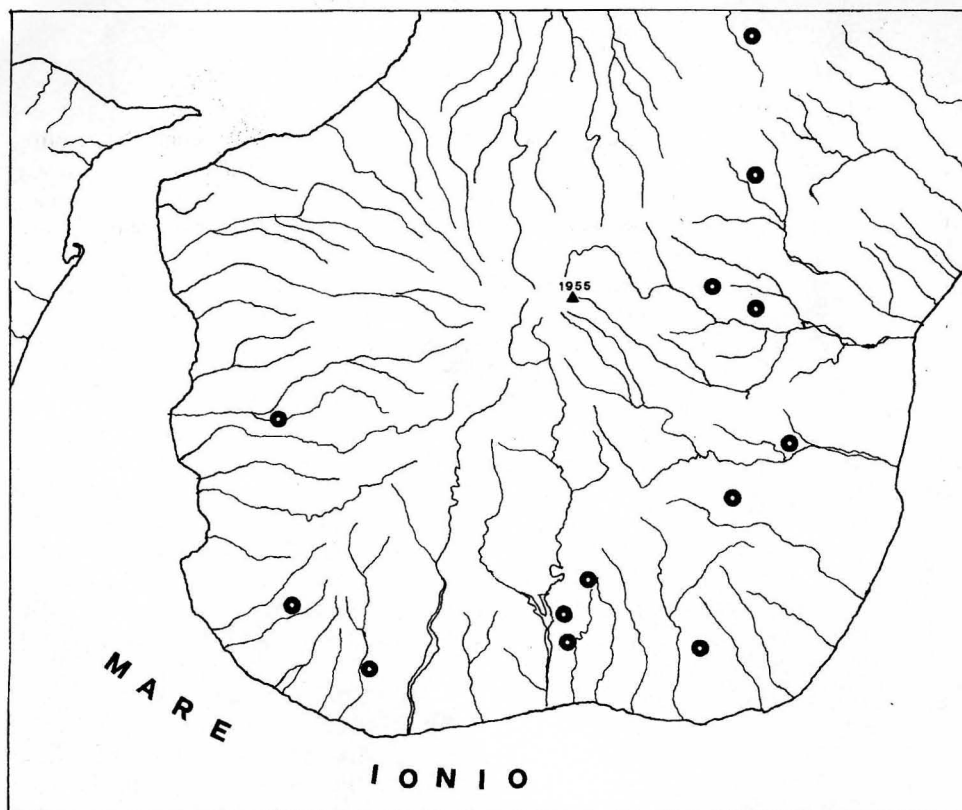


Fig. 3. Geographical distribution of *Crepis aspromontana*, based on herbarium specimens.

Specimina visa. - Italy, Aspromonte, rupi di Pentadattilo, 8.5.1989, *Brullo, Signorello & Spampinato* (CAT); *ibid.*, 5.6.1989, *Scelsi & Spampinato* (CAT); *ibid.*, 4.5.1993, *Brullo, Scelsi & Spampinato* (CAT); *ibid.*, Sant'Andrea sotto Terreti, 7.9.1989, *Scelsi & Spampinato* (CAT); *ibid.*, Motta S. Giovanni, 24.3.1993, *Spampinato* (CAT); *ibid.*, rupi presso Platì, 18.6.1991, *Brullo, Scelsi & Spampinato* (CAT); *ibid.*, Piano Abbruschiato, Molocchio, 18.6.1991, *Brullo, Scelsi & Spampinato* (CAT); *ibid.*, M. Goni, Terreti, 30.4.1989, *Spampinato* (CAT); *ibid.*, sopra S. Luca, 13.6.1993, *Brullo & Scelsi* (CAT); *ibid.*, Madonna del Carmine, Pietrapennata, 7.11.1989, *Scelsi & Spampinato* (CAT); *ibid.*, 28.10.1990, *Scelsi & Spampinato* (CAT); *ibid.*, S. Carlo, 4.5.1993, *Brullo, Scelsi & Spampinato* (CAT); *ibid.*, Bova, 15.2.1993, *Brullo & Scelsi* (CAT); *ibid.*, Pietralunga, 17.5.1990, *Scelsi & Spampinato* (CAT); *ibid.*, M. Scapparrone, 16.5.1990, *Scelsi & Spampinato* (CAT); *ibid.*, Fiumara Lo Verde, Serro Schavone, 16.5.1990, *Scelsi & Spampinato* (CAT); *ibid.*, Amendolea Vecchio, 21.2.1994, *Scelsi & Spampinato* (CAT).

Ecology. - *Crepis aspromontana* occurs on Ionian slope of Aspromonte (Fig. 3), where it is localized in conglomerate or calcareous rocky habitats, growing in the crevices together with other chasmophytes. On the whole, it is an uncommon species linked to very xeric environmental conditions. According to Scelsi & Spampinato (1992), in this area, which is known as the most arid of Calabria, a significant member set of quite rare S

Mediterranean species, absent in the rest of the Italian peninsula, has been found.

Taxonomic relationships. - According to the infrageneric classification of *Crepis* proposed by Babcock (1947), *Crepis aspromontana* fits well in *C. sect. Lepidoseris* (Reichen.) Benth., which groups taxa more or less pubescent, generally perennial, sometimes monocarpic or annual, usually with long woody root, basal leaves petiolate, denticulate to pinnatifid, capitula medium size and many-flowered, ligules yellow, receptacle with ciliate pits, cypselas uniform or bifid, more or less beaked and 10-ribbed.

For the occurrence of broadly ovate, imbricate outer involucre bracts and cypselas usually bifid, *C. aspromontana* seems quite related to *C. vesicaria* L. s. str., but numerous morphological differences allow to distinguish very well these two species. In particular, *C. aspromontana* differs by having the root very robust and woody, stem robust and densely glandular-pubescent, basal leaves spatulate or oblanceolate-spatulate, rounded or obtuse at apex, cauline leaves broadly auriculate-amplexicaul, outer bracts 5-6, ovate or subrounded-ovate, 1/2-3/4 as long as inner, finely pubescent, always with black bristles along the midrib, inner bracts pilose-glandular along the keel with black bristles near the apex, receptacle with dense ciliate pits, marginal cypselas with body 0.6-0.7 mm wide; while *C. vesicaria* s. str. is characterized by root slender and slightly woody, stem more slender and glabrous or sparsely glandular-pubescent in the upper part of the inflorescence, basal leaves oblanceolate to ovate, somewhat obtuse to acute at apex, cauline leaves narrowly auriculate-amplexicaul, outer bracts 7-10, ovate, 1/4-2/3 as long as inner, glabrous or sparsely pubescent near the apex, rarely with black bristles near the apex, inner bracts appressed-pubescent along the keel rarely with black bristles near the apex, receptacle with scattered ciliate pits, marginal cypselas with body 0.4-0.5 mm wide.

C. aspromontana shows some resemblance with species distributed in the Macaronesian area, like *C. canariensis* (Sch.Bip.) Babcock and *C. andryaloides* Lowe, and in Morocco, like *C. salzmännii* Babcock, mainly in the robust habit, strongly woody root, well developed basal leaves, broadly auriculate-amplexicaul cauline leaves, stems glandular-pubescent at least in the upper part of the inflorescence and occurrence of more or less developed black bristles on the bracts. Because of these characters, typical of the most primitive members of the *C. sect. Lepidoseris*, *C. aspromontana* can be considered a species with an old origin, linked to rocky habitats, a typical refuge of the Tertiary flora.

It is opportune to emphasize that *C. vesicaria* L. s. str. in the Aspromonte area, where it is very common, is ecologically well differentiated from *C. aspromontana*, occurring always in the synanthropic places as meadows, road sides, cultivated fields, etc.

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References

- Babcock, E. B. 1947: The genus *Crepis*, part two, systematic treatment. — Univ. Calif. Publ. Bot. 22: 198-1030.
 Scelsi, F. & Spampinato, G. 1992: Osservazioni fitogeografiche sulla flora costiera del territorio di Reggio Calabria. — Giorn. Bot. Ital. 126(2): 389.

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