

Hieracium hypochoeroides subsp. *peracutisquamum* (Asteraceae), a new taxon from Basilicata, southern Italy

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Hieracium hypochoeroides subsp. *peracutisquamum* Di Grist., Gottschl. & Raimondo, a new taxon endemic to Basilicata (southern Italy), is described and illustrated. It is confined to the carbonate rocks of Monte della Madonna di Viggiano (Lucanian Apennine, SW Basilicata). Information on its habitat ecology and taxonomic relationships is provided.

From a botanical point of view, Basilicata (southern Italy) is one of the least known regions of Italy. The botanical exploration of that region, by several people (Petagna, Gasparrini, Tenore, Gussone, Barbazita, Terracciano, Porta, Cavara, Grande, Fiori, etc.), was particularly intense in the late 18th and early 19th century, but more recent floristic contributions are scarce and the current presence and conservation status of many species are still in doubt (Conti *et al.* 2006, Domina *et al.* 2012). *Synopsis Florae Lucanae* (Gavioli 1947), the only complete botanical account of the region, includes 3557 taxa (1899 species, 1371 subspecies and varieties, 257 forms, and 30 hybrids). Of *Hieracium* s. *stricto* 14 taxa are mentioned: *H. hypochoeroides* subsp. *serinense* (as *H. × serinense*), *H. murorum*, *H. naegelianum* subsp. *andreae* (as *H. naegelianum* var. *andreae*), *H. oxyodon* var. *hastatum* (as *H. × oxyodon* var. *hastatum*), *H. pallescens* subsp. *tephrochlorum* (as *H. × incisum*), *H. schmidtii* (as *H. murorum* var. *pallidum*), *H. pollinense* (as *H. × leucophaeum*), *H. portanum*, *H. racemosum*

subsp. *crinitum* (as *H. racemosum* var. *crinitum*), *H. racemosum* subsp. *virgaurea* (as *H. racemosum* var. *virga-aurea*), *H. sabaudum* subsp. *boreale* f. *lucanicum*, *H. scorzonifolium* subsp. *divaricatum* (as *H. schizocladum*), *H. valoddae* subsp. *austroitalicum* (as *H. × valoddae*), and *H. × incisum* var. *vulgatum*, the latter perhaps belonging to the *H. racemosum* aggregate.

In early July 2014, during floristic inventorying of Monte della Madonna di Viggiano (Lucanian Apennine, SW Basilicata), a small population belonging to the *H. hypochoeroides* aggregate was found. The plants were quite distinctive and rather isolated within the aggregate from a geographical point of view; therefore they are here described as representing a new subspecies.

Hieracium hypochoeroides* subsp. *peracutisquamum Di Grist., Gottschl. & Raimondo, *subsp. nova* (Figs. 1 and 2).

TYPE: Italy. Basilicata, Monte della Madonna di Viggiano, Viggiano (PZ), 40°22'50.63''N, 15°51'46.08''E, 1534 m



Fig. 1. *Hieracium hypochoeroides* subsp. *peracutisquamum* (holotype).

a.s.l., carbonate rocks, 8 July 2014, *E. Di Gristina 101241* (holotype PAL; isotypes PAL-Gr!, FI!, B!, Hb. Gottschlich 61551!).

ETYMOLOGY: The epithet *peracutisquamum* refers to the shape of the tip of the involucral bracts.

Plant a perennial, rosulate hemicryptophyte. Rhizome stout or slender, oblique or horizontal. Stem erect, stout (0.9–2.8 mm diam.), (22)26–51 cm tall, green, often brownish-purple at base, striated, phyllopodous, beneath with few to moderately dense, 2–5 mm long, whitish,

± crisp, dentate simple hairs, sparse minute (up to 0.1 mm long) yellowish glandular hairs and sparse or lacking stellate hairs, above with moderately dense, 1–3 mm long, crisp, distally white and dark-based, dentate simple hairs; sparse to moderately dense 0.1–0.3 mm long, blackish glandular and stellate hairs. Basal leaves (3)–7, petiolate; petiole (1.5)2–9(10) cm long, green, often brownish-purple at base, with moderately to rather dense, 2–5 mm long whitish, ± crisp, dentate simple hairs; sparse, rare mod-



Fig. 2. *Hieracium hypochoeroides* subsp. *peracutisquamum* blooming in nature.

erately dense minute (up to 0.1 mm long) yellowish glandular hairs; lacking stellate hairs; lamina elliptical, oblong-elliptical, lanceolate or ovate, (2)2.5–11 × (1.3)1.5–3.5(3.7) cm, glaucous-green, often slightly spotted, attenuate or truncate, margin in lower half serrate-dentate or denticulate, in upper half denticulate or entire, acute or rounded-obtuse, seldom acuminate, with whitish, crisp, dentate simple hairs 1–4(5) mm long that are sparse to moderately dense above, moderately dense on margin, rather dense along midrib; sparse minute (up to 0.1 mm long) glandular hairs; and sparse or lacking stellate hairs. Cauline leaves 0–1, linear-lanceolate, 1.1–2.5 × 0.08–0.15 cm, colour and indumentum similar to those of basal leaves. Inflorescence furcate-paniculate, branches 1–3(4), straight or curved, (2.5)3–12(13.5) cm long, each with 1–3 capitula; capitula 2–10 per plant; acaulium 2–5(5.5) cm long. Peduncles with 1–2(3) linear, green or dark

green, 1–5 mm long bracts, with moderately to fairly dense, 0.5–1.5 mm long, crisp, distally white and dark-based, dentate simple hairs; moderately to rather dense black or yellowish-black, 0.2–0.5 mm long glandular hairs; and sparse to moderately dense stellate hairs. Involucre almost globose, 9–12 mm long. Involucral bracts in few series, dark green, lighter at margin, linear-lanceolate, 0.4–0.9 mm wide, acute, with moderately to fairly dense, crisp to curved, 0.5–1.5 mm long, distally white and dark-based simple hairs; moderately dense, 0.2–0.3 mm long glandular hairs with black or yellowish-black glands and black stipe; and, at base, sparse stellate hairs. Corolla limb ligulate, yellow, glabrous. Styles yellow. Achenes 3–4 mm long, dark brown. Flowering in mid-June to first week of July, fruiting in July.

DISTRIBUTION AND HABITAT: *Hieracium hypochoeroides* subsp. *peracutisquamum* grows exclusively on the carbonate cliffs of Monte

Fig. 3. Carbonate rocks of Monte della Madonna di Viggiano, the habitat of *Hieracium hypochoeroides* subsp. *peracutisquamum*.



della Madonna di Viggiano (Viggiano, Potenza province) (Fig. 3), within Parco Nazionale dell'Appennino Lucano Val d'Agri Lagonegrese. The only known population counts about 200 individuals growing on north-exposed rocks between 1500 and 1650 m a.s.l., at the upper border of *Fagus sylvatica* wood, around and below the Sanctuary of the Madonna Nera of Viggiano. *Hieracium hypochoeroides* subsp. *peracutisquamum* belongs to a chasmophytic plant community characterized by several biogeographically interesting taxa such as *Viola aethnensis* subsp. *mesanensis*, *Saxifraga paniculata* subsp. *stabiana*, *S. rotundifolia*, *Sempervivum tectorum*, *Silene parnassica*, *Edraianthus graminifolius* subsp. *graminifolius*, and *Pimpinella tragium*.

TAXONOMIC RELATIONSHIPS: The collective species *Hieracium hypochoeroides* is likely a young aggregate of microtaxa that evolved during the post-glacial period. Many of the taxa so far described are local endemics. Their growth form is very constant (leaves in a basal rosette, stem with at most one leaf, synflorescence $\pm$ laxly paniculate to racemose). Differences between the microtaxa are limited to the shape of leaves and phyllaries and to the indumentum of peduncles and phyllaries (presence and quantity of stellate, glandular or simple hairs). In Basilicata, the *H. hypochoeroides* complex has so far been repre-

sented by *H. hypochoeroides* subsp. *serinense*, a taxon endemic to the Sirino Mountain (Lagonegro, Potenza province). It is known only from the type locality (Gottschlich 2007). The two subspecies have ecological affinities (both grow on shaded carbonate cliffs) but they are clearly morphologically distinct. *Hieracium hypochoeroides* subsp. *peracutisquamum* has peduncles and phyllaries with numerous glandular hairs, and the phyllaries are filiform in the upper part, while *H. hypochoeroides* subsp. *serinense* has peduncles and phyllaries usually without glandular hairs, and the phyllaries are acute but not filiform in the upper part.

Hieracium hypochoeroides subsp. *peracutisquamum* adds to the considerable number of new endemic *Hieracium* taxa recently discovered in southern Italy (Raimondo & Di Gristina 2004, 2007, Di Gristina *et al.* 2013, 2014, Gottschlich *et al.* 2013, 2015, Caldarella *et al.* 2014).

CONSERVATION STATUS: According to the IUCN (2010) criteria, *Hieracium hypochoeroides* subsp. *peracutisquamum* should be classified as "Critically Endangered" (CR): B1a+2a; C2a(ii).

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