Hieracium bertisceum (Compositae), a new species from the State Union of Serbia and Montenegro

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Abstract

Hieracium bertisceum is described as a species new to science and illustrated. It is compared with H. (sect. Hieracium) transylvanicum and H. oxyodon (bupleuroides-bifidum) and is assumed to originate from the crossing of these two species, an assumption further supported by its similarity to the equally sympatric H. pseudobifidum (transylvanicum-bifidum). Currently it is only known from a mountain ridge of Mt Marijaš in the Prokletije Mts, in the central Balkan Peninsula.

As far as the number of described taxa (over 12 000, IPNI 2005) is concerned, Hieracium belongs to the richest genera in the plant kingdom; considering the complex evolution, followed by diverse types of reproduction and hybridization, it certainly belongs to the taxonomically most complicated genera, too. In the Balkan Peninsula, especially in the territory of the State Union of Serbia and Montenegro, the genus has one of its diversity centres (Stevanović et al. 1995): according to Zahn’s classification (Zahn 1922-38, Behr & al. 1937, 1939a-b) 84 species, including 23 “species principales”, with 235 subspecies of Hieracium s.str. (excl. Pilosella Hill.) were recorded from its territory so far. However, until now no group has been comprehensively studied in this area. Recent initial studies of certain aggregates resulted in the preliminary report of several new species (Niketić & al. 2003). In the present contribution, a new species is described and illustrated, which was discovered among few poorly known similar taxa during field excursions in the Prokletije Mts.

Hieracium bertisceum Niketić, sp. nov.

Holotype: State Union of Serbia and Montenegro, Kosovo, Metohija, Mts Prokletije, Mt Marijaš, 42°36’N, 20°06’E, c. 2350 m, open stony ridge between Pinus peuce and P. mugo communities on limestone, 28.8.1997, M. Niketić A21 (BEO; isotype: B) – Fig. 1.

Transitus oxyodon-transylvanicum. Species nova Hieracio pseudobifido et H. transylvanico affinis, a quibus foliis basalis rigidis lanceolatis basi attenuatis apice longe acuminatis, foliis caulinis bracteiformis, capitulis inferiorioribus saepe abortis differt; ab altero etiam pedunculis
Hieracium bertisceum from the State Union of Serbia and Montenegro

Fig. 1. Hieracium bertisceum – A: habit; B: pedicel segment, showing the indumentum; C: involucral bract, showing the indumentum; D: apex of marginal flower. – Scale bars: A = 5 cm; B = 1 mm; C-D = 3 mm.

Phyllopodum, olivaceo-virens vel ± glaucescens, mono- vel bicaule. Caulis 30-50 cm tenuis subflexuosus substratiatus basi saepe violaceus, inferne stellato-pilosus et pilosus (basi subvilloso), medio sparsim stellato-pilosus, apicem versus densius stellato-pilosus ± canus subglandulosus (raro breviter pilosus et eglandulosus), oligocephalus. *Folia* rigida, rosularia numerosa (7-10), exteriora minora saepe ovata basi rotundata obtusa, interiora late vel anguste lanceolata 4-8 cm longa ad basim attenuata longe (4-8 cm) petiolata, apice longius acuminata, valde grosse dentata, dentes longissime mucronati; caulina (1-)2-3 anguste lanceolata vel bracteiformia; omnia ± glaucescentia supra disperse breviterque pilosa, margine costaque dorsali et in petiolo (ut etiam folia novella) dense rubrobrunneo-villoso-barbata (2-4 mm) et stellato-pilosa. *Anthela* furcata vel umbellato-paniculata c. 1/10 totius caulis longa, capitula (1-)2-5(-10), sed ramalia inferiora saepissime hau edoluta cum capitulis abortis, ramis 0-4 gracilibus 1(-2)-cephalous, acladio 2-5 cm longo; pedunculis cano-stellato-pilosus modice vel dense et plerumque longe obscure glandulosus ± epilosis (raro breviter albo pilosis et eglandulosis), apice parum incrassatis; bracteoles (1-)2-3(-4) parvis. *Involucra* 9-11 mm longa, ovato-cylindrica vel crasse ovata basi rotundata, squamis angustis acutiusculis obscuris viridi-marginatis, epilosis densiuscule obscure glandulosis (raro subdense albo pilosis et sparse breviter subglandulosis) modice vel inferne densius stellato-piloso-marginatis. *Ligulae* aureoluteae plerumque apice sparse breviter ciliatae. *Styli* obscuri. *Achenia* rubrobrunnea, 3.5-4 mm longa.

Rosette-forming perennial, olive-green or glaucescent, with 1-2 stems. Stem 30-50 cm tall, slender, subflexuose, substrate, often purplish violet at base, stellate-pilose and pilose in the lower part (subvilloso at base), scatteredly stellate-pilose in the middle part, ± densely greyish stellate-pilose and subglandulose towards the apex (rarely shortly pilose and eglandulose), with few capitula. *Leaves* rigid, *basal leaves* 7-10 in a rosette, petiole 4-8 cm long; outer ones smaller, often ovate, rounded at base, obtuse; inner ones broadly or narrowly lanceolate, with blades 4-8 cm long, attenuate at base, long-acuminate at apex, intensely coarsely toothed, teeth very long-mucronate; *cauline leaves* (1-)2-3, narrowly lanceolate or bract-shaped; all ± glaucescent, sparsely shortly pilose above, densely rusty villously bearded and stellate-pilose at the margin, on the midvein beneath and on the petiole (also on the surface of young leaves). *Synflorescence* forked or umbellato-paniculata, comprising c. 1/10 of the stem length, with (1-)2-5(-10) capitula, but basal branchets very often poorly developed with aborted capitula; branches 0-4, very slender, with 1(-2) capitula, terminal branch 2-5 cm long; peduncles moderately or densely greyish stellate-pilose and often obscurely-long glandulose and ± epilose (rarely shortly whitish pilose and eglandulose), slightly thickened at apex; bracteoles (1-2-3-4), very small. *Involucere* 9-11 mm long, ovato-cylindrical or broadly ovalate, rounded at base; involucral bracts lanceolate, slightly acute, blackish green with green margins, epilose and ± densely obscurely glandulose (rarely subdensely whitish pilose and sparsely shortly glandulose), moderately or, in the lower part, densely ‘floccosely’ edged. *Ligules* golden-yellowish, often sparsely short-ciliate at apex. *Styles* dark. *Achenes* reddish brown, 3.5-4 mm long.

**Etymology.** – The name of the species refers to the mountain chain where the new species occurs, i.e. the Bertiscus Mts (or North Albanian Alps, or Prokletije Mts in Serbian, or Bjeshkët e Nemuna Mts in Albanian).

**Phenology.** – Flowering in August.

**Distribution and habitat.** – Known only from the recent type collection from Mt Marijaš in the Prokletije Mts (Fig. 2) and presumably a stenoendemic. It occurs in the subalpine belt at an altitude of 2300-2400 m, on exposed limestone slopes in the vegetation zone of *Pinus peuce* Griseb. and *P. mugo* Turra. Herbaceous plants growing in its vicinity include *Hieracium oxyodon* Fries, *Arenaria biflora* L., *Carex kitaibelliana* Degen ex Bech., *Gentiana verna* L., *Geum montanum* L., *Willdenowia* 35 – 2005 267

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Meum athamanticum Jacq., Minuartia recurva (All.) Schinz & Thell., Gnaphalium pichleri Murb., Salix waldsteiniana Willd., Saxifraga sempervivum C. Koch, Silene multicaulis Guss., Tanacetum larvatum (Griseb.) Kanitz, Thesium alpinum L., Veronica alpina L., Viola zoysii Wulfen and Wulfenia blecicii Lakušić. The related H. pseudobifidum Schur and H. transylvanicum Heuffel have a sympatric distribution, growing only several hundred meters away, on rocky substrate within the Pinus peuce forest.

Conservation status. – Hieracium bertisceum is known only from one population and one location with an area of occupancy of less than 10 km². The number of mature individuals is estimated as less than 500. By using a software application (Nikitic 1999a) the threat category (IUCN 2001) of H. bertisceum has been estimated as CR B1 / EN C2a / VU C3a; D1; D2. According to criterion B1 (area of occupancy less than 10 km² and only a single location) it should be classified as Critically Endangered (CR).

Relationships. – The newly described species is morphologically similar to the hybridogenous Hieracium oxyodon (bupleuroides-bifidum), which probably originated as a cross between representatives of Hieracium sect. Drepanoidea and sect. Hieracium. As in the southeastern Dinarides, only H. oxyodon subsp. oxyodon was recorded in the habitat (Zahn 1922-38(1930), Niketić 1999b) and grows in the immediate vicinity of H. bertisceum. The main differential characters of these two species are the shape and hairiness of the leaves. In H. bertisceum, young leaves have a characteristic cover of thick rusty hairs, which clearly points at the relationship with the equally sympatric diploid H. transylvanicum (Chrtek 1996, Vladimirov 2000, Mráz & Szelag 2004). The latter species, from which c. 30 other hybridogenous groups originate, forms a separate group within H. sect. Hieracium (Zahn 1935). As H. bertisceum is in many morphological characteristics intermediate between H. oxyodon and H. transylvanicum, and as its population number is much lower than that of these two sympatric species, it may be assumed that H. bertisceum resulted from the crossing of them in a rather recent past. The hybridogenous combination oxyo-
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