

***HIERACIUM WIMMERI* (ASTERACEAE), A SPECIES NEW FOR THE EASTERN SUDETES**

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Abstract. *Hieracium wimmeri* R. Uechtr., a mountain species known to date in Poland from the Karkonosze Mts and Tatra Mts, has been found in the Śnieżnik Massif in the Eastern Sudetes. A map of the general distribution of *H. wimmeri* and illustrations of the newly collected specimens are presented.

Key words: Asteraceae, *Hieracium wimmeri*, distribution map, Śnieżnik Massif, Poland

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During my field studies on the vascular flora of the Śnieżnik Massif in the 1980s and 1990s, I paid particular attention to the genus *Hieracium*, of which ca 800 herbarium sheets were collected. Unfortunately, not all of this collection could be determined in time to be included in the published flora (Szelağ 2000). Recently Dr. Jindřich Chrtěk determined or revised this material. Thanks to his help, the flora of the Śnieżnik Massif has been enriched with a mountain species, *Hieracium wimmeri* R. Uechtr. (Fig. 1).

The new station of *H. wimmeri* is in the upper part of the Dolina Kleśnicy valley on the saddle between Mt. Śnieżnik Kłodzki and Mt. Żmijowiec, at ca 1100 m a.s.l. This occurrence of *H. wimmeri* was confirmed in September 2010; its population was composed of 13 fruiting individuals. *Hieracium wimmeri* grows in a herb community along a road to the Hala pod Śnieżnikiem glade, in association with *Campanula barbata* L., *Deschampsia caespitosa* (L.) P. Beauv., *Hypericum maculatum* Crantz, *Nardus stricta* L., *Potentilla aurea* L., and *Viola lutea* subsp. *sudetica* (Willd.) Nyman.

Apart from this newly discovered station, in Poland *H. wimmeri* also occurs in the Karkonosze Mts, where it was observed at four locations at the end of the 20th century (Szelağ 2003). The station from the Góry Izerskie Mts (Fiek & Uech-

tritz 1881) probably does not exist anymore. Its occurrence at the only known location in the Polish Tatra Mts (Dolina Kondratowa valley) reported by Zahn (1938) has not been confirmed for many years now.

In the Czech Republic *H. wimmeri* occurs in the Krkonoše Mts and is considered to be an extremely endangered species (Chrtěk 2004). In the latest edition of the *Black and Red List of the Krkonoše/Karkonosze Mts* (Štursa et al. 2009), *H. wimmeri* was listed as critically endangered (CR) in the Polish part of the mountains and as endangered (EN) in the Czech part.

Hieracium wimmerii was described from the Karkonosze Mts (Uechtritz 1872). It belongs to *H. epimedium* agg., which comprises ca 32 taxa presumably of hybrid origin and the morphological formula *H. bifidum*–*H. juranum*, which Zahn (1938) conservatively kept at subspecies rank. Taxa of *H. epimedium* agg. are distributed in the Alps, Carpathians, Sudetes and Scandinavia (Zahn 1921–1923). *Hieracium wimmerii* occurs in the Sudetes and Western Carpathians and at disjunct localities in the Eastern Carpathians (Fig. 2) (Zahn 1938). According to Zahn (1921–1923), plants from the Alps represent a separate taxon intermediate between *H. wimmeri* and *H. intebellifolium* Arv.-Touv. Therefore the localities from the



Fig. 1. Specimens of *Hieracium wimmeri* R. Uechtr. from the newly discovered station.

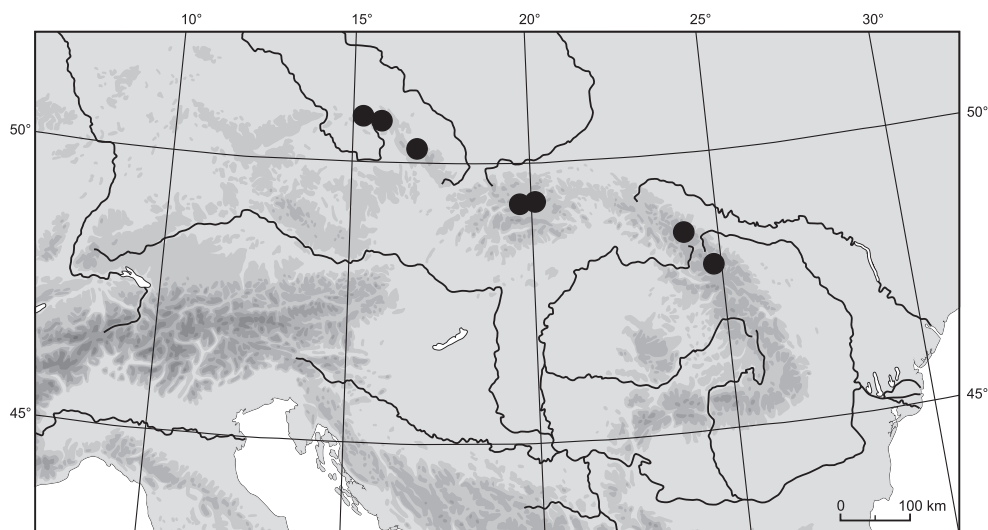


Fig. 2. General distribution of *Hieracium wimmeri* R. Uechtr.

Alps are not considered on the distribution map of *H. wimmerii* (Fig. 2).

***Hieracium wimmeri* R. Uechtr.**

Fig. 1

Oesterr. Bot. Z. **22**: 277. 1872.

H. epimedium subsp. *wimmeri* (R. Uechtr.) Zahn in Schinz & Keller, *Fl. Schweiz*, ed. 3, **2**: 481. 1914.
 – *H. juranum* subsp. *wimmeri* (R. Uechtr.) Zahn in Hallier & Wohlfarth, Koch's, *Synop. Deutsch. Schweiz. Fl.*, ed. 3: 1881. 1901. – *H. macilentum* subsp. *wimmeri* (R. Uechtr.) Greuter, *Willdenowia* **37**: 164. 2007.
 – *H. froelichianum* subsp. *wimmeri* (R. Uechtr.) Gottschlich & Greuter in Greuter & von Raab-Straube, *Med-Checklist* **2**: 311. 2008.

Stem 15–40 cm high, at the base with numerous, pale, 1–2 mm long simple hairs with or without single stellate hairs; in the middle with sparse, up to 1.5 mm long simple hairs, scattered stellate hairs and single microglands; within synflorescence with scattered, dark-based, 0.5–1.5 mm long simple hairs, dark glandular hairs, and numerous stellate hairs. Basal leaves 2–6, petiolate, obovate to elliptic, attenuate at the base, obtuse or subacute at apex, 6–12(–15) cm long, 1–3 cm wide, sparsely denticulate, on both surfaces covered by scattered, up to 1 mm long simple hairs or on the upper surface glabrous. Cauline leaves 1–3, rapidly reduced upwards, 2–5(–9) cm long, sessile, attenuate at

the base, acute at apex, sparsely denticulate or almost entire, on the upper surface glabrous or with sparse, up to 1 mm long simple hairs, on the lower surface with scattered simple hairs and sparse stellate hairs. Synflorescence with 1–5 capitula (when monocephalous then the other capitula aborted). Acladium 1.0–3.5 cm long. Peduncles erect, with numerous to dense stellate hairs, numerous, dark, 0.3–0.7 mm long glandular hairs and scattered, dark-based, up to 1 mm long simple hairs. Involucres campanulate and subglobose at the base, 9–10 mm long, covered by moderately dense indumentum. Involucral bracts lanceolate, subacute at apex, the outer bracts blackish green with numerous, dark-based, 1.0–1.2 mm long simple hairs, scattered, black glandular hairs and sparse stellate hairs; the inner bracts with pale margins and less dense indumentum. Ligules yellow, 14–16 mm long with few, simple hairs at apex. Styles dark. Achenes blackish, 3.2–3.4 mm long. Flowering: end of July and August. (Description based on the plants from the Śnieżnik Massif. Vouchers stored in author's herbarium).

Hieracium wimmerii was found to be triploid, with chromosome number $2n = 27$ counted in plants from the Krkonoše Mts (Chrtěk 1994).

When considering the distribution of the mountain *Hieracium* species that are common for the

Sudetes and Western Carpathians, we observe two distributional types: (1) Western Carpatho-Sudetic, represented by *H. alpinum* L., *H. atratum* Fries, *H. engleri* R. Uechtr., *H. nigratum* R. Uechtr. and *H. wimmeri*; and (2) Western Carpatho-Eastern Sudetic, represented by *H. grabowskianum* Nägeli & Peter, *H. moravicum* Oborny, *H. silesiacum* E. Krause, *H. stygium* R. Uechtr. and *H. villosum* Jacq.

Only *Hieracium wimmeri* could not be put into this pattern until recently, displaying an Eastern Sudetic disjunction (Chrtek 2004). The Śnieżnik Massif station fills the gap that used to separate the Karkonosze Mts and Western Carpathian ranges.

Hieracium wimmeri is the only mountain representative of the genus of Western Carpatho-Sudetic distributional type, which within the Eastern Sudetes grows only on the Śnieżnik Massif. Most representatives of this group are absent from this massif, occurring in the Hrubý Jeseník Mts instead. This preference for the Hrubý Jeseník Mts is even more visible within the Western Carpatho-Eastern Sudetic group, of which only *H. stygium* grows in both mentioned Eastern Sudetic ranges. The distribution of the remaining species of this distributional type is represented by *H. silesiacum* (Szelaĝ 2004).

ACKNOWLEDGEMENTS. I am grateful to Dr. Jindřich Chrtek (Průhonice) for determination of my herbarium material and for valuable discussions on the distribution of *Hieracium wimmeri* in the Czech Republic, and to the anonymous reviewer for helpful remarks on the manuscript.

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Received 4 October 2011