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Lectotypification of the name *Hieracium rohacsense* Kit. (Compositae)**Abstract**

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A lectotype is designated for *Hieracium rohacsense*, the name of a species restricted in its distribution to the subalpine belt of the W Carpathians with two doubtful localities in the E Carpathians. The lectotype is a specimen collected in the Západné Tatry (Roháče) Mts in Slovakia and kept in the Kitaibel herbarium in the Hungarian Museum of Natural History (BP) in Budapest.

Sell & West presented in 'Flora europaea' (Sell & West 1976: 394) the concept of a *Hieracium rohacsense* group (in the morphological position *H. alpinum* L. < *H. bifidum* Kit. ex Hornem.), which includes in their opinion also *H. bifidellum* (Zahn) P. D. Sell & West, *H. bipediforme* Dahlst., *H. callistophyllum* F. Hanb. and *H. conspurcans* Norrl. This group is, however, to a large extent artificial and comprises taxa with more or less numerous stellate trichomes on peduncles and involucres, a character that is more likely the result of convergent evolution than of close relationship.

Many authors in the Central European literature (e.g. Zahn 1922-39, Janchen 1958, Nyárády 1965, Beldie 1979, Huber-Morath 1984, Wittmann & al. 1987, Dostál 1989, Hartl & al. 1992, Popescu & Sanda 1998) treated under the name *H. rohacsense* s.str. not only populations from the W Carpathians, on which the name is based, but also from the Sudeten Mts, Alps, E and S Carpathians. In contrast to this view the taxonomic study of the first author analysing chromosome numbers, morphological characters and isozymes (Mráz & al. unpubl.) revealed that *H. rohacsense* is a tetraploid apomictic species ($2n = 36$) and its distribution area is restricted to the subalpine belt of the W Carpathians (both in Slovakia and Poland) with two doubtful localities in the E Carpathians (Svydovets Mts, Ukraine, documented by specimens in PR). For the populations in the E Alps, S and E Carpathians consequently other names must be used. Among them are *H. rauzense* Murr at least for some populations of this group in the E Alps, *H. rauzense* subsp. *farinifloccum* Degen & Zahn for some populations of the E Carpathians, and *H. rauzense* var. *ratezaticum* Nyár. & Zahn for some populations of the S Carpathians. The latter two taxa most probably require the rank of species.

Hieracium rohacsense differs from *H. rauzense* by the character of its indumentum on the involucre (denser covered with simple eglandular trichomes), by the shape of its basal and cauline leaves, by the base of its cauline leaves (narrow versus broad to semiamplexicaul in *H.*

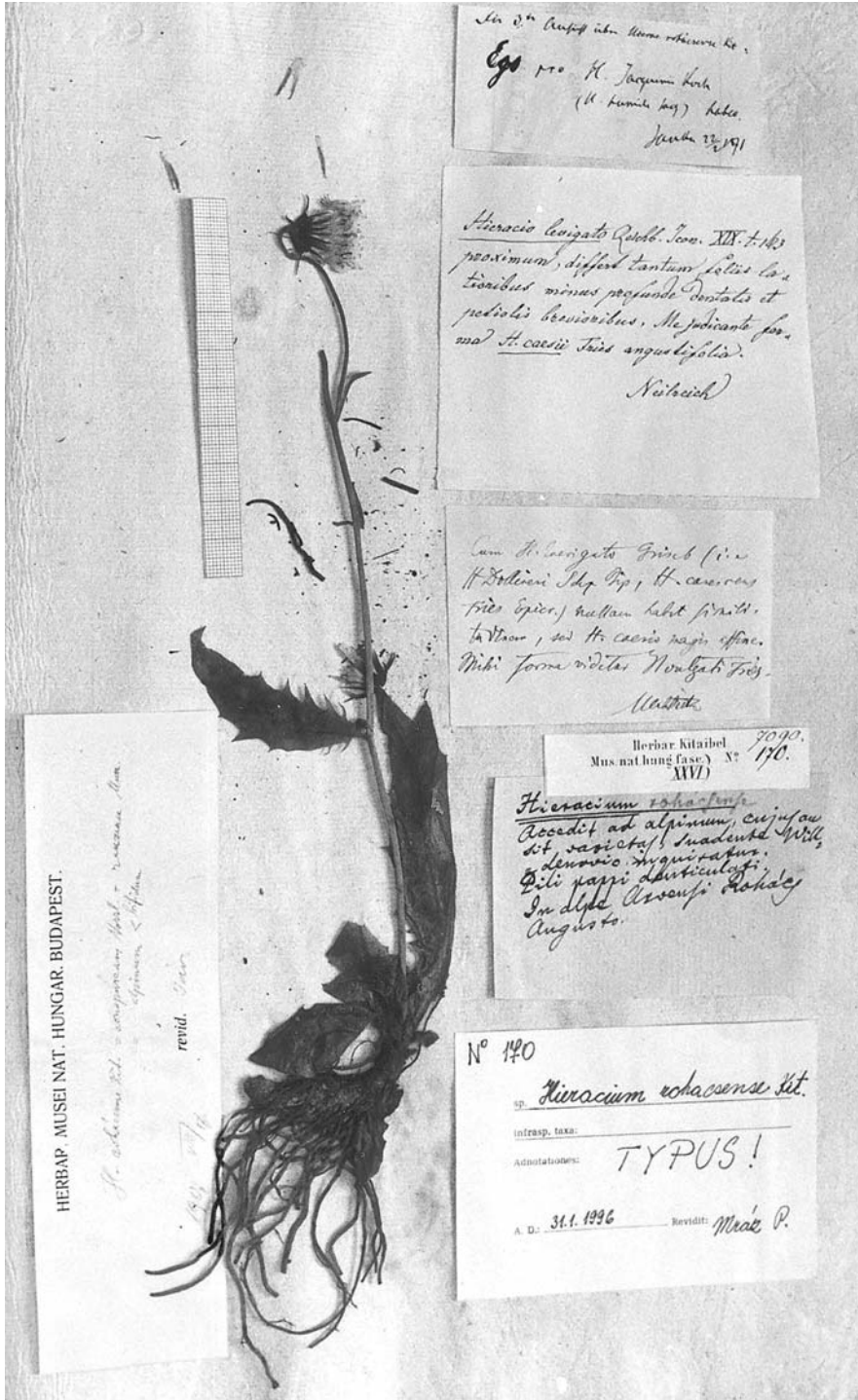


Fig. 1. *Hieracium rohacsense* Kit. (lectotype, BP).

rauzensense) and by the colour of the style at anthesis (black in *H. rohacsense* versus dark yellow to brown and often with dark sweeping hairs in *H. rauzensense*).

Morphologically next to *H. rohacsense* is a yet unnamed population from Mt Pop Ivan (E Carpathians, Ukraine). These plants have less grey and darker involucre bracts than *H. rohacsense* (because of less numerous stellate and clothing trichomes and more glandular trichomes) and their allozyme spectrum is also different.

The other two, more or less distantly related Carpathian taxa, *H. rauzensense* subsp. *farinifloccum* and *H. rauzensense* var. *ratezaticum*, differ from *H. rohacsense* by the shape of the basal and cauline leaves and by the character of the indumentum on the peduncles and involucre. The lamina of the basal and cauline leaves of *H. rauzensense* var. *ratezaticum* is broadly elliptical, whereas in *H. rohacsense* more narrowly oblanceolate. *H. rauzensense* subsp. *farinifloccum* has much shorter basal leaves than *H. rohacsense* and the basal part of the lamina is deeply dentate to the central vein (this character seldom occurs in *H. rohacsense*). The clothing and stellate trichomes on the involucre and the stellate trichomes on the peduncles of *H. rauzensense* var. *ratezaticum* are less numerous than in *H. rohacsense*, and *H. rauzensense* subsp. *farinifloccum* has fewer stellate trichomes on the involucre bracts than *H. rohacsense*.

In order to fix the correct application of the name *H. rohacsense* in its strict sense its proper typification is essential.

The name *H. rohacsense* first appeared in an unpublished manuscript by Pál Kitaibel (1757-1817), which was posthumously edited and published by Kanitz (Kitaibel 1863). As the name and description of this taxon are by Kitaibel, the correct author citation of the name is “Kit.” and not “Kit. ex Kanitz” as given in ‘Flora europaea’ (Sell & West 1976) and other sources.

The collecting locality and time as given in the protologue read: “In alpe Rohács Cottus Arvensis. Augusto”. Kitaibel collected the plant most probably in 1804 during his visit to the northern part of the former Kingdom of Hungary (Gombocz 1945). This part now belongs to the Slovak Republic.

A single corresponding specimen exists in Kitaibel’s herbarium deposited in the Hungarian Museum of Natural History (BP) in Budapest (Jávorka 1929). The specimen (fascicle XXVI, sheet number 170, see Fig. 1) is labelled by Kitaibel as follows: “*Hieracium rohacsense*. Accedit ad alpinum, cujus an sit varietas, suadente Willdenovio inquiratur. Pili pappi denticulati. In Alpe Arvensi Rohács Augusto” (Fig. 1) and is here formally designated as the lectotype of the name (duplicates may exist as in the case of other Kitaibel collections). The sheet bears a single plant, which corresponds well with the description in the protologue. The peduncles of the plant are covered by scattered simple eglandular, pale, dark-based, and numerous stellate trichomes; dark glandular trichomes are sparse. The involucre has scattered stellate trichomes, numerous eglandular simple trichomes and few dark glandular trichomes. The indumentum is greyish black in live plants but reddish brown in dried specimens as Kitaibel mentioned it in the protologue: “pedunculi ... tomento canescentes ... Calyx nigrescens, pilis nigro-fuscus, hirsutus”.

The name *H. rohacsense* was not accepted for a long time (by, e.g., Schneider 1891, Pax 1898-1908, Zahn 1921-23) until Jávorka (1925, 1929), after studying the specimen in Kitaibel’s herbarium, concluded that this name has priority over the names *H. rauzensense* and *H. conspurcans* in the case that the three taxa are considered conspecific.

Hieracium rohacsense Kit. in Linnaea 32: 422. 1863. – Lectotype (designated here): [Slovakia, Západné Tatry Mts], “in alpe arvensi Rohács”, [8.1804], P. Kitaibel (BP, herb. Kitaibel, fasc. XXVI, no. 170).

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References

- Beldie, A. 1979: Flora României, Determinator ilustrat al plantelor vasculare **2**. – București.
- Dostál, J. 1989: Nová květena ČSSR **2**. – Praha.
- Gombocz, E. 1945: Diaria itinerum Pauli Kitaibeli **1-2**. – Budapest.
- Hartl, H., Kniely, G., Leute, H. G., Niklfeld, H. & Perko, M. 1992: Verbreitungsatlas der Farn- und Blütenpflanzen Kärntens. – Klagenfurt.
- Huber-Morath, A. 1984: *Hieracia helvetica* V. – *Bauhinia* **8**: 3-22.
- Janchen, E. 1958: Catalogus florae Austriae. – Wien.
- Jávorka, S. 1925: Magyar flóra (Flora hungarica) **2**. – Budapest.
- 1929: Kitaibel herbariuma. Herbarium Kitaibelianum II. – *Ann. Hist.-Nat. Mus. Natl. Hung.* **26**: 97-210.
- Kitaibel, P. (Kanitz, A. ed.) 1863: Additamenta ad floram hungaricam. – *Linnaea* **32**: 305-642.
- Nyárády, E. I. 1965: Flora Republicii populare Romîne **10**. – București.
- Pax, F. 1898-1908: Grundzüge der Pflanzenverbreitung in den Karpathen **1-2**. – Leipzig.
- Popescu, A. & Sanda, V. (ed.) 1998: Conspectul florei cormofitelor spontane din România. – București.
- Schneider, G. 1891: *Hieracium* L. – Pp. 265-367 in: Sagorski, E. & Schneider, G., Flora der Centalkarpathen mit specieller Berücksichtigung der in der Hohen Tatra. – Leipzig.
- Sell, P. D. & West, C. 1976: *Hieracium* L. – Pp. 358-410 in: Tutin, T. G., Heywood, V. H., Burges, N. A., Moore, D. M., Valentine, D. H., Walters, S. M. & Webb, D. A. (ed.), Flora europaea **4**. – Cambridge, etc.
- Wittmann, H., Siebenbrunner, A., Pilsel, P. & Heiselmayer, P. 1987: Verbreitungsatlas der Salzburger Gefäßpflanzen. – *Sauteria* **2**.
- Zahn, K. H. 1921-23: *Compositae – Hieracium*. – In: Engler A. (ed.), Das Pflanzenreich **75-77**, **79**, **82**. – Leipzig.
- 1922-39: *Hieracium*. – In: Ascherson, P. F. A. & Gräbner, K. O. P. P. (ed.), Synopsis der mitteleuropäischen Flora **12(1-3)** + Registerband. – Leipzig.

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