

***Hieracium nigrescens* group in the Sudeten Mountains and the Western Carpathians**

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The *Hieracium nigrescens* group (*H. nigrescens* s.l.) includes taxa of morphologically intermediate position between *H. alpinum* and *H. murorum*, which are closer to the former (*H. alpinum* \geq *H. murorum*). They are distributed in higher mountains of the Central Europe and in the North, from Greenland to the Ural Mts. This research aims to propose a new taxonomic treatment of the group in the Western Carpathians (Slovakia, S Poland), and the Sudeten Mts. (N Czech Republic, SW Poland). Based on our own observations and studies of previously recognized taxa, we prepared a preliminary taxonomic treatment. To test it, we examined the morphological variation (total of 32 quantitative and qualitative characters), the genetic structure of species/populations by use of isozyme markers, chromosome numbers and the mode of reproduction (using emasculation/isolation experiments). Both multivariate morphometric and isozyme analyses provided support for recognition of 8 taxa, evaluated here at the species level, i.e. *H. apiculatum* TAUSCH, *H. chrysostyloides* (ZAHN) CHRTEK jun., *H. decipiens* TAUSCH, *H. nigrescens* TAUSCH (all from the Sudeten Mts.), *H. mlynicae* (HRUBY & ZAHN) CHRTEK jun., *H. vapenicanum* (LENGYEL & ZAHN) Chrtek jun. and *H. koprovanum* (RECH. fil. & ZAHN) CHRTEK jun. & MRÁZ (all from the Western Carpathians). Isozyme analysis revealed no variation within each

species. On the other hand, the recognized species clearly differ from each other in their banding patterns. With respect to the ploidy level ($x = 9$), tetraploids were strongly represented ($2n = 36$, *H. apiculatum*, *H. decipiens*, *H. nigrescens*, *H. mlynicae*), *H. vapenicanum* was triploid ($2n = 27$), and *H. chrysostyloides* was pentaploid ($2n = 45$). Agamospermy was confirmed for all species. While all species are genetically formed by one clone each, they differ in morphological variation. The highest phenotypic plasticity was found in *H. mlynicae*, which also includes genetically identical but morphologically slightly different population from Mount Babia hora. However, some questions remain still open, such as systematic position of *H. vapenicanum* (which may be better placed between *H. alpinum* and *H. bifidum*).

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