TAXONOMIC STUDY OF SELECTED SPECIES OF THE GENUS *HIERACIUM* S.STR. (*ASTERACEAE*) AND THEIR DISTRIBUTION IN BULGARIA

Summary

Hieracium L. (*Asteraceae*) is one of the most taxonomically intricate vascular plant genera, known for the largest number of described species among the entire plant kingdom. Taxonomic difficulties are due to the specific reproductive system of taxa, combining sexual and asexual reproduction (agamospermy, vegetative reproduction) with a wide presence of interspecific hybridization and polyploidy.

In the Bulgarian flora the genus is represented by a large number of species and is one of the largest genera of vascular plants. So far, there is no clarity about its taxonomic composition in the country, as well as any morphological descriptions of the taxa are lacking, and their habitats and distribution are poorly known. All this, as well as the forthcoming elaboration of the account of the genus for *Flora of the Republic of Bulgaria*, imposed the need for more in-depth study in the country.

The main goal of the present work is a taxonomic study of selected taxa of the genus *Hieracium* s.str. and their distribution in Bulgaria. Due to the large volume of the genus, the survey does not cover all its representatives in the country, but selected sections and species groups. The main tasks are related to literature review of previous studies of the genus in Bulgaria, study of collections in the Bulgarian and relevant foreign herbaria, field work and collection of herbarium materials and living plants for modern taxonomic treatment, study of chromosome numbers, genome size, ploidy levels, peculiarities of reproduction and outlining of the main evolutionary mechanisms in the genus.

The taxonomic diversity in seven sections of the genus was studied. The work includes 37 numbered taxa – 35 native and an alien species, as well as one natural hybrid. *H.* sect. *Villosa, H.* sect. *Barbata, H.* sect. *Naegeliana* and *H.* sect. *Amplexicaulia* are represented by one species each in the Bulgarian flora. Provisional name is proposed for a new section – *H.* sect. *Kittania*, which includes one species. *Hieracium* sect. *Pannosa* is presented with a total of 30 species and one natural hybrid. From *H.* sect. *Vulgata* only the diploid *H. transylvanicum* was studied. Three species new to science have been described – *H. kittaniae* Vladimirov, *H. petrovae* Vladimirov & Szeląg and *H. crinitopannosum* Szeląg & Vladimirov. The publications for two more new species are in preparation – *H. boreopirinicum* Szeląg & Vladimirov, nom. prov. and *H. kozhuharovii* Szeląg & Vladimirov, nom. prov. Two new species for the Bulgarian flora have been recorded for the first time – *H. amphigenum* (native) and *H. petraeum* (alien). The chromosome numbers for 7 species and one natural hybrid – *H. boreopirinicum, H. crinitopannosum, H. georgieffii, H. kittaniae, H. kittaniae* × *H. petrovae, H. neodivergens, H. petrovae* and *H. sericophyllum*, have been established for the first time. The genome size of 18 species and one natural hybrid has been measured for the first time. The conservation significance of all 35 species for which the IUCN Red-listing procedure is applicable has been evaluated. Two species were assessed as "Endangered (EN)", two – "Vulnerable (VU)", and 11 species – "Near Threatened (NT)".