

TAXONOMIC AND NOMENCLATURAL NOTES ON *HIERACIUM PAWLowskIANUM* (ASTERACEAE) AND ITS RELATIVES

ZBIGNIEW SZELĄG

Abstract: The taxonomic position of *Hieracium pawlowskianum* Nyár. from *H. sect. Cernua* R. Uechtr. is discussed. Based on morphological characteristics, *H. tomiasiforme* Nyár. and *H. riumarensse* Nyár. ex Szeląg were found to be conspecific with *H. pawlowskianum* and reduced to synonymy. Lectotypes for the names *H. pawlowskianum* and *H. tomiasiforme* are selected.

Key words: Asteraceae, *Hieracium* sect. *Cernua*, lectotypifications, new synonyms, nomenclature, taxonomy, Romania, South Carpathians

Zbigniew Szeląg, W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, PL-31-512 Kraków, Poland; e-mail: azszelag@wp.pl

INTRODUCTION

In 1937, Bogumił Pawłowski collected in the Retezat Mts (S Romania) some specimens of *Hieracium* L. which he described as *Hieracium paltinae* Jav. & Zahn subsp. *alexandri-borzae* Pawł. (Pawłowski 1939). The morphological distinctness of this taxon is undoubted, but its taxonomic position needs clarification. On the label of the herbarium sheet, with specimens selected here as lectotype, the (provisional) name *H. sparsum* Friv. subsp. *alexandri-borzae* Pawł. is visible, crossed out and changed personally by Pawłowski for *H. paltinae* subsp. *alexandri-borzae*. Nyárády (1965) raised *H. paltinae* subsp. *alexandri-borzae* to specific rank and named it *H. pawlowskianum* Nyár. Together with the change of its rank, Nyárády assumes *H. pawlowskianum* to be a hybrid between *H. paltinae* and, described at the same time, *H. tomiasiforme* Nyár. From the discussion in the protologue (Pawłowski 1939) it appears that both Pawłowski and Nyárády considered long hairs densely covering the capitula as a decisive argument for the postulated relationship with *H. paltinae*. However, the same kind of indumentum is found in *H. tomiasae* (Nyár. & Zahn) Nyár. (= *H. sparsum* Friv. subsp. *tomiasae* Nyár. & Zahn) belonging to the same species group, and yet it was never considered (cf. Zahn 1929).

During my studies of the South Carpathian representatives of *Hieracium* sect. *Cernua* R. Uechtr. and examination of corresponding type specimens, I came to the conclusion that three species accepted as distinct by Nyárády (1965), namely *H. tomiasiforme* Nyár., *H. riumarensse* Nyár. ex Szeląg and *H. pawlowskianum*, are conspecific. Two of them have equal priority. Of these, I give preference to *H. pawlowskianum*, with the following synonymy.

***Hieracium pawlowskianum* Nyár. (Figs 1 & 2)**
Fl. Rep. Pop. Române **10**: 518. 1965.

≡ *H. paltinae* subsp. *alexandri-borzae* Pawł., Bul. Grăd. Bot. Cluj **19**: 11. 1939. INDICATIO LOCOTYPICA: ‘Retezat: Butea SE 1800–1900 m, in rupestribus graminosis graniticis.’ – LECTOTYPE (selected here): B. Pawłowski (KRA 116112), Karpaty pd.-ws., góry Retezat: Butea (‘Mții Papușii’). Trawiasto-skalisté miejsca wśród kosówka. Granit. [Carpati Meridi-Orientales, Montes Retezat, Butea (‘Mții Papușii’) in rupestribus graniticus inter mugham], 1850–1900 m, 11. Aug. 1937. – ISOLECTOTYPE: CL 445013. – FURTHER SPECIMENS EXAMINED: [Romania, Southern Carpathians]: Retezat, na zboczach Valea Butii w *Calamagrostis* [Retezat Mts, on the slopes of Valea Buta in *Calamagrostis*], 11. Aug. 1937, T. Sulma (KRAM 271290 – same place and date as type collection, but not cited in protologue);

Comitat Hunyad, Retezat, In lapidosis sub cacumine alt. ca. 2200–2300 m, 2. Aug. 1907, A. de Degen (BP 191267).

= *Hieracium tomiasiforme* Nyár., Fl. Rep. Pop. Române **10**: 517. 1965, syn. nov. – NOTE. The original spelling of *Hieracium ‘tomiasaeforme’* (Nyárády 1965: 517) is correctable to *H. tomiasiforme* under Art. 60.8 of the Code (Greuter et al. 2000).

= *H. paltinae* subsp. *nigrovirenticeps* Nyár. & Zahn, Bul. Grăd. Bot. Cluj **8**: 77. 1929 ('1928') = *H. paltinae* subsp. *nigrescenticeps* Nyár. & Zahn in Ascherson & Graebner, Synop. Mitteleur. Fl. **12**(3): 686. 1938, nom. illeg. – INDICATIO LOCOTYPICA: ‘Ad lacum Zanoaga, 1850–2100 m’ – LECTOTYPE (selected here): *E. I. Nyárády* (CL 155463 – three plants), [Romania, Southern Carpathians] Retezat. In locis graminosis saxosisque inter *Pinos montanas* ca. lacum Zanoaga 1850–2100 m, 20. Jul. 1927. – ISOLECTOTYPES: CL 156596, 156602. – OTHER ORIGINAL SPECIMENS SEEN: *E. I. Nyárády* (CL 430371, 430376, 430377), [Romania, Southern Carpathians] Retezat. In graminosis alpinis inter *Pinos mantanas* sub lacum Zanoaga 1900 m solo granit., 8. Aug. 1928. – ICONOGRAPHY: Fl. Rep. Pop. Române **10**: 519, tab. 99, figs 2, 2a, 4. 1965.

= *Hieracium riumarense* Nyár. ex Szelag, Polish Bot. J. **48**: 12. 2003, syn. nov. – HOLOTYPE: *E. I. Nyárády* (CL 430313 – three plants), Romania, Southern Carpathians, Montes Godeanu. In rupestribus montis Tomeasa supra vallem Riu Mare, adversus montibus Retezat 1900 m, solo schist.-hum., 27. Aug. 1930. – ICONOGRAPHY: Fl. Rep. Pop. Române **10**: 503, Tab. 95, figs 2, 2a. 1965.

DISTRIBUTION AND HABITAT. *Hieracium pawlowskianum* is a very rare species, endemic to the Southern Carpathians, known so far from a few localities in the Retezat Mts and the Godeanu Mts. It grows in the subalpine zone in open places in *Pinus mugo* communities on granite at 1850–2100 m a.s.l.

DISCUSSION

Hieracium tomiasiforme and *H. riumarense* were described on the basis of the number and size of cauline leaves, color (from dark to almost black) and quantity of hair cover of capitula, and density of hairs covering the lower cauline leaves and the stem base. All these alleged differences fall within

the limits of variation of *H. pawlowskianum* and thus cannot be used for distinguishing supplementary taxa.

Hieracium pawlowskianum shows a combination of morphological characteristics of two taxa – *H. magocyanum* Ján. and *H. tomiasae* (Nyár. & Zahn) Nyár. – and can be considered a probable hybrid between them. The following features of *H. pawlowskianum* suggest its connection with *H. magocyanum*: hypophyllopod, 2–5(7) amplexicaul cauline leaves gradually diminishing in size, rounded to acute at apex, entire, somewhat coriaceous, with slightly revolute margins; synflorescence branches arising from the axils of upper cauline leaves; phyllaries up to 2 mm wide at base. The characteristics referring to *H. tomiasae* are: capitula densely covered with black, glittering hairs 4–6 mm long; dark peduncles with long, black, patent hairs; branches of synflorescence confined to the upper part of the stem; stem rather densely hairy in its lower part; margins and petioles of lower cauline leaves densely hairy; leaves of vegetative rosettes (at the stem base) densely hairy; phyllaries acute.

The distribution of *Hieracium tomiasae*, *H. magocyanum* and *H. pawlowskianum*, which occur side by side within a small area of the Retezat Mts and the neighboring Godeanu Mts, also supports the assumption of the hybrid origin of the latter.

Hieracium magocyanum and *H. tomiasae* are both triploid and apomictic (Mráz & Szelag, in press). The chromosome count for *H. pawlowskianum* remain unknown. The taxonomical status of *H. pawlowskianum* and its relation to *H. magocyanum* and *H. tomiasae* might be clarified by further genetic analysis.

Sell and West (1976) as well as Stace (1998) included *Hieracium pawlowskianum* and *H. tomiasiforme* [erroneously as *H. ‘thomaisaeforme’*] in *H. sect. Subalpina* Pugsley (= group XVII in *Flora Europaea*), but *H. magocyanum*, *H. riumarense* and *H. tomiasae* in *H. sect. Drepanoidea* Monnier (= group XXIV in *Flora Europaea*). My analyses do not support such a distinction, and I include *H. pawlowskianum*, *H. magocyanum* and *H. tomiasae* in *Hieracium sect. Cernua* R. Uechtr. redefined by Szelag (2003).



Fig. 1. Lectotype of *Hieracium pawlowskianum* Nyár (B. Pawłowski, KRA 116112).



Fig. 2. Inflorescences of *Hieracium pawlowskianum* Nyár. (lectotype – B. Pawłowski, KRA 116112).

ACKNOWLEDGEMENTS. I am grateful to Professor Gheorghe Coldea (Cluj-Napoca) for his hospitality during my visit to Cluj-Napoca, and to the Curators at BP and CL for making available for study the relevant collections. Special thanks are due Professor Werner Greuter (Berlin) for valuable comments on the manuscript and linguistic advice. This study was financed

by the Polish State Committee for Scientific Research (KBN grant 6 P04C 090 20).

REFERENCES

- GREUTER W., MCNEILL J., BARRIE F. R., BURDET H. M., DEMOULIN V., FILGUEIRAS T. S., NICOLSON D. H., SILVA P. C., SKOG J. E., TREHANE P., TURLAND N. J. & HAWKSORTH D. L. (eds) 2000. International code of botanical nomenclature (Saint Louis Code) adopted by the Sixteenth International Botanical Congress, St. Louis, Missouri, July-August 1999. *Regnum Veg.* **138:** 1–474.
- MRÁZ P. & SZELAG Z. (in press). Chromosome numbers in selected species of the genus *Hieracium* L. and *Pilosella* Hill (Asteraceae) from Romania. *Ann. Bot. Fen.*
- NYÁRÁDY E. I. 1965. *Hieracium* L. In: E. I. NYÁRÁDY (ed.), *Flora Republicii Populară Române*. **10:** 214–746, Editura Academiei Republicii Populară Române, București.
- PAWŁOWSKI B. 1939: Notulae floristicae ad Carpatos Austroorientales pertinentes. *Bul. Grăd. Bot. Cluj.* **19:** 1–20.
- SELL P. D. & WEST C. 1976. *Hieracium* L. In: T. G. TUTIN, V. H. HEYWOOD, N. A. BURGES, D. M. MOORE, D. H. VALENTINE, S. M. WALTERS, & D. A. WEBB (eds), *Flora Europaea*. **4:** 358–410. Cambridge University Press, Cambridge.
- STACE C. A. 1998. Sectional names in the genus *Hieracium* (Asteraceae) sensu stricto. *Edinb. J. Bot.* **55:** 417–441.
- SZELAG Z. 2003. A synopsis of *Hieracium* sect. *Cernua* (Asteraceae). *Polish Bot. J.* **48:** 89–97.
- ZAHN K. H. 1929. Hieracia Transsilvanica. A cl. E. I. Nyárády in montibus Răetezatensis et in regionibus adjacentibus lecta (cum nonnullis alis montium Carpatorum et Bihariae). *Bul. Grăd. Bot. Cluj.* **8**(1928): 33–86.

Received 21 March 2004