HIERACIA BALCANICA IX. TYPIFICATION OF THE *HIERACIUM* (ASTERACEAE) NAMES DESCRIBED BY J. FREYN FROM THE BALKAN PENINSULA

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Abstract. Thirteen names in *Hieracium* L. described by Josef Freyn from the Balkan Peninsula are lectotypified from among specimens stored at BRNM. For one species the holotype was found in BRNM. All discussed taxa are illustrated by photos of original specimens.

Key words: Baldacci, Balkan Peninsula, Brandis, *Hieracium*, Sintenis, typification, Vandas, Velenovský

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INTRODUCTION

Continuing a revision of Josef Freyn's collection in the Moravian Museum in Brno (cf. Szeląg 2012), I found original material for 14 *Hieracium* L. taxa of Freyn described from the Balkan Peninsula (Freyn 1876, 1891, 1895, 1897). They were based on material collected by Karel Vandas (1861–1923) and Josef Velenovský (1858–1949) in Bulgaria and Herzegovina, Antonio Baldacci (1867–1950) in Albania, Erich Brandis in Bosnia, Paul Ernst Emil Sintenis (1847–1907) in Greece, as well as personally by Freyn in Croatia.

Access to original herbarium material or at least illustrations for comparison is crucial when determining collected *Hieracium* specimens; therefore all lectotypes designated in this paper and one holotype are illustrated (Figs 1–14).

RESULTS

Hieracium albanicum Freyn Fig. 1

Bull. Herb. Boissier 3: 651, 666. 1895 – TYPE LOCALITY: 'Albania, in alpinis montis Stoge (Acroceraunia) die 10. julio 1892 leg. Baldacci (exs. 211 pro *H. calophyllum* f. *pseudophyllopoda* mihi); Hercegovina, Mostar: Kalkfelsen der Porim-Planina, 21. Aug. 1889 leg. Vandas (als *H. gymnocephalum* var. ? mihi)' – LECTOTYPE

(designated here): in alpinis m. Stoge (Acroceraunia), 10.07.1892, *A. Baldacci* 211 (BRNM 7289/36) – SYN-TYPE: Hecegovina, Kalkfelsen der Porim-planina (Mostar Kreis), 21.08.1889, *K. Vandas* (BRNM 7290/36).

Hieracium argyrotrichum Freyn Fig. 2

in Velenovský, Fl. Bulg.: 349. 1891 – TYPE LOCALITY: 'In rupestribus declivium m. Rhodope supra Dermendere et Sotir (Vel.)' – LECTOTYPE (designated here): Flora Bulgarica. In rupestribus decliv. m. Rhodope supra Dermendere, Aug 1889, *J. Velenovský* (BRNM 8297/36).

Hieracium aridum Freyn Fig. 3

Oesterr. Bot. Z. 26(1): 369. 1876 – TYPE LOCALITY: 'Habitat in colle aridissimo quem Monte Pero dicunt ad urbem Pola Istriae, in societate *H. adriatici* Näg. (florentis), *H. pilosellae* L. (defloratae) et *H. florentini* All. (florentis) rarissimum' – HOLOTYPE: Istrien. Wegränder oberhalb der Eisenbahn S. Abhänge des Mte. Pero bei Pola, im Gesellschaft von *H. adriaticum* Näg. (blüh.) *H. florentinum* All. (blüh.) und *H. pilosella* (verblüht). Bodenunterlage: Kalk. Seehöhe: 50 m, 9.06.1876, *J. Freyn* (BRNM 12174/36).

Hieracium bosniacum Freyn Fig. 4

Bull. Herb. Boissier 3: 508, 654. 1895 – TYPE LOCALITY: 'Bosnien, Staribrod an der serbischen Grenze, in 273 m.

Seehöhe, am 28. Juli 1894 leg. Brandis' – LECTOTYPE (designated here): Flora Bosniaca. Staribrod 273 mt., 28.07.1894, *E. Brandis* (BRNM 7244/36).

***Hieracium dolopicum* Freyn & Sint. Fig. 5**

Bull. Herb. Boissier **5**: 785. 1897 – TYPE LOCALITY: 'Thessalia graeca, Pindus dolopicus: ad parietes rupium in cacumine montis Coccino-Lithari prope Sermoniko die 21. aug. 1896 leg. Sintenis (exs. 1265)' – LECTOTYPE (designated here): Pindus dolop. Sermoniko: ad parietes rupium in summo montis Coccino-Lithari, 21.08.1896, *P. Sintenis 1265* (BRNM 7245/36) – ISOLECTOTYPES: BRNM 7246/36, BRNM 7247/36.

NOTE. According to Freyn (1897: 786) *Hieracium dolopicum* is similar to *H. odontophyllum* Freyn & Sint. from Turkey. I saw the original specimen of *H. odontophyllum* (Szelać 2012: 366, fig. 16), which in my opinion is a hybrid of the morphological formula *H. pannosum* – *H. umbellatum*, which does not fit *H. dolopicum* at all. In my opinion, *H. dolopicum* is similar to *H. pannosiformae* Freyn & Sint., another species also from Turkey (Szelać 2012: 360, fig. 10).

***Hieracium dolopicum* var. *minus* Freyn & Sint. Fig. 6**

Bull. Herb. Boissier **5**: 786. 1897 – TYPE LOCALITY: 'Thessalia graeca, Pindus dolopicus: ad parietes rupium montis Skala prope Sermoniko die 10. aug. 1896 leg. Sintenis (exs. 1129)' – LECTOTYPE (designated here): Thessalia graeca, Pindus dolopicus: ad parietes rupium montis Skala prope Sermoniko, 10.08.1896, *P. Sintenis 1129* (BRNM 7248/36).

NOTE. An examination of the type material of *H. dolopicum* s.str. and *H. dolopicum* var. *minus* revealed that they are not separable and must be considered conspecific.

***Hieracium eriobasis* Freyn & Sint. Fig. 7**

Bull. Herb. Boissier **5**: 787. 1897 – TYPE LOCALITY: 'Thessalia graeca, Pindus tymphaeus: ad rupes montis Turnara prope Chaliki die 26. junio 1896 leg. Sintenis (exs. 738)' – LECTOTYPE (designated here): Pindus tymph. Chaliki: ad rupes montis Turnara versus montem Saltura, 26.06.1896, *P. Sintenis 738* (BRNM 7260/36).

NOTE. According to Freyn (1897: 787), *Hieracium eriobasis* is a hybrid of the morphological

formula *H. candicans* > *H. villosum*. However, Zahn (1921: 584) regards *H. eriobasis* as a hybrid between *H. pannosum* and *H. murorum*. In my opinion, *H. eriobasis* belongs to *H. sect. Oreadea*.

***Hieracium flexicaule* Freyn & Vandas Fig. 8**

Bull. Herb. Boissier **3**: 645, 666. 1895 – TYPE LOCALITY: 'Hercegovina, in declivitatibus saxosis montis Velesch-Planina prope Smrčanj, aug. 1893, leg. Vandas (exs. 16)' – LECTOTYPE (designated here): Flora Hercegovinae centralis. In declivitat. saxosis mont. Velež pl. prope Smrčanj, Aug 1893, *K. Vandas 16* (BRNM 7252/36).

***Hieracium scheppigianum* Freyn Fig. 9**

Bull. Herb. Boissier **3**: 651, 665. 1895 – TYPE LOCALITY: 'Hercegovina, Trebinje: in saxosis montis Vutschi Zub rarum, julio 1891 leg. Vandas (pro *H. flexuosum*); in declivitatibus saxosis montis Prasa supra vallem Dobri Do 1400 m. s. m., aug. 1891 leg. Vandas (pro *H. flexuosum* × *orien* ? mihi)' – LECTOTYPE (designated here): Flora Hercegovinae centralis. In saxosis summi montis Vuči zub rarum (distr. Trebinje), Jun 1891 *K. Vandas* (BRNM 7250/36) – SYNTYPE: Flora Hercegovinae centralis. In declivitatibus saxosis montis Prasa supra vallem Dobri do ca. 1400 m s. m. (prope Trebinje), Aug 1891, *K. Vandas* (BRNM 7251/36).

***Hieracium secundum* Freyn Fig. 10**

in Velenovský, Fl. Bulg.: 352. 1891 – TYPE LOCALITY: 'In graminosis alpinis in formatione juniperina m. Osogovska Planina (Vel. Vs.)' – LECTOTYPE (designated here): Bulgaria. Osogovo Planina ad confines Macedoniae. Auf mehreren Stellen in der *Juniperus* Formation mit *H. eriopus* vermischt, Aug 1887, *Velenovský & Vandas* (BRNM 8574/36).

***Hieracium sermonikense* Freyn & Sint. Fig. 11**

Bull. Herb. Boissier **5**: 790. 1897 – TYPE LOCALITY: 'Thessalia graeca, Pindus dolopicus: in silvis prope Sermoniko supra pagum Bezula cum *H. racemosum* W. K. forma die 18. aug. 1896 (exs. 1197); Volo: in fagetis montis Pelion die 5. sept. 1896 (exs. 1277) leg. Sintenis' – LECTOTYPE (designated here): Pindus dolopicus Sermoniko in silvis supra Bezula, 18.08.1896, *P. Sintenis 1197* (BRNM 8553/36) – ISOLECTOTYPE: (BRNM 8552/36) – SYNTYPES: Velo; in fagetis montis Pelion, 5.09.1896, *P. Sintenis 1277* (BRNM 8365/36, BRNM 8554/36).

NOTE. Freyn (1897: 790) regards *Hieracium sermonikense* as a hybrid between *H. bracteolatum* Smith and *H. racemosum* Waldst. & Kit. In my opinion, the characteristic serration of leaves indicates rather a hybrid between *H. bracteolatum* and *H. crinitum* Smith.

***Hieracium subvillosum* var. *transiens* Freyn** Fig. 12

in Velenovský, Fl. Bulg.: 345. 1891 – TYPE LOCALITY: ‘Inter *Juniperus* regionis alpinae m. Petrohan-Balkan in societate sequentis (Vs. Vel.)’ – LECTOTYPE (designated here): Petrov Han in der Stara Planina. In der *Bruckenthalia* und *Juniperus* Formation auf den höchsten Bergketten, Aug 1887, Vandas & Velenovský (BRNM 8586/36).

NOTE. According to Zahn (1923: 1038), *Hieracium subvillosum* var. *transiens* Freyn is conspecific with *H. erythrocarpum* subsp. *leptobrachion* (Neiç. & Zahn) Zahn. Surprisingly, however, in the same work Zahn determined a specimen with admixture of simple hairs in the capitula indumentum as *H. erythrocarpum* subsp. *leptobrachion* fo. *transiens* (Freyn) Zahn.

***Hieracium velenovskyi* Freyn** Fig. 13

in Velenovský, Fl. Bulg.: 346. 1891 – TYPE LOCALITY: ‘In herbidis alpinis formationis juniperinae in m. Vitoša (Vel), m. Petrohan-Balkan (Vs. Vel), m. Rilo frequens (Vel)’ – LECTOTYPE (designated here): Bulgaria. Na Vitoši, 08.1885 Velenovský (BRNM 8603/36) – SYNTYPES: Stara Planina, Petrov Han. Sehr hoch, auf grasigen Waldplätzen in der Höhe der *Juniperus* Formation, Jul–Aug 1887 Velenovský (BRNM 8605/36); Bulgarien Petrov Han in der Stara Planina. In der *Bruckenthalia* × *Juniperus* Formation auf der höchsten Bergkette mit *H. tridentatum* Fr. var., Jul–Aug 1887, Velenovský (BRNM 8666/36).

NOTE. This is a morphologically outstanding endemic of the flora of Bulgaria which grows to this day at all localities given in the protologue. The biggest population of *Hieracium velenovskyi*, numbering a few thousand plants, is in the area of Mt. Aleko in the Vitoša Mts. In 1999, together with Dr. Vladimir Vladimirov, Sofia, we found a new locality of *H. velenovskyi* on the Mt. Botev massif in the Sredna Stara Planina Mts.

***Hieracium vulgatum* var. *fastigiatum* Freyn** Fig. 14

in Velenovský, Fl. Bulg.: 344. 1891 – *H. erythrocarpum* subsp. *acrocymum* Zahn in Engler, Das Pflanzenreich IV.280: 1040. 1922 – TYPE LOCALITY: ‘[Bulgaria] Inter Mughos ad jugum Kobylno branište m. Rilo (Vel)’ – LECTOTYPE (designated here): Flora Bulgarica. Inter *Pinus mughus* [illegible] Kobylno Branište in m. Rilo. Aug 1889, J. Velenovský (BRNM 8588/36).

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Fig. 1. Lectotype of *Hieracium albanicum* Freyn (BRNM 7289/36).

Fig. 2. Lectotype of *Hieracium argyrotichum* Freyn (BRNM 8297/36).

Fig. 4. Lectotype of *Hieracium bosniacum* Freyn (BRNM 7244/36).

Fig. 5. Lectotype of *Hieracium dolopicum* Freyn & Sint. (BRNM 7245/36).

Fig. 6. Lectotype of *Hieracium dolopicum* var. *minus* Freyn & Sint. (BRNM 7248/36).

Fig. 7. Lectotype of *Hieracium eriobasis* Freyn & Sint. (BRNM 7260/36).

Fig. 8. Lectotype of *Hieracium flexicaule* Freyn & Vandas (BRNM 7252/36).

Fig. 9. Lectotype of *Hieracium scheppigianum* Freyn (BRNM 7250/36).

Fig. 10. Lectotype of Hieracium secundum Freyn (BRNM 8574/36).

Fig. 11. Lectotype of *Hieracium sermonikense* Freyn & Sint. (BRNM 8553/36).

Fig. 12. Lectotype of *Hieracium subvillosum* var. *transiens* Freyn (BRNM 8586/36).

Fig. 13. Lectotype of *Hieracium velenovskyi* Freyn (BRNM 8603/36).

Fig. 14. Lectotype of *Hieracium vulgatum* var. *fastigiatum* Freyn (BRNM 8588/36).