

# HIERACIA BALCANICA X. TYPIIFICATION OF THE *HIERACIUM* (ASTERACEAE) NAMES DESCRIBED BY K. H. ZAHN FROM THE BALKAN PENINSULA

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**Abstract.** Twenty-two names in *Hieracium* L. described by Karl Herman Zahn from the Balkan Peninsula are lectotypified from among specimens stored at BRNM, PR and PRC. All considered taxa are illustrated by photos of original specimens.

**Key words:** Adamović, Balkan Peninsula, Dimonie, Formánek, *Hieracium*, Laus, Sagorski, typification, Vandas, Velenovský

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## INTRODUCTION

Continuing a revision of the *Hieracium* L. collection in Czech herbaria (Szelağ 2002, 2012, 2014) – the Moravian Museum in Brno (BRNM), National Museum in Prague (PR) and Charles University in Prague (PRC) – I found original material for 22 taxa described by Karl Herman Zahn from the Balkan Peninsula (Zahn 1907, 1909a, b, 1911, 1914, 1921–1923, 1925). They were based on specimens collected by Josef Velenovský (1858–1949), Eduard Formánek (1845–1900), Heinrich Laus (1872–1941) and Karel Vandas (1861–1923) in Bulgaria, Greece and Macedonia, by Lujo Adamović (1864–1935) in Serbia, by Ernst Sagorski (1847–1929) in Montenegro, and by Mihail Dimonie (teacher at the Romanian secondary school in Bitola, Macedonia) in Albania.

All lectotypes designated in this paper are illustrated (Figs 1–22), as an aid to identification of species.

## RESULTS

***Hieracium crinitum* subsp. *pseudoracemosum***  
Zahn Fig. 1

in Vandas, Reliq. Formánek. 358. 1909. – TYPE LOCALITY: ‘Xerolivadon in Macedonia’ – LECTOTYPE (des-

ignated here): Xerolivadon in Macedonia, *E. Formánek* (BRNM 8423/36).

***Hieracium camkorijense* Zahn** Fig. 2

Magyar Bot. Lapok **10**: 172. 1911. – TYPE LOCALITY: ‘[Bulgaria, Rila Mts] Čamkorija (Laus)’ – LECTOTYPE (designated here): Flora bulgarica, Čamkorija, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium dimonieï* Zahn** Fig. 3

Magyar Bot. Lapok. **8**: 299. 1909. – TYPE LOCALITY: ‘Albania: in montibus Korab, sol. calc. 15–2000 m., Iul. 1908 leg. Dimonië’ – LECTOTYPE (designated here): Albania in reg. alp. m. Corab sol. calc. July 1908, *M. Dimonië* (PRC *s.n.*).

***Hieracium erythrocarpum* fo. *angustifolium***  
Zahn Fig. 4

Magyar Bot. Lapok **10**: 171. 1911. – TYPE LOCALITY: ‘[Bulgaria, Rila Mts] Čamkorija, Musalla’ – LECTOTYPE (designated here): Bulgaria, Musalla, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium erythrocarpum* subsp. *melanocarpum***  
Zahn Fig. 5

Magyar Bot. Lapok **10**: 172. 1911. – TYPE LOCALITY: ‘In m. Vitoša Bulgariae (Laus)’ – LECTOTYPE

(designated here): Bulgarien: Vitoša, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium erythrodontum* subsp. *philippopolitanum*** Zahn Fig. 6

in Vandas, Reliq. Formánek. 347. 1909. – TYPE LOCALITY: ‘Džemdem Tepe pr. Philippopolin in Bulgaria (1897)’ – LECTOTYPE (designated here): Džemdem Tepe ad Philippop. Bulg., 11. August 1897, *E. Formánek* (BRNM 11810/36).

***Hieracium iuranomorphum*** Zahn Fig. 7

Magyar Bot. Lapok **10**: 174. 1911. – TYPE LOCALITY: ‘Bulgaria: Vitoša (Laus)’ – LECTOTYPE (designated here): Bulgaria: Vitoša, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium klisuræ*** Zahn Fig. 8

Magyar Bot. Lapok. **12**: 220. 1914. – TYPE LOCALITY: ‘In graminosis et lapidosis montis Rhodope supra pagum Belovo, ubi detexit a. 1911. In monte Balkan supra Klisura jam antea legit dom. Velenovský’ – LECTOTYPE (designated here): Bulgaria. Traviny Balkanu u Klisury, August 1885, *J. Velenovský* (BRNM 8609/36).

***Hieracium macrotrichum* subsp. *pletvariense*** Zahn Fig. 9

Repert. Spec. Nov. Regni Veget. **21**: 258. 1925. – TYPE LOCALITY: ‘Macedonia Serbica. Am Aufstieg von Pletvar östlich von Prilep auf den Koziak, leg. Vandas 12. August 1823’ – LECTOTYPE (designated here): Macedonia, Pletvar – Kozjak, 12. August 1823, ex herb. J. Rohlena (PRC *s.n.*).

***Hieracium olympicum* subsp. *subcrintum*** Zahn Fig. 10

in Vandas, Reliq. Formánek. 361. 1909. – TYPE LOCALITY: ‘Kamenicka pl., Dobrolucka pl. in mt. Rhodope Bulgaria, Ostrec in montes Rhodope, Bulgaria’ – LECTOTYPE (designated here): Ostrec, Rhodope, 2. August 1897, *E. Formánek* (BRNM 8304/36) – SYNTYPES: Kamenicka pl. Bg. *E. Formánek* (BRNM 8303/36), [illegible] (BRNM 8301/36, 8302/36).

***Hieracium pannosum* subsp. *trojanum*** Zahn Fig. 11

in Engler, Das Pflanzenreich **IV.280**: 564. 1921. – TYPE LOCALITY: ‘Bulgarien: Trojan Balkan, Trnovo, Rila usw.

(Urumoff), Musalla, Konjovo Planina (Podpera), Kalofer (Wagner), Serbien: Berg Basara, Zaječar 1500 m (Adamović pro [*H.*] *marmoreo*)’ – LECTOTYPE (designated here): [Serbia] Basara, *L. Adamović* (BRNM 7179/36).

***Hieracium plumulosum* subsp. *trichobrachion*** Zahn Fig. 12

in Engler, Das Pflanzenreich **IV.280**: 574. 1921. – TYPE LOCALITY: ‘Hercegovina: Plužine (Formanek)’ – LECTOTYPE (designated here): Hercegovina. Zalomskathal bei Plužine, 27. August 1888, *E. Formánek* (BRNM 7224/36).

***Hieracium pseudosparsum*** Zahn Fig. 13

in Vandas, Reliq. Formánek. 365. 1909. – TYPE LOCALITY: ‘Batak in montes Rhodope, Bularia’ – LECTOTYPE (designated here): Batak, mt. Rh. Bg., *E. Formánek* (BRNM 8607/36).

***Hieracium sparsiflorum* subsp. *paniculatissimum*** Zahn Fig. 14

Magyar Bot. Lapok **10**: 169. 1911. – TYPE LOCALITY: ‘Bulgaria: Čamkoriija (Laus)’ – LECTOTYPE (designated here): Flora bulgarica: Čamkoriija, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium sparsiflorum* subsp. *sparsiceps*** Zahn Fig. 15

in Vandas, Reliq. Formánek. 362. 1909. – TYPE LOCALITY: ‘Katlovi skali in montes Rhodope, Bularia’ – LECTOTYPE (designated here): Katlovi skali, Batak, mt. Rh. Bg., *E. Formánek* (BRNM 8566/36).

***Hieracium sparsiflorum* subsp. *subsparsicrinum*** Zahn Fig. 16

Magyar Bot. Lapok **10**: 170. 1911. – TYPE LOCALITY: ‘Bulgaria: Čamkoriija, Vitoša (Laus)’ – LECTOTYPE (designated here): Bulgaria: Vitoša, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium sparsiflorum* subsp. *vestiticeps*** Zahn Fig. 17

Magyar Bot. Lapok **10**: 170. 1911. – TYPE LOCALITY: ‘Bulgaria: Samokov (Laus)’ – LECTOTYPE (designated here): Bulgarien: Samokov, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium sparsum* subsp. *campanelliforme***

Zahn Fig. 18

in Engler, Das Pflanzenreich **IV.280**: 1026. 1922. – ‘*H. kotschyianum* Heuff.’ *sensu* Freyn in Velenovský, Fl. Bulg.: 351. 1891, *non* Heuff. 1853. – TYPE LOCALITY: ‘In pascuis alpinis m. Vitoša (Vle)’ – LECTOTYPE (designated here): Bulgaria. Na Vitoši, August 1885 J. Velenovský (BRNM 8572/36).

***Hieracium sparsum* subsp. *maricae* Zahn**

Fig. 19

in Engler, Das Pflanzenreich **IV.280**: 1020. 1922. – *H. sparsiflorum* var. *multifolium* Zahn, Magyar Bot. Lapok **10**: 170. 1911. – TYPE LOCALITY: ‘Bulgaria: in valle Marica (Laus)’ – LECTOTYPE (designated here): Bulgarien: Marica Tal, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium stuposum* subsp. *ueskuebiense***

Zahn Fig. 20

in Vandas, Reliq. Formánek. 360. 1909. – TYPE LOCALITY: ‘Üsküb in Macedonia’ – LECTOTYPE (designated here): Üsküb in Macedonia, E. Formánek (BRNM 8254/36).

***Hieracium subnitens* Oborny & Zahn Fig. 21**

Magyar Bot. Lapok **10**: 173. 1911. – TYPE LOCALITY: ‘Bulgaria: Čamkorija (Laus)’ – LECTOTYPE (designated here): Bulgaria: Čamkorija, July 1908, *H. Laus* (PR *s.n.*).

***Hieracium tommasinii* subsp. *adenothyrsus* Sag. & Zahn Fig. 22**

Magyar Bot. Lapok **6**: 223. 1907. – TYPE LOCALITY: ‘Montenegro: In fauce calc. pr. Njegus, 1000 m (Gelmi, Sagorski). Albania: Greča versus Selce (Baldacci), Trijepsi (Baldacci)’ – LECTOTYPE (designated here): Flora

montenegrina, Njegus, in einer Doline, July 1904, E. Sagorski (PRC *s.n.*).

ACKNOWLEDGEMENTS. I am grateful to the Curators of BRNM, PR and PRC for the loan of herbarium material and to the anonymous reviewer for helpful remarks on the manuscript.

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Received 4 May 2015



Fig. 1. Lectotype of *Hieracium crinitum* subsp. *pseudoracemosum* Zahn (BRNM 8423/36).



Fig. 2. Lectotype of *Hieracium camkorijense* Zahn (PR s.n.).



Fig. 3. Lectotype of *Hieracium dimonieii* Zahn (PRC s.n.).



Fig. 4. Lectotype of *Hieracium erythrocarpum* fo. *angustifolium* Zahn (PR s.n.).

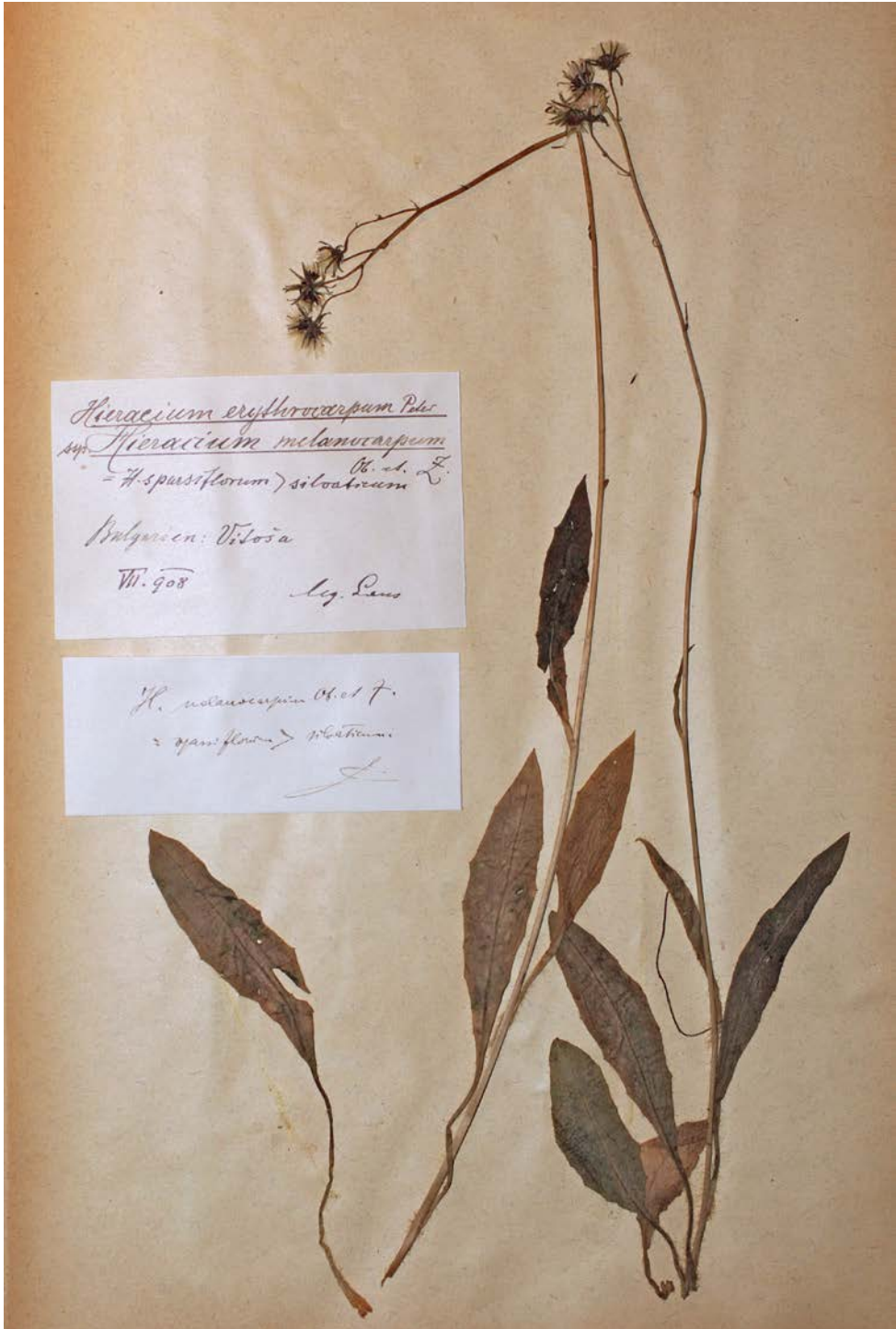


Fig. 5. Lectotype of *Hieracium erythrocarpum* subsp. *melanocarpum* Zahn (PR s.n.).



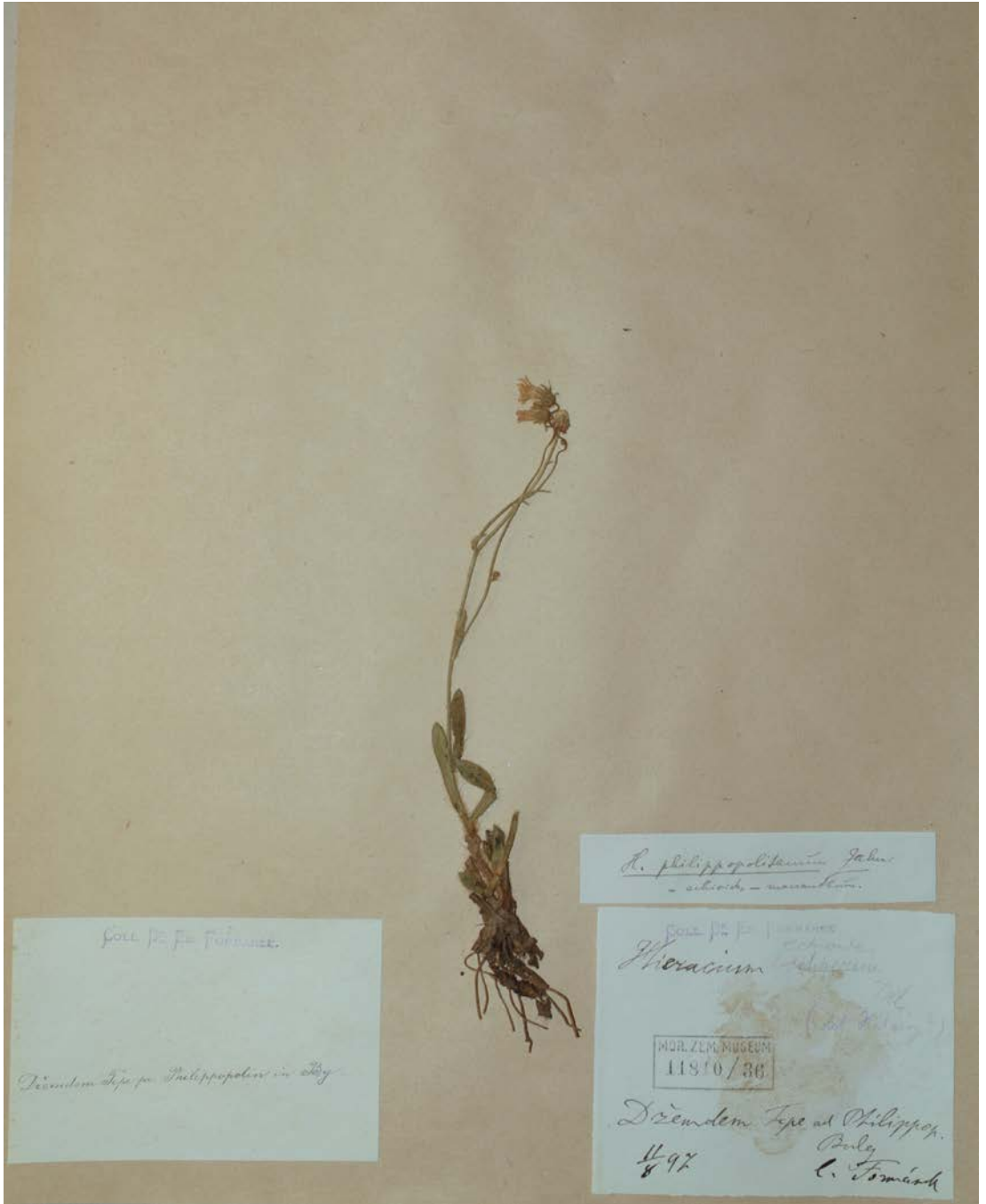


Fig. 6. Lectotype of *Hieracium erythrodontum* subsp. *philippopolitanum* Zahn (BRNM 11810/36).



Fig. 7. Lectotype of *Hieracium iuranomorphum* Zahn (PR s.n.).



Fig. 8. Lectotype of *Hieracium klisurae* Zahn (BRNM 8609/36).



Fig. 9. Lectotype of *Hieracium macrotrichum* subsp. *pletvariense* Zahn (PRC s.n.).



Fig. 10. Lectotype of *Hieracium olympicum* subsp. *subcrinitum* Zahn (BRNM 8304/36).



Fig. 11. Lectotype of *Hieracium pannosum* subsp. *trojanum* Zahn (BRNM 7179/36).



Fig. 12. Lectotype of *Hieracium plumulosum* subsp. *trichobrachion* Zahn (BRNM 7224/36).



Fig. 13. Lectotype of *Hieracium pseudosparsum* Zahn (BRNM 8607/36).





Fig. 14. Lectotype of *Hieracium sparsiflorum* subsp. *paniculatisimum* Zahn (PR s.n.).



Fig. 15. Lectotype of *Hieracium sparsiflorum* subsp. *sparsiceps* Zahn (BRNM 8566/36).

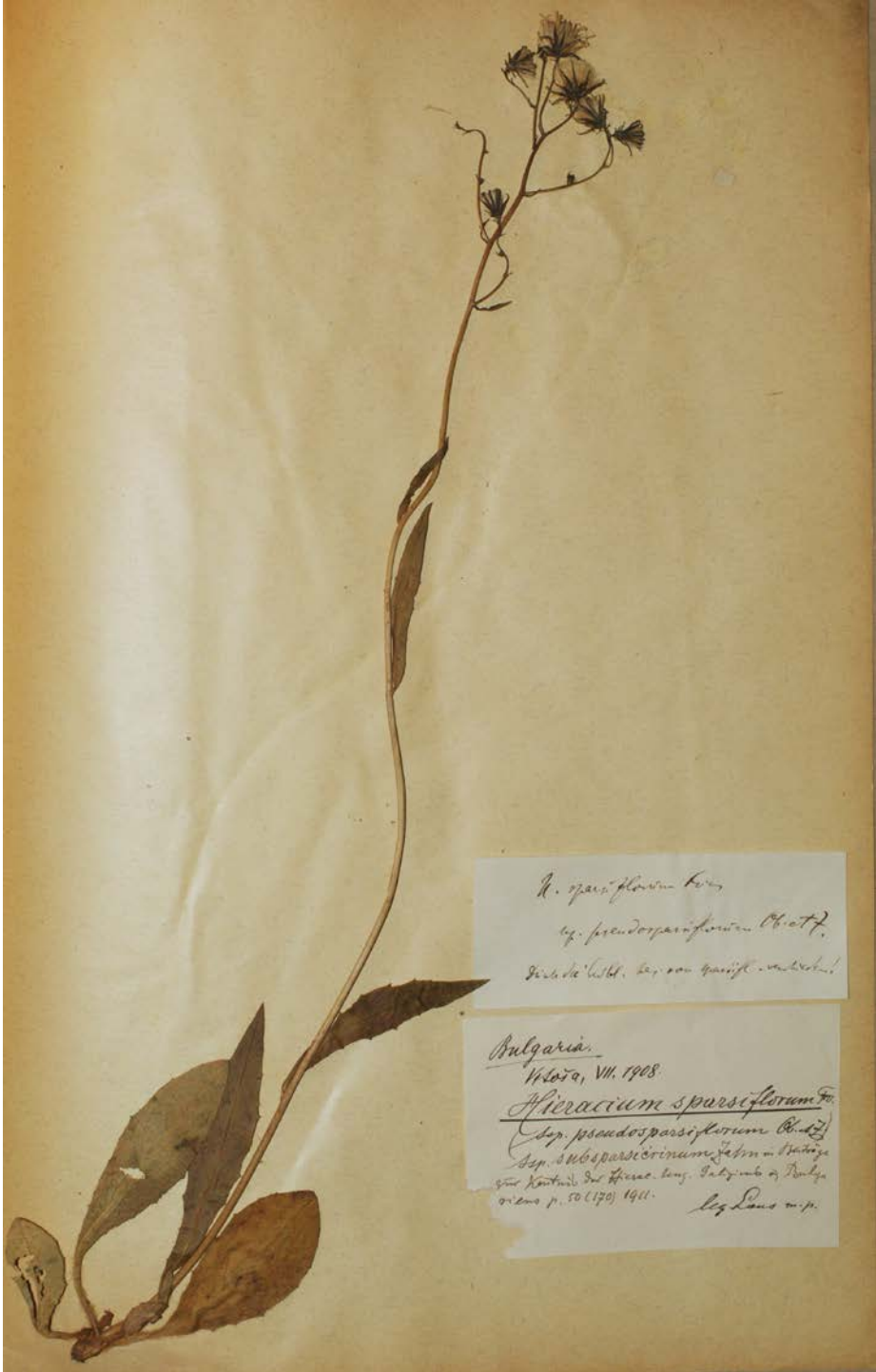


Fig. 16. Lectotype of *Hieracium sparsiflorum* subsp. *subsparsicrinum* Zahn (PR s.n.).



Fig. 17. Lectotype of *Hieracium sparsiflorum* subsp. *vestiticeps* Zahn (PR s.n.).



**Fig. 18.** Lectotype of *Hieracium sparsum* subsp. *campanelliforme* Zahn (BRNM 8572/36).

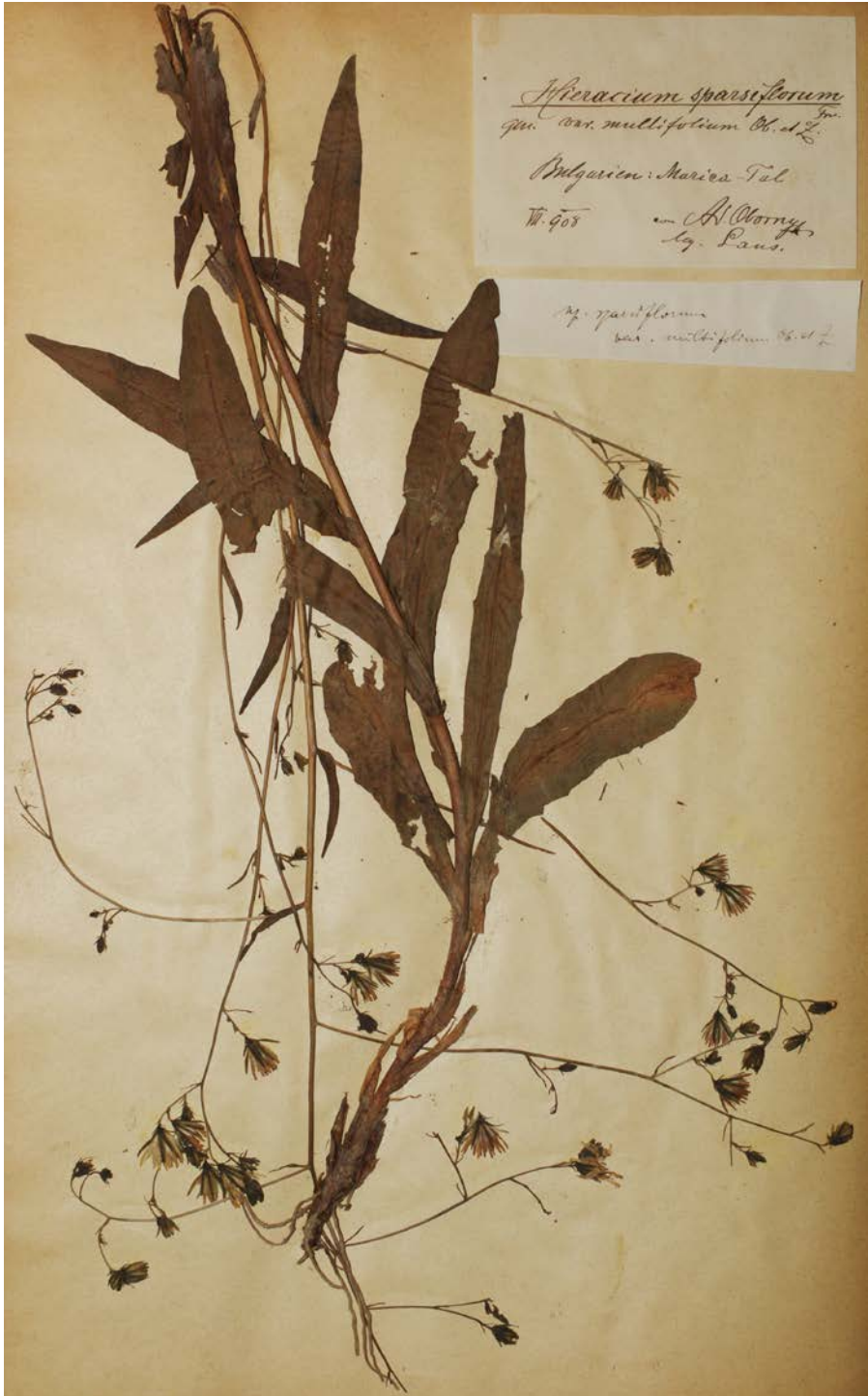


Fig. 19. Lectotype of *Hieracium sparsum* subsp. *maricae* Zahn (PR s.n.).



**Fig. 20.** Lectotype of *Hieracium stiposum* subsp. *ueskuebiense* Zahn (BRNM 8254/36).



Fig. 21. Lectotype of *Hieracium subnitens* Oborny & Zahn (PR s.n.).





Fig. 22. Lectotype of *Hieracium tommasinii* subsp. *adenothyrsum* Sag. & Zahn (PRC s.n.).