

A SYNOPSIS OF *HIERACIUM* SECT. *CERNUA* (ASTERACEAE)

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Abstract: Historically, the taxa of the *Hieracium sparsum* group have been included in several infrageneric taxa. At sectional level, *Hieracium* sect. *Cernua* R. Uechtr. has priority over *H.* sect. *Sparsiflora* Gus. Schneid. and *H.* sect. *Pseudostenotheca* (Fr.) Juxip. Seventy-three species and subspecies are placed in *H.* sect. *Cernua*. *Hieracium naegelianum* Pančić is transferred to the new monotypic sect. *Naegeliana* Zahn ex Szeląg.

Key words: *Asteraceae*, *Hieracium*, sect. *Cernua*, sect. *Naegeliana*, taxonomy, nomenclature, distribution

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INTRODUCTION

The *Hieracium sparsum* group (*H. sparsum* Friv. s.l., sensu Zahn 1922) constitutes a separate and morphologically fairly uniform complex of mountain, especially subalpine, taxa occurring in SE Europe and W Asia. In its geographical distribution, two diversity centers are easily recognizable: Balcanian, comprising the central part of the Balkan Peninsula with the S Carpathians; and Caucasian, including also NE Anatolia (Bräutigam 1992). In addition, only scattered, relict stations in the E Alps, E Sudetes, W and E Carpathians as well as in W Anatolia are known (Zahn 1922, 1938; Pawłowski 1963; Nyárády 1965; Szeląg 2000, 2003).

The characteristic features of the *H. sparsum* group are primarily capitula containing few ligules, involucre consisting of few, up to 2 mm wide, regularly obtuse, glabrous or sparsely tomentose imbricate phyllaries arranged in 2–3 rows; straw-grey pappus; sessile or sometimes amplexicaul stem leaves.

In the *H. sparsum* group di-, tri- and tetraploids have so far been detected (Chrtek 1996; Schuhwerk & Lippert 1998, 1999; Vladimirov & Szeląg 2001).

The problem of the sectional placement of the *H. sparsum* group has been considered previously by several prominent specialists in *Hieracium*. Originally, species of the *H. sparsum* group were

placed in sect. *Cernua* by Uechtritz (1875). Later, Schneider (1888) established for them the new section *Sparsiflora*. Zahn (1922) presented a comprehensive infrageneric classification of the entire genus *Hieracium* and included *H. sparsum* s.l. in sect. *Hololeia*. Juxip (1960) assigned the *H. sparsum* group to the newly recognized sect. *Pseudostenotheca* of very wide scope. Sell and West (1975) segregated Turkish species of *H. sparsum* group into three series, *H.* ser. *Sparsa*, *H.* ser. *Glauca* and *H.* ser. *Italica*. All these series names were published without Latin diagnoses or basionyms and remain invalid. Finally, Sell and West (1976) as well as Stace (1998) distributed European representatives species of the *H. sparsum* group among three sections, namely *H.* sect. *Drepanoidea*, sect. *Pseudostenotheca* and sect. *Subalpina*.

MATERIAL AND METHODS

The research was based mainly on herbarium material from PR, PRC, BRNM, BP, CL, G, W, LD, WRSL, KRA, KRAM, SO and SOM (herbaria abbreviations follow Holmgren *et al.* 1990), as well as field studies carried out for several years in the Balkan Peninsula, Carpathians, Sudetes, E Alps and W Turkey. Also, specimens of about 20 taxa were observed in garden culture. In the case of Caucasian taxa, only a limited num-

ber of herbarium sheets could be analyzed, and had to be supported by literature data. So far I have not been able to undertake field research in the Caucasian region; in that area, Georgia would particularly interesting, as the largest number of taxa of the *H. sparsum* group occur there. My limited information on Caucasian *Hieracium* taxa contrasts with rather thorough familiarity with European ones, so the checklist of taxa in sect. *Cernua* is only provisional. The articles of the *International Code of Botanical Nomenclature* (Greuter *et al.* 2000) are cited as 'ICBN Art.'

***Hieracium* sect. *Cernua* R. Uechtr.**

Österr. Bot. Z. **25**: 215. 1875 – TYPE (ICBN Art. 22.6): *H. cernuum* Friv.

= *Hieracium* sect. *Sparsiflora* Gus. Schneid., Deutsch. Bot. Monatsschr. **6**: 122. 1888., *syn. nov.* – TYPE (ICBN Art. 22.6): *H. sparsiflorum* Fr., *nom. illeg.* (= *H. sparsum* Friv.),

= *Hieracium* sect. *Pseudostenotheca* (Fr.) Juxip in Fl. USSR **30**: 13. 1960., *syn. nov.* Basionym: *H.* [unranked] *Pseudostenotheca* Fr.: 7, 138. 1862. – LECTOTYPE: *H. sparsiflorum* Fr., *nom. illeg.* (= *H. sparsum* Friv.) selected by Stace (1998: 438).

= *Hieracium* [unranked] *Oligantha* A. Kern., Sched. Fl. Exs. Austro-Hung.: 64. 1881 [*'Oliganthae'*], *syn. nov.* – LECTOTYPE (selected here): *H. grisebachii* A. Kern.

NOTES. *Hieracium* sect. *Cernua* was validated by Uechtritz (1875) by means of the shortest possible diagnosis: the single word 'phyllopodum', as opposed to 'subaphyllopodum' characterizing *H.* sect. *Prenanthoidea* with which he compared his new section (all other descriptive matter in the protologue concerns one of the species mentioned). The automatic type *H. cernuum* Friv. is now generally considered synonymous with *H. sparsum* Friv.

Schneider (1888) presented an infrageneric classification of the European taxa of *Hieracium*, but this publication was overlooked by Zahn (1922) and, much later, by Stace (1998). In his publication, Schneider described several sections, including monotypic sect. *Sparsiflora* for *H. sparsiflorum* Fr. [*nom. illeg.*], i.e., *H. sparsum* Friv.

Hieracium sect. *Hololeion* Zahn was based on the earlier but invalid *H.* subg. *Hololejon* [Maxim., *nom. provis.*, *ex*] Fr. (*pro syn.*) (cf. Fries 1862) and first validated by Zahn in 1902. The

name is illegitimate, because Zahn cited *H.* sect. *Cernua* R. Uechtr. in synonymy (ICBN Art. 52.1) and also listed *H. sparsiflorum*, the type of *H.* sect. *Sparsiflora* Gus. Schneid., among the included species. It may be noted that the German term 'Rotte', as used in Koch's Synopsis, is a linguistic equivalent of the Latin term 'sectio', as can be seen when comparing the Latin and German versions of earlier editions of Koch's work (W. Greuter, pers. comm.).

Hieracium sect. *Hololeion* Zahn as well *H.* sect. *Hololeia* Zahn (1907: 244) are not included into synonyms of *H.* sect. *Cernua*, because both names are based on *H. hololeion* Maxim. which is recognized as a separate genus *Hololeion* Kitam.

HIERACIUM SECT. CERNUA, A PROVISIONAL LIST OF SPECIES AND SUBSPECIES

Zahn (1922, 1938) distinguished one collective species of *H. sparsum* s.l. subdivided into numerous subspecies, varieties and forms. Some of these were subsequently elevated to species rank. Also, new taxa of sect. *Cernua* were described mostly as species (Juxip 1960; Nyárády 1965). Therefore in the following list only species and subspecies are considered. Taxa of lower rank, the number of which would considerably extend the list, have been omitted. In the case of species originally described as lower rank taxa, basionyms or typonyms are also given. General information on geographical distribution was added for every taxon.

Juxip (1960) included in sect. *Pseudostenotheca* taxa of *H. sparsum* s.l. (sensu Zahn 1922) raised to specific rank along with other collective species: *H. erythrocarpum* Peter, *H. tschamkorijense* Zahn, *H. djimilense* Boiss., *H. dacicum* R. Uechtr. and *H. pelagae* Zahn. I do not regard these species as belonging to sect. *Cernua*.

Nikolaev (1990) placed Caucasian taxa of the *H. sparsum* group in sect. *Sparsiflora* Gus. Schneid. Several of the 21 cited species clearly do not belong to sect. *Cernua* and have not been included in the list.

H. abietogenum Nyár. ex SzelağPolish Bot. J. **48**(1): 11. 2003.

DISTRIBUTION. Romania.

H. amblylepis Boiss.Fl. Orient. **3**: 874. 1875.

DISTRIBUTION. Turkey.

H. beschtavicum (Litw. & Zahn) JuxipFl. USSR **30**: 47. 1960.*H. sparsiflorum* Friv. ex Fr. subsp. *beschtavicum* Litw. & Zahn, Repert. Nov. Spec. Regni Veg. **4**: 246. 1907.

DISTRIBUTION. Russia.

NOTE. The entire article of Sennikov (1998) was devoted to validation of Juxip's (1960) specific combinations. Sennikov's combinations seem superfluous, however, as Juxip unequivocally cited the protologue of every taxon he raised to species rank. At the same time, Sennikov himself did not avoid faults: (i) of the species of sect. *Cernua* he missed *H. svaneticiforme*; (ii) he cited *Feddes Repertorium* as the place of publication of protologues of several taxa of Zahn (1907), although the title of the journal was then *Repertorium novarum specierum regni vegetabilis* (the title was changed in 1965 – cf. Natho 1998).

H. borbasii R. Uechtr ex Borb.Magyar Bot. Lapok **3**: 48. 1904.

DISTRIBUTION. Bulgaria, Romania.

H. chromolepium ZahnVestn. Tifl. Bot. Sada **21**: 8. 1912.

DISTRIBUTION. Georgia.

H. concinnidens (Zahn) JuxipFl. USSR **30**: 58. 1960.*H. sparsum* Friv. subsp. *concinnidens* Zahn in Engler, Das Pflanzenreich **82**: 1028. 1922.

DISTRIBUTION. Georgia.

H. evolutum (Nyár. & Zahn) Nyár.Fl. Rep. Pop. Romîne **10**: 518. 1965.*H. sparsum* Friv. subsp. *tubulare* [var.] *evolutum* Nyár. & Zahn in Zahn, Bul. Grăd. Bot. Cluj **8**: 68. 1928.

DISTRIBUTION. Romania.

H. fagarasense (Nyár. & Zahn) Nyár.Fl. Rep. Pop. Romîne **10**: 506. 1965.*H. sparsum* Friv. subsp. *fagarasense* Nyár. & Zahn in Zahn, Bul. Grăd. Bot. Cluj **8**: 66. 1928.

DISTRIBUTION. Romania.

H. foliosissimum (Woronow & Zahn) JuxipFl. USSR **30**: 34. 1960.*H. sparsiflorum* Friv. ex Fr. subsp. *foliosissimum* Woronow & Zahn, Monit. Jard. Bot. Tiflis **22**: 31. 1912.

DISTRIBUTION. Turkey.

H. georgicum Fr.

Epicr. Gen. Hierac.: 106. 1862.

DISTRIBUTION. Georgia.

H. grisebachii A. Kern.Sched. Fl. Exs. Austro-Hung. **1**: 63. 1881.

DISTRIBUTION. Austria, Bulgaria?

H. idae (Zahn) P.D. Sell & C. WestNot. Roy. Bot. Gard. Edinb. **33**: 431. 1975.*H. sparsum* Friv. subsp. *idae* Zahn in Engler, Das Pflanzenreich **82**: 1021. 1922.

DISTRIBUTION. Turkey (Kaz Dag).

H. kiderense (Zahn) JuxipFl. USSR **30**: 57. 1960.*H. sparsiflorum* Friv. ex Fr. subsp. *kiderense* Zahn, Repert. Nov. Spec. Regni Veg. **4**: 246. 1907.

DISTRIBUTION. Russia (Daghestan).

H. kotschyanum Heuff.Flora **36**: 618. 1853.

DISTRIBUTION. Romania.

H. kotschyianum Heuff. subsp. *longidentatum*
Nyár. ex Szelağ

Polish Bot. J. **48**(1): 11. 2003.

DISTRIBUTION. Romania.

H. lailanum (Schelk. & Zahn) Juxip

Fl. USSR **30**: 59. 1960.

H. sparsiflorum Friv. ex Fr. subsp. *lailanum* Schelk. & Zahn, Izv. Kavk. Muz. **7**: 136. 1913.

DISTRIBUTION. Georgia.

H. longifoliosum Nyár. ex Szelağ

Polish Bot. J. **48**(1): 11. 2003.

DISTRIBUTION. Romania.

H. lubricicaule (Nyár.) Borza

Bul. Gräd. Bot. Cluj **14**: 59. 1934.

H. sparsum Friv. subsp. *lubricicaule* Nyár. in Zahn, Bul. Gräd. Bot. Cluj **8**: 66. 1928.

DISTRIBUTION. Romania.

H. macedonicum Boiss. & Orph. in Boiss.

Fl. Orient. **3**: 872. 1875.

DISTRIBUTION. Greece, Macedonia.

H. macrolepis Boiss.

Fl. Orient. **3**: 873. 1875.

DISTRIBUTION. Georgia, Russia (Daghestan), Turkey.

H. magocsyanum Jáv.

Magyar Fl.: 1224. 1925.

DISTRIBUTION. Romania.

H. mannagettae Freyn

Bull. Herb. Boiss. **6**: 986. 1898.

DISTRIBUTION. Turkey.

H. nigrilacus Nyár. in Zahn.

Bul. Gräd. Bot. Cluj **8**: 147. 1928.

DISTRIBUTION. Romania.

H. ostii-bucurae Nyár. ex Szelağ

Polish Bot. J. **48**(1): 12. 2003.

DISTRIBUTION. Romania.

H. pawlowskianum Nyár.

Fl. Rep. Pop. Romîne **10**: 518. 1965.

H. paltinae Jáv. subsp. *alexandri-borzae* Pawł., Bul. Gräd. Bot. Cluj **19**: 11. 1939.

DISTRIBUTION. Romania.

H. perfoliosum Nyár. ex Szelağ

Polish Bot. J. **48**(1): 12. 2003.

DISTRIBUTION. Romania.

H. pisaturense Nyár. in Zahn

Bul. Gräd. Bot. Cluj **8**: 149. 1928.

DISTRIBUTION. Romania.

H. porphyriticum A. Kern.

Österr. Bot. Z. **13**: 247. 1863.

DISTRIBUTION. Romania.

H. pseudokotschyianum (Nyár. & Zahn) Nyár.

Fl. Rep. Pop. Romîne **10**: 517. 1965.

H. sparsum Friv. subsp. *sparsicrinum* Deg. & Zahn [var.] *pseudokotschyianum* Nyár. & Zahn in Zahn, Bul. Gräd. Bot. Cluj **8**: 67. 1928.

DISTRIBUTION. Romania.

H. pseudotubulare (Nyár. & Zahn) Nyár.

Fl. Rep. Pop. Romîne **10**: 730. 1965.

H. sparsum Friv. subsp. *tubulare* Zahn [var.] *pseudotubulare* Nyár. & Zahn in Zahn, Bul. Gräd. Bot. Cluj **8**: 69. 1928.

DISTRIBUTION. Romania.

H. riumarense Nyár. ex Szelağ

Polish Bot. J. **48**(1): 12. 2003.

DISTRIBUTION. Romania.

H. schultziaenum Pančić & Vis.

Pl. serb. rar. a. nov. 3: 9 in Mem. r. Ist. Venet. Sci. **15**: 1870.

DISTRIBUTION. Bulgaria, Greece, Macedonia, Serbia.

H. secundum Freyn in Velen.

Fl. Bulg.: 352. 1891.

DISTRIBUTION. Bulgaria.

H. silesiacum Krause

Jahresb. Schles. Gesel. Vatr. Cultur **28**: 101. 1850.

DISTRIBUTION. Czech Republic, Poland, Slovakia.

H. simplicicaule (Somm. & Lev.) Peter

Nachr. Königl. Ges. Wiss. Göttingen **46**: 38. 1898.

H. svaneticum Somm. & Lev. ?var. *simplicicaule* Somm. & Lev., Nuovo Giorn. Bot. Ital. n. ser. **2**: 93. 1895.

DISTRIBUTION. Georgia, Russia (Daghestan).

H. sparsum Friv.

Flora **19**: 436. 1836.

DISTRIBUTION. Bosnia, Bulgaria, Greece, Macedonia, Romania?, Serbia, Turkey (Ulu Dag).

H. sparsum Friv. subsp. *acropolianthelum* Rech. fil. & Zahn,

Bot. Jahrb. Syst. **69**: 537. 1939.

DISTRIBUTION. Greece.

H. sparsum Friv. subsp. *campanelliforme* Zahn in Engler

Das Pflanzenreich **82**: 1026. 1922.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *chlorocaeioides* Nyár. & Zahn in Zahn

Bul. Gräd. Bot. Cluj **8**: 65. 1928.

DISTRIBUTION. Romania.

H. sparsum Friv. subsp. *deralense* Horv. & Pawł. in Pawł.

Acta Soc. Bot. Pol. **32**: 483. 1963.

DISTRIBUTION. Bosnia.

H. sparsum Friv. subsp. *georgieffii* Zahn in Stoj. & Stef.

Fl. Bulg. 1265. 1925.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *ipekanum* Rech. fil. & Zahn

Repert. Spec. Nov. Regni Veg. **38**: 352. 1934.

DISTRIBUTION. Albania.

H. sparsum Friv. subsp. *korabense* Behr & Zahn

Glasn. Skopsk. Naučn. Društva **18**: 64. 1937.

DISTRIBUTION. Macedonia.

H. sparsum Friv. subsp. *malomvizense* (Deg. & Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1028. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *malomvizense* Deg. & Zahn, Magyar Bot. Lapok **7**: 127. 1908.

DISTRIBUTION. Bulgaria, Romania.

H. sparsum Friv. subsp. *maricae* Zahn in Engler

Das Pflanzenreich **82**: 1020. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *sparsiflorum* var. *multifolium* Zahn, Magyar Bot. Lapok **10**: 170. 1911.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *melanotephrodes* Zahn in Engler

Das Pflanzenreich **82**: 1021. 1922.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *naegelianiformae* Behr & Zahn

Glasn. Skopsk. Naučn. Društva **18**: 64. 1937.

DISTRIBUTION. Macedonia.

H. sparsum Friv. subsp. *neiceffianum* (Deg. & Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1021. 1924, 'neitscheffianum'.

H. sparsiflorum Friv. ex Fr. subsp. *neiceffianum* Deg. & Zahn, Magyar Bot. Lapok **5**: 80. 1906.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *nikolovii* (Urum. & Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1027. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *nikolovii* Urum. & Zahn, Allgem. Bot. Z. **4**: 57. 1907.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *ottomalicum* Zahn in Engler

Das Pflanzenreich **82**: 1021. 1922.

DISTRIBUTION. Bosnia.

H. sparsum Friv. subsp. *paniculatisimum* Zahn in Engler

Das Pflanzenreich **82**: 1022. 1922.

DISTRIBUTION. Bulgaria, Greece.

NOTE. Zahn (1922: 1022) mentioned 'subsp. *camkorijense* Zahn, Magyar Bot. Lapok **10**: 169. 1911' as a synonym. This subspecies has never been described (cf. Zahn 1911).

H. sparsum Friv. subsp. *paulii* Szelağ

Feddes Repert. **111**: 251. 2000.

DISTRIBUTION. Italy (Südtirol).

H. sparsum Friv. subsp. *peninsulare* (Zahn) Zahn in Ascherson & Graebner

Synop. Mitteleur. Fl. **12**(3): 647. 1938.

H. sparsum Friv. subsp. *schultzianum* (Pančić & Vis.) Zahn var. *peninsulare* Zahn in Engler, Das Pflanzenreich **82**: 1020. 1922.

DISTRIBUTION. Bulgaria, Macedonia, Serbia.

H. sparsum Friv. subsp. *peristeriense* Behr & Zahn

Glasn. Skopsk. Naučn. Društva: **64**. 1937.

DISTRIBUTION. Macedonia.

H. sparsum Friv. subsp. *pilosifrons* Zahn in Engler

Das Pflanzenreich **82**: 1027. 1922.

DISTRIBUTION. Serbia.

H. sparsum Friv. subsp. *pseudosparsiflorum* (Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1020. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *pseudosparsiflorum* Zahn, Magyar Bot. Lapok **10**: 170. 1911.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *schuettianum* Zahn

Repert. Spec. Nov. Regni Veg. **30**: 237. 1932.

DISTRIBUTION. Montenegro.

H. sparsum Friv. subsp. *sparsiceps* (Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1020. 1922.

Basionym: *H. sparsiflorum* Friv. ex Fr. subsp. *sparsiceps* Zahn in Vandas, Reliq. Formanek.: 362. 1909.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *sparsicrinum* (Deg. & Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1022. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *sparsicrinum* Deg. & Zahn, Magyar Bot. Lapok **5**: 79. 1906.

DISTRIBUTION. Romania.

H. sparsum Friv. subsp. *squarrosobracchiatum* Behr & Zahn, *nom. inval.* (sine descr. lat.)

DISTRIBUTION. Macedonia.

H. sparsum Friv. subsp. *staraeplaninae* Zahn in Engler

Das Pflanzenreich **82**: 1021. 1922.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *subsparsicrinum* (Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1024. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *subsparsicrinum* Zahn, Magyar Bot. Lapok **10**: 170. 1911.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *subsparsiflorum* (Deg. & Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1028. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *subsparsiflorum* Deg. & Zahn, Magyar Bot. Lapok **5**: 78. 1906.

DISTRIBUTION. Bosnia, Bulgaria, Serbia.

H. sparsum Friv. subsp. *vestiticeps* (Zahn) Zahn in Engler

Das Pflanzenreich **82**: 1027. 1922.

H. sparsiflorum Friv. ex Fr. subsp. *vestiticeps* Zahn, Magyar Bot. Lapok **10**: 170. 1911.

DISTRIBUTION. Bulgaria.

H. sparsum Friv. subsp. *vierhapperi* Zahn Verh. Zool.-Bot. Gesel. Wien **74/75**: 42. 1925.

DISTRIBUTION. Austria.

H. sublubricicaule (Nyár. & Zahn) Nyár.

Fl. Rep. Pop. Romîne **10**: 517. 1965.

H. sparsum Friv. subsp. *sparsicrinum* Deg. & Zahn [var.] *sublubricicaule* Nyár. & Zahn in Zahn, Bul. Gräd. Bot. Cluj **8**: 67. 1928.

DISTRIBUTION. Romania.

H. subsimplex Somm. & Lev.

Nuovo Giorn. Bot. Ital., n. ser. **2**: 94. 1895.

DISTRIBUTION. Georgia.

H. svaneticiforme (Litw. & Zahn) Juxip

Fl. USSR **30**: 58. 1960.

H. sparsiflorum Friv. ex Fr. subsp. *svaneticiforme* Litw. & Zahn, Repert. Nov. Spec. Regni Veg. **4**: 245. 1907.

DISTRIBUTION. Russia.

H. telekianum Boros & Lengyel

Scripta Bot. Mus. Transsylv. **1**: 8. 1942.

DISTRIBUTION. Romania.

H. tomiasae (Nyár. & Zahn) Nyár.

Fl. Rep. Pop. Romîne **10**: 506. 1965.

H. sparsum Friv. subsp. *tamiasae* Nyár. & Zahn in Zahn, Bul. Gräd. Bot. Cluj **8**: 68. 1928.

DISTRIBUTION. Romania.

NOTE. Endemic to Tomeasa Mt. in the Godeanu Mts; doubtful locality in Serbia (Niketić & Zlatković 1998).

H. tomiasaeforme Nyár.

Fl. Rep. Pop. Romîne **10**: 517. 1965.

H. paltinae Jáv. & Zahn subsp. *nigrovirenticeps* Nyár. & Zahn in Zahn, Bul. Gräd. Bot. Cluj **8**: 77. 1928.

DISTRIBUTION. Romania.

H. tubulare (Zahn) Nyár.

Fl. Rep. Pop. Romîne **10**: 498. 1965.

H. sparsum Friv. subsp. *tubulare* Zahn in Engler, Das Pflanzenreich **82**: 1022. 1922.

DISTRIBUTION. Bosnia?, Romania.

H. zanoagae Pax. 'zanogae'

Grundz. Pfl.-Verbr. Karp. 2: 98. in Engler & Drude, Veget. Erde **10**. 1908.

DISTRIBUTION. Bosnia, Bulgaria, Romania.

SECTIONAL PLACEMENT OF *HIERACIUM* *NAEGELIANUM* PANČIĆ

Hieracium naegelianum Pančić is a rare species, known from only a few highest ridges of the central part of the Balkan Peninsula and from a few isolated stations from the Abruzzo Mts on the Apennine Peninsula (Zahn 1938).

Nägeli and Peter (1886) included *H. naegelianum* in unranked *Glaucina*. This group comprised five principal species: *H. bupleuroides* C. C. Gmel., *H. glaucum* All., *H. naegelianum* Pančić,

H. porrifolium L. and *H. stuposum* Rechb. [*nom. illeg.*] (cf. Gutermann *et al.* 1973) and 14 intermediate species.

Glaucina, as a name of a group of unspecified rank, was also used in Peter's (1894) work. This time, however, *H. naegelianum* was not mentioned; only the four remaining principal species were.

Zahn (1906) included *H. naegelianum* in a monotypic [unranked] 'Rotte' *Naegeliana*. The species therefore has been separated from *H. sparsum s.l.*, which was included in the 'Rotte' *Holo-leion* in the same publication. In his later publication, however, Zahn (1922) abandoned this view, including both above-mentioned *species principales collectivae* into sect. *Holo-leia*.

Sell and West (1976) placed *H. naegelianum* in their group 'xxiv' [= sect. *Drepanoidea* (Stace 1998)] along with the majority of species of sect. *Cernua* as well as some species included previously in the *Glaucina* group by Nägeli and Peter (1886).

Morphological differences between *H. naegelianum* and taxa of the *H. sparsum* group (sect. *Cernua*) are very conspicuous. *H. naegelianum* bears mostly only one, erect, globular, multi-flowered capitulum; flower styles yellow, sometimes darkening; pappus snow-white; achenes 3.2–3.5 mm, pale (straw-)yellow; stem rarely more than 20 cm tall; basal leaves usually numerous, \pm spatulate with rounded apex or elliptic-lanceolate and shortly acute, their margin always undulate; stem leaves (0)1–3, small, subulate. Specimens analyzed karyologically derived from Greece (Merxmüller 1975; Grau & Erben 1988) and Bulgaria (Vladimirov & Szelağ 2001) were triploid ($2n = 3x = 27$).

Apart from morphological characters, the two species differ in growth form. *H. naegelianum* spreads, forming a dense turf. In the Pirin Mts I observed continuous patches up to 3–4 m²; a similar growth mode, although to a lesser degree, is maintained also in cultivated specimens. Taxa of the *H. sparsum* group instead grow separately, forming small tufts.

There are also marked ecological differences between *H. naegelianum* and taxa of the *H. sparsum* group. *Hieracium naegelianum* is a calcicol-

ous plant of the alpine zone, descending sometimes to the subalpine zone, while *H. sparsum s.l.* grows on lime-poor soils of subalpine and upper montane zones throughout its European area.

All these morphological, biological and ecological differences justify separation of *H. naegelianum* from taxa of sect. *Cernua* and suggest its separate sectional placement.

***Hieracium* sect. *Naegeliana* Zahn ex Szelağ, sect. nov.**

Hieracium [unranked] XIX. *Naegeliana* Zahn, Magyar Bot. Lapok 5: 92. 1906, *nom. nud.*

TYPE: *H. naegelianum* Pančić

Plantae plerumque monocephalae, sed cultae nonnumquam tricephalae sunt. Involucra ovata, obscure-viridia vel nigrescentia, parce minuteque glandulifera et pilosa. Squamae imbricatae, ad basim ad 2 mm latae, apice obtusissimae. Folia basalia numerosa, sessilia, cano-virida, glabra, ad marginem undulata, glabra vel sparse pilosa. Folia caulina ad 3, reducta, tenuilanceolata vel subulata, sessilia, glabra. Achaenia straminea vel dilute brunnea, ad 3,5 mm longa. Pappus albus vel niveus.

DISTRIBUTION. Central part of the Balkan Peninsula (Serbia and Montenegro, Macedonia, Albania, Greece, Bulgaria), Italy (Abruzzo Mts).

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