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Nomenclatural notes on some names in the *Hieracium tenuiflorum* group (Asteraceae) of the Alps

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Abstract

The names belonging to the *Hieracium tenuiflorum* group (sect. *Hieracium*) as published by Zahn and others are discussed and typified. The accepted names are *H. tenuiflorum*, *H. tenuiflorum* subsp. *austrosilvularum*, *H. tenuiflorum* subsp. *glaucoviolascens*, *H. tenuiflorum* subsp. *pictoprasinum*, *H. tenuiflorum* subsp. *pseudomerianum*, *H. tenuiflorum* subsp. *sebini* and *H. murorum* subsp. *nemorensifolium*. Where possible, also names at the ranks lower than species and subspecies (i.e. varieties, subvarieties, forms and subforms) were typified. *Hieracium tenuiflorum* is typified by specimens preserved in Herbarium Bicknell. All the subspecies were typified by specimens preserved in G, PAV and TR, except *H. tenuiflorum* subsp. *austrosilvularum* whose original material went very likely lost. Eight varieties, two subvarieties, fifteen forms and three subforms were typified by specimens preserved in B, BASBG, G, GRM, PAV, TR and Z/ZT.

Keywords: France, Italy, Karl Hermann Zahn, Switzerland, typification

Introduction

Hieracium (Linnaeus 1753: 799) s.str. is one of the most diverse vascular plant genera among the angiosperms (Mraz *et al.* 2019), with more than 10,000 published names (IPNI 2023). The most complete taxonomic treatments of this genus were published by Zahn in the beginning of the last century (Zahn 1921, 1922, 1923, 1931, 1934). The current taxonomic treatment in Italy (Bartolucci *et al.* 2018; Gottschlich 2019) has not substantially changed Zahn's scheme. As a result of this, more than 1,300 taxa (species and subspecies) are reported from Italy (Bartolucci *et al.* 2018) and new species are being described every year (Di Gristina *et al.* 2019; Gottschlich & Orsenigo 2021; Gottschlich & Villa 2022). Zahn (1921, 1922, 1923, 1931, 1934) made an extensive use of taxonomic ranks lower than species and subspecies (i.e. varieties, subvarieties, forms and subforms) that are no longer a usual practice in current studies in *Hieracium*, despite they are allowed by the nomenclatural rules; see Art. 4.1 and 4.2 of International Code of Nomenclature for algae, fungi, and plants (hereafter ICN: Turland *et al.* 2018). Although many of these names will certainly remain permanently in the synonymy, it is possible that further studies will reveal that some of these varieties may represent local apomictic taxa. A lectotypification of these names may therefore become important.

As part of ongoing studies on the taxonomy and nomenclature of the genus *Hieracium* in Italy and the Alps (e.g., Di Gristina *et al.* 2012, Orsenigo *et al.* 2019), we present here a contribution that aims exclusively to provide typifications for *H. tenuiflorum* Arvet-Touvet in Bicknell (1896: 173) and all the infraspecific taxa listed by Zahn (1931, 1934) under *H. murorum* grex *tenuiflorum*. Since Zahn's monograph, no systematic review of the taxa listed under *H. tenuiflorum* has been carried out, except for some name recombination (Gottschlich in Raab-Straube & Raus 2013).

Material and methods

This work was carried out by analysing the relevant literature and studying specimens preserved at B, BASBG, BERN, FI, G, GJO, GRM, JE, LY, MPU, PAD, PAV, TR, W, Z and Herbarium Bicknell, Bordighera (acronyms follow Thiers 2023 [continuously updated]). Herbarium Bicknell is a private collection hosted in the Bicknell Clarence Museum in Bordighera (Italy) where the original material collected by Clarence Bicknell is stored. “The Bicknell Herbarium consists of 48 large packages of plants, containing specimens gathered in an area of about 330 km², as indicated in the work ‘Flora of Bordighera and San Remo’ published by Bicknell in 1896; there also exists the 49th package containing specimens of 172 exotic species, often accompanied by an indication of their country of origin. The collection of the above-mentioned 48 packages amounts to 11.216 herbarium sheets divided into 2.044 entities” (Martini 1981).

In this work, all taxonomical units for which we identified the original material are listed in alphabetical order. In the classification of intraspecific taxonomical units (Zahn 1931), Zahn’s system often does not coincide with the definitions given in volume 1 of the “Synopsis” (Ascherson & Graebner 1896–1898) for these ranks. In the case of *H. murorum* subsp. *tenuiflorum*, as classified by Zahn, it can be interpreted as follows (see Zahn 1931: 479).

- | | |
|---|---------------|
| 1. eu-tenuiflorum [bold!] | = subspecies |
| a. [bold!] genuinum [recte: tenuiflorum!] | = varietas |
| 1. normale [recte: tenuiflorum!] | = subvarietas |
| a. [cursive!] commune [recte: tenuiflorum!] | = forma |
| 1. [cursive!] verum [recte: tenuiflorum] | = subforma |

However, concerning var. b. *pilosiceps*, in the typographical arrangement Zahn omitted the rank of subvarieties and listed the next units directly below ‘b’. Because of the similar typography, we decided to accept these taxa as formae, too.

Abbreviations used in the following account: Ind. loc. = Indicatio loci = geographical information given in the protologue.

Typifications

1. *Hieracium murorum* [subsp. *pseudomerianum*] subforma *aestivale* Zahn (1934: 482)

Ind. loc.:—“Comer See z. B. Ponte S. Pietro im Val Sassina und zwischen Genico und Croce di Brentalon; Menaggio; Perledo-Esino”.

Type:—[ITALY. Lombardy, Prov. LC] “Lierna. Valletta di Regoledo, margine del sentiero che sale da Genico alla Croce di Brentalon, 31 Jul 1923, P. Rossi” (lectotype, designated here: PAV-LOM014983!).

Syntype:—[ITALY. Lombardy, Prov. LC] “Lierna, fraz. Genico sopra il paese presso i margini del sentiero del mulino di Lierna, 31 Jul 1923, P. Rossi” (PAV-LOM014256!).

Remarks:—In PAV we could trace two specimens that correspond to localities cited in the protologue (“between Genico and Croce di Brentalon) and bear labels handwritten by Zahn that make explicit reference to this new form. Unfortunately, one of these specimens is severely damaged, and no leaves are available (PAV-LOM014256); the second one is damaged, too (no capitula remain). However, in the second specimen, leaves are clearly visible and correspond to Zahn’s original description. The specimen PAV-LOM014983 is designated as a lectotype of the name.

Current name:—*Hieracium tenuiflorum*.

2. *Hieracium murorum* var. *austrohelveticum* Zahn (1921: 288)

≡ *Hieracium murorum* [subsp. *tenuiflorum*] forma *austrohelveticum* (Zahn) Zahn (1931: 481).

Ind. loc.:—[without indication].

Type:—[ITALY. Trentino Alto-Adige, Prov. BZ] “Oberbozen Sep 1924, L. Fenaroli” (neotype, designated here: TR-BOT027319!).

Remarks:—Zahn described this variety (later recombined as a form) without any clear reference to specimens

or collection areas but with a short diagnosis (“*cum pedicellis subdense pilosae*”). Only later, in the monograph of Ascherson & Graebner, he listed a series of localities for this form (Zahn 1931). Among the localities there are several that refer to collections by Luigi Fenaroli in the Lake Iseo area and in Oberbozen (South Tyrol). We could trace these specimens in Fenaroli’s herbarium in TR, including the specimen collected in Oberbozen (TR-BOT027319) bearing a label hand-written and signed by Zahn with the determination *H. murorum* subsp. *tenuiflorum* A.-T. β *pilosiceps* Zahn 2. *austrohelicum* Zahn. The specimen is in a good preservation state and has peduncles with rather dense simple hairs. For this reason, we agree to designate this specimen as a neotype.

Current name:—*Hieracium tenuiflorum*.

3. *Hieracium murorum* subsp. ***austrosilvularum*** P.Rossi & Zahn in Zahn (1934: 483)

Ind. loc.:—“Alpen von Lecco: Alpe Conghed [Colonghelli] im Val Monastero bei Abbadia! Mte Palmo [Pelmo] ob Pieve di Cadore 1300 m (Pampanini)”.

Remarks:—Zahn (1934) published this taxon with a diagnosis (“Blätter wie *silvularum* oder *grandidens* (äussere z. T. klein, oval, gezähnt), aber nur sehr kurz behaart; Stengel \pm dünn, wenigköpfig; Aeste 1–3, entfernt; Akladium 15–40 mm; Kopfstiele (sehr dünn) und Hülle (7–8 mm, zylindrisch, dunkelgrün, wenig flockig) nur kaum mässig- und kurz behaart und -drüsig; Schuppen schmal, spitzlich bis sehr spitz“ = “Leaves like *silvularum* or *grandidens* (outer partly little, ovate, denticulate), but only with very short simple hairs, stem \pm thin, with few capitula; branches 1–3, remote; akladium 15–40mm; peduncles (very thin) and involucre (7–8 mm, cylindrical, dark green, with sparse stellate hairs) only with few to subdense and short simple and glandular hairs; phyllaries narrow, subacute to acute”; and mentioned two localities: (Lecco Alps) Alpe Colonghelli (in the protologue the wrong name Alpe Conghed was indicated) in Val Monastero in Abbadia and Mount Pelmo (in the protologue the wrong name Palmo was indicated) Pieve di Cadore 1300 m, referring to a specimen collected by Pampanini. Unfortunately, we could trace no specimen referred to this taxon in PAV where the herbarium of Pietro Rossi is housed. We supposed that this specimen (as occurred to the others) went lost or was completely damaged by insect infestation. We looked also in FI and PAD, where Pampanini’s collections are hosted without success. In FI we could trace a single specimen of *H. tenuiflorum* in the area of Cadore. However, the information on the label does not match with that reported by Zahn (“boschi tra le acque a San Vito del Cadore, alt 1400 m). Moreover, there is no evidence that this specimen has been seen by Zahn, since the label bears only handwritten notes of the Italian hieraciologist Saverio Belli (“*Hieracium tenuiflorum* forma”). Although the leaves of the specimens correspond to Zahn’s description (i.e. outer ones partly little, ovate, denticulate), we could not designate this specimen as a lectotype. We looked for a neotype, but unfortunately there seems to be no other collections referred to this taxon, except for the two specimens cited by Zahn.

Current name:—*Hieracium tenuiflorum* subsp. *austrosilvularum* (P.Rossi & Zahn) Gottschl. in Raab-Straube & Raus (2013: 157).

4. *Hieracium murorum* [subsp. *tenuiflorum*] forma ***bifidiceps*** Furrer & Zahn in Furrer (1929: 229)

Ind. loc.:—“Kastanienwald, Aringo bei Montereale, ca. 1100 m; Mte. Pelato (ob Tossicia) NE-Hang um 1100 m”.

Type:—[ITALY. Abruzzo, Prov. AQ] “Kastanienwald Aringo bei Montereale, um 1100 m; 8 Jun 1928, E. Furrer” (lectotype, designated here: Z-000238290 [image!]) by United Herbaria Z+ZT / CC BY 4.0‘ image of the lectotype available at <https://www.herbarien.uzh.ch/>).

Remarks:—This forma was proposed by Furrer & Zahn in Furrer (1929) to distinguish individuals with few, bigger capitula and sub-furcate or weakly paniculate synflorescence. In Z/ZT we could trace a single specimen collected by Furrer in chestnut woods in Aringo (Abruzzo) in 1928 that bears an original label handwritten by Zahn. The description on the label perfectly matches with the protologue of the species published by Furrer.

Current name:—*Hieracium tenuiflorum*.

5. *Hieracium tenuiflorum* var. ***creusense*** Arvet-Touvet (1913: 327d)

Ind. loc.:—“France: Creuse: St-Vaury à Chardeix, 28 Jul. 1855 (de Cessac) etc.”

Type:—[FRANCE. Nouvelle-Aquitaine] “Creuse: Chardeix près St-Vaury, 28 Jul 1855, de Cessac” (lectotype, designated here: GRM barcode MHNGr.1914.44232 [image!]; isolectotype: GRM barcode MHNGr.1914.44354).

Remarks:—Arvet-Touvet described this variety clearly referring to a collection of de Cessac in Creuse region. We could trace two specimens in GRM that perfectly match Arvet-Touvet’s description and were collected in the same

place and on the same date as reported in the protologue. Both specimens bear a label supposedly of the collector and another label handwritten by Arvet-Touvet with the name “*Hier. creusense A.-T.!* (*H. tenuiflorum* var. *perincisum A.-T. & Briquet*) l.c. *Nouv. Notes Flor. p.96! (141) Creuse: St-Vaury a Chardeix, 28 Jul 1855 (De Cessac)*”.

Current name:—*Hieracium tenuiflorum*.

6. *Hieracium murorum* subvar. ***crucisdomini*** Fenaroli & Zahn (1927: 24)

≡ *Hieracium murorum* [subsp. *tenuiflorum*] forma *crucisdomini* (Fen. & Zahn) Zahn (1931: 481).

Ind. loc.:—“Longobardia bor.: in pascuis subalpinis Prealpinum Brixienisium, prope Passum Crucis Domini (Passo Croce Domini), solo calcario; m 1660 c.”

Type:—[ITALY. Lombardy, Prov. BS] “Giudicarie. Passo Croce Domini, Jul 1925, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027323!).

Remarks:—We could trace one specimen in Herbarium Fenaroli in TR collected in 1925 that matches with the protologue description and bears an original label handwritten by Zahn.

Current name:—*Hieracium tenuiflorum*.

7. *Hieracium murorum* subsp. ***glaucoviolascens*** Bornm. & Zahn in Zahn (1923: 1541)

Ind. loc.:—“Tessin: Mte San Salvatore, 800–900 m”.

Type:—[SWITZERLAND, Ticino] “Monte San Salvatore, 8–900 m, 7 Jun 1895, J. Bornmüller” (lectotype designated by Vogt & Gottschlich (2023): B barcode B100420888, image of the lectotype available at <http://herbarium.bgbm.org/object/B100420888>).

Current name:—*Hieracium tenuiflorum* subsp. *glaucoviolascens* (Bornm. & Zahn) Gottschl. in Raab-Straube & Raus (2013: 157).

8. *Hieracium murorum* var. ***goloëse*** Zahn (1921: 288)

≡ *Hieracium murorum* [subsp. *tenuiflorum*] forma *goloëse* (Zahn) Zahn (1931: 479).

Ind. loc.:—“Korsika: am Golo bei Calacuccio”.

Type:—[ITALY. Trentino Alto-Adige, Prov. BZ] “Oberbozen, Sep 1924, L. Fenaroli” (neotype, designated here: TR barcode TR-BOT027292!).

Remarks:—The Latin description of this taxon was published with a reference to a specimen collected by Kükenthal in Golo in Calacuccio. We looked for this specimen in B, but we couldn’t find any specimen collected in Corsica. We could trace two specimens in TR collected by Fenaroli and determined by Zahn. The specimens were collected in Oberbozen (TR BOT027292) and Val Rabbi (TR-BOT027293) respectively and cited by Zahn (1931). Although these specimens cannot be considered as the original material, the specimen collected in Oberbozen corresponds to Zahn’s original description (“*Folia magna glauca parcepilosa valde grosse multidentata, basi subcordata dentibus retroversis aucta, late ovato-triangularia. Involucra viridia, glandulis longis tenuibus ± dilutis obsita*”). For this reason, we agree to designate this specimen as a neotype.

Current name:—*Hieracium tenuiflorum*.

9. *Hieracium murorum* [subsp. *nemorensifolium*] subforma ***inaequalibasis*** Zahn (1934: 484)

Ind. loc.:—“Col des Quatre Chemins am Mt du Chat 1400 m”.

Type:—[FRANCE. Dép. Savoie] “Chaîne du Bourget. Mt. du Chat, hêtraie au col des 4 Chemins, 1400 m, 7 Jul 1924, J. Briquet” (lectotype, designated here: G barcode G00414355 [image!], image of the lectotype available at <https://www.ville-ge.ch/musinfo/bd/cjb/chg/adetail.php?id=613506&base=img&lang=en>).

Remarks:—In Briquet’s herbarium in G we traced a single specimen collected in Mont du Chat that perfectly matches Zahn’s description and could be safely designated as a lectotype.

Current name:—*Hieracium tenuiflorum*.



FIGURE 1. Lectotype of *Hieracium tenuiflorum* Arv.-Touv. (10 Jun 1894, C. Bicknell, Herbarium Bicknell 25b-56-3).

10. *Hieracium murorum* [subsp. *tenuiflorum*] var. **macrocephalum** P.Rossi & Zahn in Zahn (1934: 481)

≡ *Hieracium murorum* [subsp. *tenuiflorum* var. *macrocephalum*] forma *intermedium* Zahn (1934: 481).

Ind. loc.:—“Alpen von Lecco; Val Ontragno; Val Fraele bei Bormio 12–2000 m; Mendel, Welschnofen, Rollepäss; Karer See; Val Grande bei Schluderbach und Tuxer Tal in Tirol; Cadore: Valle Digion bei Padola; Schweiz: Brunnen-Sisikon; Goldauer Bergsturz 540 m (Huber)”.

Type:—[ITALY, Lombardy, Prov. SO] “S.Gallo, Fraele 1200–2000, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027324!).

Syntype:—[ITALY, Lombardy, Prov. LC] “Valletta di Rossana, sopra Maggiana. Lierna, 6 Aug 1923, P. Rossi” (PAV-LOM014982!).

Remarks:—The form *H. tenuiflorum* var. *macrocephalum* f. *intermedium* was intended as a typical for *H. tenuiflorum* var. *macrocephalum*. Zahn (1934) provided only a very short diagnosis “Wie *a*1a [referring to *H. tenuiflorum* var. *tenuiflorum* f. *tenuiflorum*]: Hülle 10 mm” that distinguished this variety only by the size of the flower heads. In the protologue there are numerous localities from Italy, however, the only collector cited is Huber. We could trace several specimens collected in the Alps of Lecco by P. Rossi and determined by Zahn as *H. murorum* subsp. *tenuiflorum* var. *macrocephalum*, but unfortunately the vast majority of them are severely damaged and capitula are missing, preventing from verifying that they match Zahn’s description. In the Herbarium Fenaroli in TR we trace a specimen, collected in one of the localities cited in the protologue “Val Fraele bei Bormio 1200–2000 m”, that despite being partly damaged still have some capitula. The specimen bears two labels. One has a statement of the locality (S. Gallo, Fraele 1200–2000 m) and the determination (*H. bifidum*), handwritten by Fenaroli, and at the same label there is a handwritten determination by Zahn (*H. murorum* L. ssp. *tenuiflorum* A-T v. *macrocephalum* f. *intermedium* Zahn). Despite the poor condition of this specimen, we decided to designate it as a lectotype.

Current name:—*Hieracium tenuiflorum*.

11. *Hieracium murorum* [subsp. *pseudomerianum*] var. **marchii** P.Rossi & Zahn in Zahn (1934: 483)

Ind. loc.:—“Alpen von Lecco: Gegen Villa Manzoni zwischen Lierna und Villa”.

Type:—[ITALY, Lombardy, Prov. LC] “Lago di Como (pr. Lierna), Jun 1923, P. Rossi” (lectotype, designated here: TR barcode TR-BOT027352).

Syntypes:—[ITALY, Lombardy, Prov. LC] “Loc. Lierna. Sui muri lungo la via del lago, nel tratto che si estende dal capoluogo (Villa) alla frazione Grumo, 5 Jun 1923, P. Rossi” (PAV-LOM014308); [Italy, Lombardy] “Lierna. Lungo il lago: margine destro della strada provinciale nel tratto dalla frazione Villa alla villa Manzoni 5 Jun 1923. P. Rossi” (PAV-LOM014255, PAV-LOM014262).

Remarks:—We found three specimens stored in PAV. All of them are irremediably damaged, with leaves, stems, and capitula broken or lost. One specimen (PAV-LOM014308) is composed of single leaves and stem fragments, enclosed in a paper bag. Labels of these specimens, handwritten by Zahn, have a statement of the locality and collection date. Moreover, we traced a specimen in Fenaroli Herbarium (TR-BOT027352). The specimen bears a label handwritten by Zahn which comes from the same locality as cited in the protologue. The specimen was collected by P. Rossi and determined by Zahn. For this reason, we can assume that this specimen belongs to an original collection made by P. Rossi and was donated or exchanged with Fenaroli, and we can consider this specimen as part of the original material. Because of its good condition, we designated the specimen in TR as a lectotype of the name *H. murorum* var. *marchii*.

Current name:—*Hieracium tenuiflorum*.

12. *Hieracium murorum* [subsp. *tenuiflorum* var. *pilosiceps*] forma **molineriae** P.Rossi & Zahn in Zahn (1934: 481)

Ind. loc.:—“Limbiate in der Lombardei; Val Molinera und Pioverna in den Alpen von Lecco; Ratsalm ob Welschnofen! Gailtal 500 m”.

Type:—[ITALY, Lombardy, Prov. LC] “Valle Molinera—sponda destra. In luoghi ombrosi rocciosi lungo i margini del sentiero che sale da Prato S. Pietro poco sotto e ad oriente delle rocce «il frate e la monaca», 12 Set 1919, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014952!).

Syntype:—[ITALY, Lombardy, Prov. MB] “Limbiate, Apr 1923, L. Fenaroli” (TR-BOT027322!).

Remarks:—We traced two different specimens in PAV and TR, collected respectively by P. Rossi and L. Fenaroli

in the localities indicated by Zahn (Val Molinera and Limbiate). Both specimens have determinations handwritten by Zahn. The PAV specimen bears a label handwritten by Zahn dated 1923 with a diagnosis of the new variety (in the label it is called *H. murorum* L. subsp. *tenuiflorum* Arv.-Touv. var. *molineriae* Rossi & Zahn). The TR specimen bears two labels handwritten by Zahn with his determination. Both specimens are in poor condition, with missing leaves or parts of the leaves. However, the specimen PAV-LOM014952, despite the missing leaves, can safely be considered as the lectotype due to the presence of the original diagnosis by Zahn. The specimen stored in TR remains a syntype.

Current name:—*Hieracium tenuiflorum*.

13. *Hieracium murorum* [subsp. *tenuiflorum*] forma ***multidentiferum*** Zahn (1931: 480)

Ind. loc.:—“Bergamo; Val Brembana, Val d’Erve”.

Type:—[ITALY, Lombardy, Prov. BG] “Val d’Erve, May 1923, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027308!).

Remarks:—In TR we could trace one specimen collected by Fenaroli in Val d’Erve (Bergamo province) in 1923 that bears the original label by Zahn with a reference to this name and the volume where the new forma was described. There are two individuals on the sheet, both matching the original Zahn description. The left one, however, has been damaged by pests and some flower heads are missing or damaged.

Current name:—*Hieracium tenuiflorum*.

14. *Hieracium murorum* subsp. ***nemorensifolium*** Briquet & Zahn in Zahn (1934: 483)

Ind. loc.:—“Jura du Bourget: Unter Tannen am Mtgne de l’Epine unter Chateau Richard 1250 in! Mt Grelle 1400 m!”

Type:—[FRANCE, Dép. Savoie] “Chaîne du Bourget. Sapinaies de la Montagne de l’Epins sous Château Richard 1250 m, 7 Jul 1924, J. Briquet” (lectotype, designated here: G barcode G00414354 [image!], image of the lectotype available at <https://www.ville-ge.ch/musinfo/bd/cjb/chg/adetail.php?id=613504&lang=en>).

Syntype:—[FRANCE, Dép. Savoie] “Chaîne du Bourget. Mt. Grelle sapinaies ou versant E, 1400 m, 8 Jul 1924, J. Briquet” (G00414353a [image!]).

Remarks:—Zahn (1934) published *H. murorum* subsp. *nemorensifolium* based on Briquet’s collections made in the Jura Massif, available in Briquet’s herbarium housed in G. The collection localities were cited as “Mt.gne de l’Epine unter Chateau Richard 1250 m and Mt Grelle 1400 m”. In the absence of a designated type, all of Briquet’s specimens from these localities are to be treated as syntypes (Art. 9.6. of ICN, Turland *et al.* 2018). Altogether, three potentially matching specimens were located in G. Considering the quality of the specimens, we designate G00414354 as a lectotype (ICN Art. 9.3). Because of the broad phyllaries, this taxon seems not to belong to *H. tenuiflorum* but to *H. murorum* s.l. Therefore, we made no new combination.

Current name:—*Hieracium murorum* subsp. *nemorensifolium* Briq. & Zahn.

15. *Hieracium murorum* [subsp. *pseudomerianum*] var. ***oblongiforme*** P.Rossi & Zahn in Zahn (1934: 482)

Ind. loc.:—“Alpen von Lecco: Val Ontragno; Croce di Brentalon! Kärnten: Windische Höhe bei Matschiedl 1100 m”.

Type:—[ITALY, Lombardy, Prov. LC] “Lungo il lato sin. della Valle Ontragno appena oltrepasato il torrente per salire all’Alpe, 16 Aug 1919, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014309).

Remarks:—Three specimens were found in PAV. Unfortunately, two of them (PAV-LOM014307; PAV-LOM014306) are lacking labels. On the other hand, one specimen (PAV-LOM014309) is very well preserved, and it bears two labels. The first one was written by P. Rossi, with a collection date and locality. The second label was handwritten by Zahn, and it bears his identification of the subspecies with a short description. Characters of the specimens and description match with the protologue of the variety. For these reasons we can consider this specimen as a lectotype of the name *H. murorum* var. *oblongiforme*.

Current name:—*Hieracium tenuiflorum*.

16. *Hieracium murorum* [subsp. *tenuiflorum*] forma ***odontocraspedum*** Zahn (1931: 480)

Ind. loc.:—“im Val Meria: Capanna Rosalba—Tesci”.

Type:—[ITALY, Lombardy, Prov. LC] “Val Meria Val Scarettone sul sentiero + Rosalba—Tesci; 15 Jul 1923, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014961!).

Remarks:—In PAV we traced a single specimen lacking capitula, which was collected by Pietro Rossi in Val Meria and precisely in Val Scarettona on the way to Rosalba hut. Despite the missing parts (many of the *Hieracium* specimens hosted in PAV are in bad preservation condition), the leaves perfectly match Zahn's description, and we could safely designate the specimen PAV-LOM014961 as lectotype.

Current name:—*Hieracium tenuiflorum*.

17. *Hieracium tenuiflorum* var. **perincisum** Arvet-Touvet & Briquet in Briquet (1899: 141)

≡ *Hieracium murorum* [subsp. *tenuiflorum*] var. *subincisodentatum* Zahn (1924: 65), nom. illeg. superfl.

≡ *Hieracium murorum* [subsp. *tenuiflorum*] forma *perincisum* (Arv.-Touv. & Briq.) Zahn (1931: 479).

Ind. loc.:—“PE [= Préalpes orientales]. Versant S. du col de Vernaz, 1500–1900 m”.

Type:—[France, Dép. Haute Savoie] “Col de Vernaz (ou de Lachau) versant S, 1500–1900 m, 5 Aug 1897, J. Briquet” (lectotype, designated here: G barcode G00392503 [image!]).

Remarks:—This variety was published by Arvet-Touvet in Briquet (1899) with a short description in French: “*La var. perincisum se distingue du type par ses feuilles incisées-pectinées, les intérieures lancéolées et l'oungement acuminées au sommet*” [The var. *perincisum* is distinguished from the type by its incised-pectinate leaves, the interiors lanceolate and long-acuminate at the apex]. We could trace in G one specimen collected by Briquet in 1897 that bears five different handwritten labels. The first (top right) handwritten by Briquet himself stated the new combination with the information on the collection site and date; the other two on the right seem to be handwritten by Arvet-Touvet but make no mention of the new variety. The two labels on the left are two subsequent (1923) labels handwritten by Zahn, which contained the description of the variety *H. murorum* subsp. *tenuiflorum* var. *subincisodentatum*. The text in the label perfectly matches the protologue of the variety *subincisodentatum* (Zahn 1924). We consider this specimen as a lectotype of *H. tenuiflorum* var. *perincisum*.

Current name:—*Hieracium tenuiflorum*.

18. *Hieracium murorum* subsp. **pictoprasinum** Fenaroli & Zahn (1927: 25)

Ind. loc.:—“Longobardia bor.: ad rupes Sebini (Lago d'Iseo) inter pagos Castro et Riva di Solto; m. 200 c.”.

Type:—[ITALY, Lombardy, Prov. BG] “Lago d'Iseo (Castro), Apr 1925, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027327!) (Fig. 2).

Remarks:—Fenaroli & Zahn (1927) validly described *H. murorum* subsp. *pictoprasinum* with a detailed diagnosis and proposed this new subspecies as an intermediate form between *H. bifidum* subsp. *eriopodoides* (Zahn) Zahn (1921: 434) and *H. tenuiflorum*. Probably one of the most peculiar morphological characters of this taxon (to which the name also refers) are the leaves that are light blue-green, exceptionally dark-brown spotted (“*supra dilute prasinio-viridia, eximie atrobrunneo-maculata*”). In addition to the diagnosis, the authors added the following sentence: “*Hab.: Longobardia bor.: ad rupes Sebini (Lago d'Iseo) inter pagos Castro et Riva di Solto; m 200 c.*” A specimen collected by Fenaroli was found at TR (TR-BOT027327) bearing a single plant (with three rosette and two stems) and the original label with a statement of the locality: “Lago d'Iseo (Castro)”. A second label contained the determination handwritten by Zahn “*H. murorum L. spp. pictoprasinum Fenaroli et Zahn, bifidum < tenuiflorum 1926 Zahn*”. The last part refers to the intermediate morphology and to the year when the specimen was revised. On the same label there is a handwritten note by Fenaroli with the name “*H. bifidum eriopodoides, Castro 1925.4*”.

Current name:—*Hieracium tenuiflorum* subsp. *pictoprasinum* (Fen. & Zahn) Gottschl. in Raab-Straube & Raus (2013: 157).

19. *Hieracium murorum* [subsp. *tenuiflorum* var. *pilosiceps*] forma **piovernae** P.Rossi & Zahn in Zahn (1934: 481)

Ind. loc.:—“Val Pioverna; Welschnofen (Huber)”.

Type:—[ITALY, Trentino Alto-Adige, Prov. BZ] “Italien. Südtirol: Fichtenwald ob Nova Levante; 1250 m; 21 Jul 1927, A. Huber-Morath” (lectotype, designated here: BASBG barcode BASBG-00280843 [image!]).

Syntypes:—[ITALY, Trentino Alto-Adige, Prov. BZ] “Rechtes Ufer des Ratzöler Bachs ob Nova Levante (Welschnofen) ob Bozen; ca. 1350 m; 22 Jul 1927, A. Huber-Morath” (BASBG-00280844 [image!]).



FIGURE 2. Lectotype of *Hieracium murorum* subsp. *pictoprasinum* (Apr 1925, L. Fenaroli, Erbario Fenaroli TR-BOT027327).

Remarks:—Zahn described this form and cited two different localities: Val Pioverna, surely referring to a collection of Pietro Rossi, and Welschnofen (in South Tyrol), referring to a collection of Huber. We could trace no specimen referred to this taxon in PAV where the herbarium of Pietro Rossi is hosted. We supposed that this specimen (as occurred to other sheets) went lost or was completely damaged by insect infestation. Instead, we could trace two specimens in BASBG, where the herbarium of Arthur Huber-Morath is kept. The two specimens were collected in Nova Levante (Südtirol) and bear the handwritten labels of Zahn with the name of the new forma. Both specimens are in poor condition, with missing or damaged leaves. However, the specimen BASBG-00280843 can safely be considered as a lectotype and the other one remains a syntype.

Current name:—*Hieracium tenuiflorum*.

20. *Hieracium murorum* [subsp. *tenuiflorum* var. *macrocephalum*] forma *pseudocinerascens* P.Rossi & Zahn in Zahn (1934: 482)

Ind. loc.:—“Alpen von Lecco z. B. Mandella Lario, Val d’Esino, Val Meria”.

Type:—[ITALY, Lombardy, Prov. LC] “Lato sinistro torrente Esino sotto il ponte del sentiero di Esino Inferiore in zona arida presso l’alveo, 4 Aug, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014958!).

Remarks:—We traced a single specimen in PAV collected by P. Rossi in Val d’Esino that bears the name *pseudocinerascens*. The sheet has a label handwritten by Zahn with the diagnosis that perfectly matches with the diagnosis provided in the protologue.

Current name:—*Hieracium tenuiflorum*.

21. *Hieracium murorum* [subsp. *tenuiflorum* subvar. *subfloccosum*] forma *pseudodollineriforme* Fenaroli & Zahn (1925: 27)

Ind. loc.:—“Longobardia: in conisylvis (*Pinetum sylvestris*) planitiei prope pagum Limbiate”.

Type:—[ITALY, Lombardy, Prov. MB] “Groane di Limbiate” May 1922, L. Fenaroli (lectotype, designated here: TR barcode TR-BOT027307!).

Remarks:—In this latter combination Zahn makes probably a mistake since he does not refer to the work where this form was described originally by Fenaroli and himself. He cited this reference later for the forma *subdollineriforme* that however was not described by Fenaroli & Zahn and whose description made by Zahn does not agree with the one made by Fenaroli & Zahn. We could trace one specimen in TR that matches with the protologue description and bears an original label handwritten by Zahn with a description identical to the one in the protologue.

Current name:—*Hieracium tenuiflorum*.

22. *Hieracium murorum* subsp. *pseudomerianum* P.Rossi & Zahn in Zahn (1934: 482)

Ind. loc.:—“Comer See z. B. Ponte S. Pietro im Val Sassina und zwischen Genico und Croce di Brentalon; Menaggio”.

Type:—[ITALY, Lombardy, Prov. LC] “Sulle rupi umide lungo il lato sin. della Pioverna da Prato S. Pietro a Cortenova, poco sopra il letto del torrente, 24 Aug 1920, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014260; isolectotype: PAV barcode PAV-LOM014969) (Fig. 3).

Remarks:—Two specimens in PAV were collected on the same date by Pietro Rossi in Prato San Pietro. In the protologue Zahn indicated the wrong locality Ponte San Pietro in Val Sassina. The correct name is Prato San Pietro as stated on the label of Pietro Rossi. One of the two specimens (PAV-LOM014969) has damaged capitula that are enclosed in a paper bag. The second one (PAV-LOM014260) is a well-preserved specimen that bears two different labels handwritten by Zahn. On the first label there is only the new combination [*Hieracium murorum* L. (grex *H. tenuiflorum* Zahn H. d. Schweiz p 221) n. ssp. *pseudo-merianum* Rossi et Zahn 1923”]. On the second label there is a long diagnosis handwritten by Zahn, describing the new subspecies in detail (Fig. 3). This specimen agrees perfectly with the protologue, and therefore the specimen is designated here as a lectotype. The second specimen (PAV-LOM014969) can be considered an isolectotype.

Current name:—*Hieracium tenuiflorum* subsp. *pseudomerianum* (P.Rossi & Zahn) Gottschl. in Raab-Straube & Raus (2013: 157).

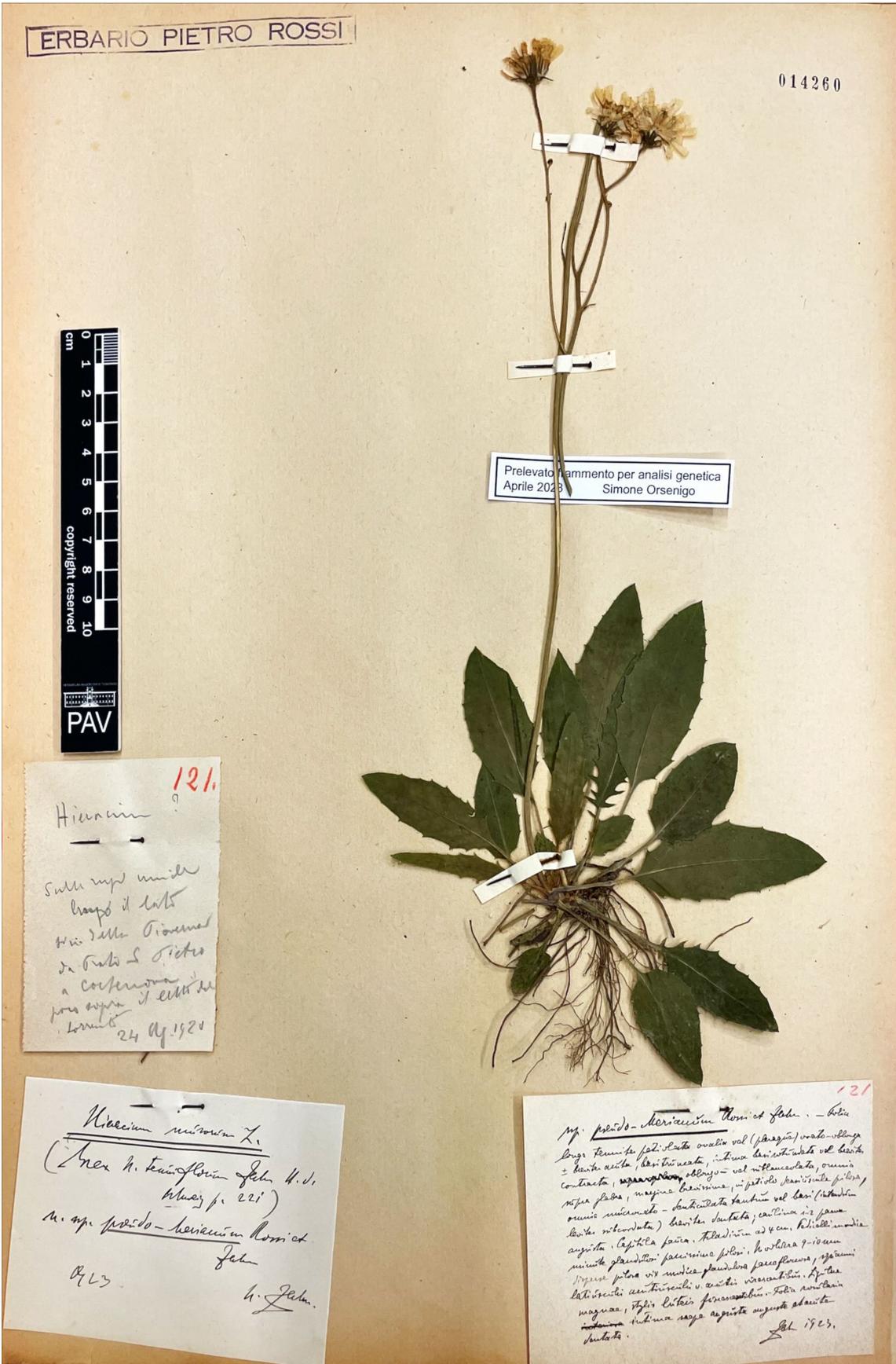


FIGURE 3. Lectotype of *Hieracium murorum* subsp. *pseudomerianum* (24 Aug 1920, P. Rossi, PAV-LOM014260).

23. *Hieracium murorum* [subsp. *tenuiflorum* var. *macrocephalum*] forma *pseudosilvaticum* P.Rossi & Zahn in Zahn (1934: 482)

Ind. loc.:—“Menaggio; Alpe Lierna im V. Ontragno, V. del Padola; Forêt de Crêt Percigneu 1500 m bei La Chapelle in Savoyen (Briquet); Goldau; Klausenpass 1890 m”.

Type:—[ITALY, Lombardy, Prov. LC] “In luoghi boschivi lungo i margini del sentiero dall’Alpe di Lierna alla bocchetta di Valle Ontragno, 10 Sep 1919, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014959!).

Remarks:—We traced a single specimen in PAV, which is severely damaged (only few leaves and flower heads are left), collected by P. Rossi in Alpe di Lierna that bears the name *pseudosilvaticum*; the few leaves are multidentate as indicated by Zahn in the protologue. The sheet bears a label handwritten by Zahn with the diagnosis that matches with the diagnosis stated in the protologue.

Current name:—*Hieracium tenuiflorum*.

24. *Hieracium murorum* [subsp. *tenuiflorum* var. *macrocephalum*] forma *reductum* Zahn (1934: 482)

Ind. loc.:—“Prato di San Pietro im Val Molinera”.

Type:—[ITALY, Lombardy, Prov. LC] “Valle Molinera sponda destra lungo i margini del sentiero che sale da Prato S. Pietro sotto e ad est delle rocce «il frate e la monaca», 12 Set 1919, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM015020!).

Remarks:—We traced a single specimen collected in the locus classicus by P. Rossi and deposited in PAV. Although the label handwritten by Zahn did not mention the name of the form, the short diagnosis present on the label matches with the diagnosis stated in the protologue. Moreover, the two individuals on the sheet are characterized by a reduced size compared to the other collection. We here designate PAV-LOM015020 as a lectotype of the name.

Current name:—*Hieracium tenuiflorum*.

25. *Hieracium murorum* subsp. *sebini* Fenaroli & Zahn (1927: 24)

Ind. loc.:—“Longobardia bor.: ad rupes Sebini (Lago d’Iseo) prope pagum Castrum (Castro); m. 200 c.”

Type:—[ITALY, Lombardy, Prov. BG] “Lago d’Iseo; Sebino, Apr 1925, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027326!) (Fig. 4).

Remarks:—Fenaroli & Zahn (1927) characterised this taxon as a form similar to *Hieracium bifidum* Kit. ex Hornemann (1815: 761). There is a single collection of *H. murorum* subsp. *sebini* in Herbarium Fenaroli (TR-BOT027326). The specimen bears two labels, the first with the name “*Sebino*” and the collection date “1925.4” written by Fenaroli with a determination handwritten by Zahn (curiously Zahn wrote the name *sebincum* Fen. & Zahn and in brackets grex *H. tenuiflorum*). The second label is the “official label” of the Erbario Fenaroli and states the new name and the collection site (“Lago d’Iseo”) and date (1925.4). A more precise locality is present in the protologue [*ad rupes Sebini (Lago d’Iseo) prope pagum Castrum (Castro); m 200 c.*]. Considering what is stated above, we can safely select the specimen of the Erbario Fenaroli as a lectotype of the name *H. murorum* subsp. *sebini*.

Current name:—*Hieracium tenuiflorum* subsp. *sebini* (Fen. & Zahn) Gottschl. in Raab-Straube & Raus (2013: 157).

26. *Hieracium murorum* [subsp. *tenuiflorum*] forma *sinuosifrondifforme* Zahn (1931: 480)

Ind. loc.:—“Iseo-See; Gröden 1400 m; Genua; Portofino; [...] an der Axenstrasse”.

Type:—[ITALY, Lombardy, Prov. BS] “Pisogne, 6 May 1921, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027298b!).

Remarks:—Although no information about collectors was given in the protologue, we could trace six specimens in TR collected by Fenaroli and determined by Zahn. The specimens (TR-BOT027296a–b, TR-BOT027296a–b, TR-BOT027298a–b) were collected in Groane di Limbiate (in Lombardy) in 1923 and in Pisogne near Iseo Lake in 1921. The locality Groane di Limbiate is cited several times in Zahn (1931) as the lower altitude where *H. tenuiflorum* was recorded (150 m a.s.l.). However, since there is a clear reference in the protologue to specimens collected near Iseo Lake, we could safely consider original material only the collection of Fenaroli from this area. There are two sheets in this collection. On the first (TR-BOT027298a), leaves of the specimen are missing and severely damaged. On the second (TR-BOT027298b), there is a complete plant with several basal leaves that matches Zahn’s original description.

Current name:—*Hieracium tenuiflorum*.



FIGURE 4. Lectotype of *Hieracium murorum* subsp. *sebini* (Apr 1925, L. Fenaroli, Erbario Fenaroli TR-BOT027326).

27. *Hieracium murorum* [subsp. *tenuiflorum* subvar. *subfloccosum*] forma *subaltefurcatum* Zahn (1931: 480)

Ind. loc.:—“z. B. Iseo-See”.

Type:—[ITALY, Lombardy, Prov. BG] “Tavernola (piazzone), Oct 1924, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027306a!).

Remarks:—There are two individuals on the specimen traced in TR, of which the right one seems to perfectly correspond to Zahn’s description. Two individuals are present on the second sheet (TR-BOT027306b), but they seem to have no spotted leaves.

Current name:—*Hieracium tenuiflorum*.

28. *Hieracium murorum* [subsp. *glaucoviolascens*] forma *subbifidum* Zahn (1923: 1541)

≡ *Hieracium murorum* [subsp. *glaucoviolascens*] subforma *subbifidum* (Zahn) Zahn (1931: 481).

Ind. loc.:—[without indication].

Type:—[ITALY, Lombardy, Prov. LC] “nei castagneti posti appena ad est e sopra Bonzeno fraz. di Bellano”, 6 Mai 1923, P. Rossi” (**neotype, designated here:** PAV barcode PAV-LOM014244!).

Remarks:—Zahn described this taxon with an extremely short diagnosis (“vel 0” [referring to glandular hairs on the peduncles]) and without indicating any locality or collections. Later Zahn (1931) reported some localities in Alps of Lecco (V. Erve and Valle della Pioverna unter Taceno), citing specimens collected by P. Rossi. In PAV we could trace four specimens collected by P. Rossi in the Alps of Lecco that bear labels handwritten by Zahn and referred to this taxon (from PAV-LOM014244 to PAV-LOM014247). Although these specimens could not be considered as the original material, they match Zahn’s description and have been certainly seen by Zahn. For these reasons they could be designated as a neotype. We designated the specimen PAV-LOM014244 as a neotype since it consists of two complete and well-developed plants collected in Bonzeno, at the end of Valle della Pioverna, not far from Taceno.

Current name:—*Hieracium tenuiflorum*.

29. *Hieracium murorum* [subsp. *tenuiflorum* var. *pilosiceps*] forma *subdollineriforme* Zahn (1934: 481)

Ind. loc.:—“Pasturo 1100 m in den Alpen von Lecco; und bei Limbiate”.

Type:—[ITALY, Lombardy, Prov. LC] “Pasturo. Sul verrucano, versante sud (m 1100) tra Baiedo ed i prati di Nava: poco sotto la vetta, 31 Jul 1926, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014960!).

Remarks:—Describing this form, Zahn referred to the description by Fenaroli & Zahn (1925), but there only a *f. pseudodollineriforme* is described. Consequently, the original description of the form *subdollineriforme* is the one reported in Zahn (1934). We traced in PAV a specimen collected by P. Rossi in Pasturo with a label handwritten by Zahn that contained the short diagnosis of the new taxon. The specimen, although a few capitula are missing, perfectly matches Zahn’s description and could be safely designated as a lectotype for the name.

Current name:—*Hieracium tenuiflorum*.

30. *Hieracium murorum* [subsp. *tenuiflorum*] subvar. *subfloccosum* Zahn (1931: 480)

Ind. loc.:—“z. B. Iseo-See; Welschnofen; Latemar-Karersee; Tuxer Tal; Pieve di Cadore; Ampezzo”.

Type:—[ITALY, Lombardy, Prov. BG] “Sebini, Jun–Jul 1924, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027299!).

Syntypes:—[ITALY, Lombardy, Prov. BG] “Tavernola, Apr 1923, L. Fenaroli” (TR-BOT027301a!; TR-BOT027301b!).

Remarks:—According to Zahn, this subvariety should be characterized by involucre with subdense or dense stellate hairs. We traced three different specimens in TR that match the description of Zahn and bear labels handwritten by the German hieraciologist (TR-BOT027299; TR-BOT027300 and TR-BOT027301a,b). The first (TR-BOT027299) has the name Sebini (that refers to Iseo Lake) on the label written by Fenaroli. There are two plants on the sheet, both matching the original description, and this material could be safely considered as a lectotype. The specimen TR-BOT027300 consists of a single plant, but the collection locality is unreadable. The two specimens TR-BOT027301a and TR-BOT027301b bear three different labels that indicate the locality of Tavernola on Iseo Lake. The labels are handwritten by Zahn and clearly refer to var. *subfloccosum*. These specimens could be considered as syntypes.

Current name:—*Hieracium tenuiflorum*.

31. *Hieracium murorum* [subsp. *tenuiflorum*] subforma ***submaculatum*** Zahn (1931: 479)

Ind. loc.:—“Bei Lanersbach im Tuxer Tal (Lehrerin Fritz)”.

Type:—[ITALY, Lombardy, Prov. BS] “Pisogne. Iseosee, Apr 1921, L. Fenaroli” (lectotype, designated here: TR barcode TR-BOT027294b!).

Remarks:—It was impossible to trace the original material cited from the locality given in the protologue, but we could trace two specimens in TR collected by Fenaroli and determined by Zahn. These specimens were collected in the area of Iseo Lake, in Pisogne (TR-BOT027294b) and Tavernola (TR-BOT027294c) and cited by Zahn in its monograph (Zahn 1931) only below the rank of variety. However, since these specimens were surely seen and determined by Zahn, they could be considered as original material. Consequently, we designate as lectotype the specimen collected by L. Fenaroli at Pisogne and preserved at TR (TR-BOT027294b).

Current name:—*Hieracium tenuiflorum*.

32. *Hieracium murorum* [subsp. *pseudomerianum*] var. ***submerianum*** P.Rossi & Zahn in Zahn (1934: 482)

Ind. loc.:—“Alpen von Lecco: Alpe Lierna”.

Type:—[ITALY, Lombardy, Prov. LC] “Dall’Alpe di Lierna nel bosco di larici verso Est, verso la bocchetta, 16 Aug 1919, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014253).

Remarks:—The specimen stored in Herbarium Pietro Rossi bears two labels, one handwritten by Pietro Rossi with the locality and collection date. The second label, handwritten by Zahn, bears the name of the new variety given above and a detailed description of the specimen which matches with the protologue.

Current name:—*Hieracium tenuiflorum*.

33. *Hieracium murorum* [subsp. *tenuiflorum* subvar. *subfloccosum*] forma ***subpinnatum*** Zahn (1931: 480)

Ind. loc.:—“Alpen von Lecco: Varenna-Bellano-Taceno, Val Meria; Val Ganna, Valdisotto bei Bormio”.

Type:—[ITALY, Lombardy, Prov. LC] “Val Meria, Valle Scarettono, sponda sin. dalla baita Tesco per sentiero + e le colonne alla capanna Rosalba, 15 Jul 1923, P. Rossi” (lectotype, designated here: PAV barcode PAV-LOM014978!).

Syntypes:—[ITALY, Lombardy, Prov. SO] “limite del bosco a Li Ghesa in Valdisotto, 15 Jun 1924, M. Longa” (TR-BOT027304a!; TR-BOT027304b!).

Remarks:—We traced two different specimens in PAV and TR (the latter with two sheets) collected respectively by P. Rossi and M. Longa (but stored in Herbarium Fenaroli) in the localities indicated by Zahn. Both specimens are accompanied by determinations handwritten by Zahn. All the specimens are in poor condition, with missing synflorescences or parts of the leaves. However, the specimen stored in PAV clearly has leaves with long teeth. For this reason, we could safely designate the specimen PAV-LOM014978 as a lectotype and the specimens stored in TR are remaining syntypes.

Current name:—*Hieracium tenuiflorum*.

34. *Hieracium tenuiflorum* Arv.-Touv. in Bicknell (1896: 173)

≡ *Hieracium sylvaticum* subsp. *tenuiflorum* (Arv.-Touv.) Zahn in Reichenbach (1905: 18).

≡ *Hieracium murorum* subsp. *tenuiflorum* (Arv.-Touv.) Zahn in Schinz & Keller (1914: 420).

Ind. loc.:—“In the woods and on the slopes of Monte Bignone, Monte Ceppo and Monte Arpetta”.

Type:—[ITALY, Liguria, Prov. IM] “nei boschi presso Monte Arpetta a 1400 m, 10 Jun 1894, C. Bicknell” (lectotype, designated here: Herbarium Bicknell 25b-56-3!) (Fig. 1).

Syntypes:—[ITALY, Liguria, Prov. IM] “nei boschi di Monte Bignone, sopra Croce di Para, 28 Mai 1894, C. Bicknell” (Herbarium Bicknell 25b-56-4!); “nei boschi di Monte Ceppo, 13 Oct, 1893, C. Bicknell” (Herbarium Bicknell 25b-56-5!); “Cima di Monte Ceppo, 1600 m, sopra Baiardo, 24 Jun 1892, C. Bicknell” (Herbarium Bicknell 25b-56-6!).

Remarks:—Clarence Bicknell (1842–1918) published the name *Hieracium tenuiflorum* attributing the species to Jean-Maurice Casimir Arvet-Touvet (1841–1913), with a short diagnosis provided by Arvet-Touvet (“*This is distinguished by M. Arvet-Touvet from the latter species by its smaller flower heads, and its acute involucre bracts, and is perhaps only a form or variety of H. murorum*”) and the habitat (“*in the woods*”).

Few years later Arvet-Touvet confirmed the validity of this species: "Le *H. tenuiflorum* (équivalent au *H. murorum* δ *microcephalum* Greml.) nous paraît avoir une valeur bien supérieure aux races démembrées du *H. murorum* d'après la forme des feuilles et l'indument. It se reconnaît à ses calathides et périclines presque de moitié plus petites que dans le *H. murorum*" [*H. tenuiflorum* (equivalent to *H. murorum* δ *microcephalum* Greml.) seems to have a much higher value than the dismembered races (i.e. varieties) of *H. murorum* recognized according to the shape of the leaves and the indumentum. It can be distinguished by its flower heads and phyllaries almost half the size of those in *H. murorum*] (Briquet 1899).

We traced four specimens in Museum Clarence Bicknell in Bordighera (Italy) where Bicknell's herbarium is preserved. Each specimen bears a number handwritten in pencil on the upper angle of the sheet; this number represents a univocal identification code of the specimens. All the specimens were collected by Bicknell between 1892 and 1894 and have annotations handwritten by Arvet-Touvet ("*Hieracium tenuiflorum* Arv. T.?" "var.?" or "forma?"), denoting probably that at the beginning Arvet-Touvet was unsure about the separation of this species from *H. murorum* L., as stated also by Bicknell in the protologue. All the four specimens can be safely considered as original material. Among these, we select "25b-56-3" as a lectotype of *H. tenuiflorum*, since it is the richest collection among the original material, consisting of five plants collected in one of the localities cited in the protologue (Monte Arpetta). They are showing the typical features of this species, especially small flower heads with acute phyllaries. All the plants have a single stem with few (2–3) capitula.

Three out of the four specimens bear some additional handwritten annotations by Saverio Belli (1852–1919), Italian hieraciologist, which contain several considerations on the specimens and on the new species described by Arvet-Touvet. On the label attached to the designated lectotype, Belli added: "*Altra forma che dovrebbe appartenere al H. tenuiflorum ma già un po' differente da quelli di Bajardo. Questa varietà (o forma) è più simile alla mia che raccolti nei colli Torinesi e in quelli di Como*" ["Another form that should belong to *H. tenuiflorum*, slightly different from Bajardo specimen. This variety (or form) is more similar to the one that I collected in the hills of Turin and Como"].

The summit of Monte Arpetta falls into the French territory; however, the Italian border runs on the eastern side less than 1 km far from the summit, more or less along the 1400 m contour line. According to the map published by Bicknell in his *Flora of Bordighera and San Remo* (1896), the collection was made probably in what is today considered the Italian territory.

Current name:—*Hieracium tenuiflorum* Arv.-Touv.

35. *Hieracium murorum* [subsp. *tenuiflorum*] forma *villosipes* Zahn (1931: 479)

Ind. loc.:—"Iseo-See".

Type:—[ITALY, Lombardy, Prov. BG] "Tavernola, Apr 1923, L. Fenaroli" (lectotype, designated here: TR barcode TR-BOT027295!).

Remarks:—We could trace one specimen in TR with the original annotation by Zahn (*H. murorum* ssp. *tenuiflorum* A.-T., α . *genuinum*, 1. *normale*, d. *villosipes*). However, it has no information about its collection locality except an annotation in pencil in the lower left corner (T. 1923,4). This annotation is probably from Fenaroli and could refer to the locality of Tavernola, on Iseo Lake, where other samples housed in Erbario Fenaroli were collected in the same period and annotated as T. or Tav. The description of Zahn perfectly matches with the specimen characters.

Current name:—*Hieracium tenuiflorum*.

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