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Hieracium tridentatum (Asteraceae) in Britain

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Abstract
The history of the publication of the hawkweed taxon *H. tridentatum* (Fr.) Fr. is given together with early accounts in British literature. The removal of the species in 1958 and its replacement with *H. trichocaulon* (Dahlst.) Johanss. is then assessed.

Keywords: hawkweed; Fries; Sell & West

Introduction

Linnaeus (1753) lists only twenty six species in the genus *Hieracium*. Of these there are several species that are no longer considered to belong to the genus. The study of the genus *Hieracium* proceeded very slowly but in 1819 the epithet *tridentatum* was published as a variety of *Hieracium vulgatum* by Professor Elias Fries (1819, p.77). Fries (1845, p. 6) subsequently raised *H. tridentatum* to the rank of species. On this occasion Fries gives no description but refers his reader to Herb. Norm. III:4 (Fries, 1837) (Fig. 1), thus selecting syntypes, one of which should be selected as the lectotype. There are sets of Herb. Norm. in at least fifteen herbaria, so plenty of syntypes are available. The first British mention of *H. tridentatum* was by Babington (1847, p. 198), he gave a brief description and confirmed the presence of the species in England. Fries (1848, p. 171) published a description in Latin, but by then had decided to include three forms in the species, and named the exsiccata Herb. Norm. III:4 forma *dentata*.

The next account of *H. tridentatum* in Britain is contained in Backhouse (1856, p. 67). There is a decent description of the species and a record of distribution in Britain stretching from Teesdale to Kent. The flowering period is given as August and September, which is rather late for the southern parts of the plant's distribution, where it can be in flower in July. Backhouse (1856) refers to Fries (1848, p. 171) as does Hanbury (1894b) in his *Tentative List of British Hieracia..* Hanbury (1894b) also introduces *H. rigidum* Hartm. var. *trichocaulon* Dahlst. to the British List with a full reference to the syntype Dahlstedt (1889) fascicle III: 64. Hanbury & Thompson (1904, p. 262) published a new account of the genus *Hieracium* in which species 82 *H. rigidum* includes var. ε. *tridentatum* (Fr.), and a note, "Other vars. or forms have been described." This treatment reflects the view held by Dahlstedt (1889), when he issued Hierac. Exs. 3:57 (Fig. 2). Dahlstedt (1894) revised his view of the status of *H. tridentatum* and raised the taxon to the rank of species together with *H. rigidum* which had ten subspecies, the sixth being *trichocaulon* Dahlst. (Fig. 3). In Britain the

views of Dahlst (1894) were adopted in modified form by Linton (1905, p. 80-84). However, Linton (1905) cites the date of publication of *H. tridentatum* Fries as (1848) rather than (1845) and does not list any localities for *H. tridentatum,* merely writing "Mid and South England; Ireland". This is in direct contrast to *H. rigidum* var. *trichocaulon* for which he lists eleven vice-counties with several localities. The lack of knowledge about *H. tridentatum* continued up until the tenth edition of the London Catalogue (Linton, 1908), where that species is recorded from six vice-counties and *H. rigidum* var. *trichocaulon* from 12 vice-counties. Not until the eleventh edition of the London Catalogue (Roffey, 1925), where both taxa appear as species, did *H. tridentatum* with 17 vice-counties exceed *H. trichocaulon* with 14 vice-counties. After the introduction of many new names by Roffey (1925), there was a big drop in interest in the genus. Pugsley (1948, p. 261), was still only able to quote *H. tridentatum* Fr. (1848) ex parte, as the date of publication at the rank of species, but he increased the distribution to cover 23 vice-counties with numerous localities. *H. trichocaulon* was only recorded in nine vice-counties. Following Zahn (1922), he also described one variety and one form of *H. tridentatum* as new taxa.

Figure 1. *Hieracium vulgatum* var. *tridentatum* Fr. Herb. Norm. III:4 (detail of inflorescense on right). Reproduced under the terms of the Creative Commons Attribution License [CC BY 4.0] (http://creativecommons.org/licenses/by/4.0), Museum of Evolution, Uppsala University.

Figure 2. H. Dahlstedt, Hierac. Exs. III: 57. *Hieracium rigidum* Hartm. subsp. *tridentatum* Fr. (detail of inflorescence on right). Reproduced under the terms of the Creative Commons Attribution License [CC BY 4.0] (http://creativecommons.org/licenses/by/4.0), Museum of Evolution, Uppsala University.

Looking back at the work of Zahn (1921-23, p. 856), under 'species principales collectivae´360 *H. laevigata* Willd., he mentions the place of publication of *H. tridentatum*, at the rank of species, "Summ. veget. 6", easily over looked and missed by British authors. Zahn placed the three *H. tridentatum* exsiccata of Fries (1848, p.171) as follows: Herb. Norm. IX. no. 3 (*forma* laevigata, glabra*),* under *H.laevigata* Willd. subsp. 175 *lissolepium* Zahn; Herb. Norm. XII. no. 14 (*forma* integrifolia), under *H. laevigata* Willd. subsp. 46 *tridentatum* Fr. var. *genuinum* subvar. 2. *glanulosiceps* Zahn and subvar. *3 adenanthelum* Zahn; Herb. Norm. III. no. 4 (*forma* dentata), under *H. laevigata* Willd. subsp. 46 *tridentatum* Fr.

Post 1950

By 1950 the new journal of the Botanical Society of the British Isles *Watsonia* had commenced publication and moves were being made to publish a revised *British Plant List.* The first major publication on British botany for many years was Clapham *et al.*, 1952). The arrangement of the genus *Hieracium* in this work commenced with section *Umbellata,* the section containing the one species that occurs in Britain that

has the base chromosome number of the genus. Unfortunately the authors or editor of *Hieracium* in the revised *British Plant List* did not follow that lead and it was not until Stace (1991) that an arrangement of the genus closer to the 1952 arrangement appeared.

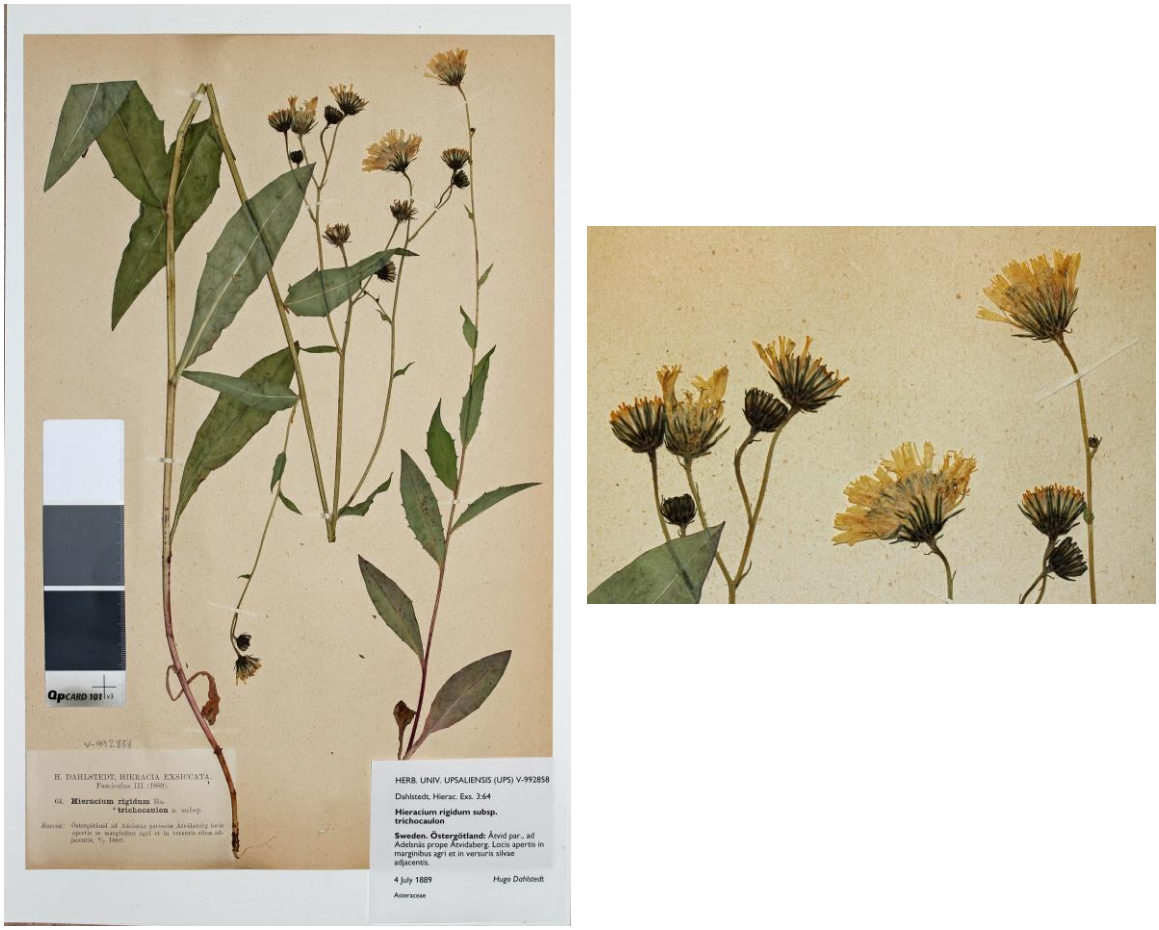

Figure 3. *Hieracium rigidum* subsp. *trichocaulon* Dahlst., Hierac. Exs. III: 64. (detail of inflorescense on right). Reproduced under the terms of the Creative Commons Attribution License [CC BY 4.0] (http://creativecommons.org/licenses/by/4.0), Museum of Evolution, Uppsala University.

Sell & West (1955) published a paper to validate new names and combinations to be used in the new list, but nothing was published to explain the many alterations made in the list. Three years later the new list of *Hieracium* was published (Sell & West, 1958). Sell & West (1958, p.129) place *H. tridentatum sensu* Pugsl. *pro parte* as a synonym under *201 H. trichocaulon* (Dahlst.) Johans., *203 H. eboracense* Pugsl. and *204 H. calcaricola* (F.J. Hanb.) Roffey. The reason for this treatment never seems to have been published, but obviously *H. tridentatum* Fr. f. dentata Fr. (1848), was not acceptable to Sell & West (1958) for publication at the rank of species. Sell & West (1958) thus removed *H. tridentatum* (Fr.) Fr. from the British list and it is still excluded.

Despite the examples of Clapham *et al.*, (1952) and Stace (1991), Sell & Murrell (2006) still decided to start the genus *Hieracium* with section *Sabauda* (Fr.) Arv.-Touv. However they have re-arranged the order of the sections and *Tridentata* is now section 4. The treatment of *H. tridentatum* (Fr.) Fr. remains much as it was in 1958. *H. tridentatum* sensu Pugsl. *pro parte* becomes *H. tridentatum* auct. and appears under the same three species. Sell & Murrell (2006, p. 251), under *H. calcaricola* (F. Hanb.) Roffey, state, "True *H. tridentatum* Fr. is a slender short plant with eglandular involucral bracts which does not seem to occur in our area."

Types

As mentioned above, syntypes of *H. tridentatum* Fr. exist, but as far as I know the species has not been lectotypified. The syntype of *H. tricocaulon* (Dahlst.) Johanss. (1902, p. 128) is Dahlstedt Hierac. Exs. 3:64 , also not lectotypified. *H. calcaricola* (F. Hanb., 1894a, p. 231) Roffey (1925, p. 29) was collected in July 1890 by H.E. Fox from limestone downs, Stroud v.c.33 (East Gloucestershire), lectotypified by Pugsley (1948, p. 241).

Morphology

As can be seen from the above images, *H. tridentatum* is not a short plant. The image of *H. trichocaulon* has one short plant and one much larger plant. The size of the plant in section *Tridentata* depends entirely upon the growing conditions that the indivdual plant happens to be in, although there is a limit on the maximum size possible. Dahlstedt (1894) gives the stem length of *H. tridentatum* as "50-70ctm." and for *H. trichocaulon* "35-90ctm." The statement by Sell and Murrell (2006) that *H. tridentatum* Fr. is a slender short plant is not very convincing. Babington (1847 p. 198) wrote of *H. tridentatum* "St. 2 feet high, stout, branching slightly in the upper half, scabrous, somewhat hairy." Backhouse (1856 p. 68) writes "Plant 2 to 5 feet high" and on page 69, "under cultivation frequently 6 feet high". However, it should be noted that Backhouse probably included the taxon now called *H. eboracense* with *H. tridentatum.*

The immediately obvious difference between the two species is the type of teeth on the leaves. The margins of median leaves of *H. tridentatum* are dentate, with three to five teeth about the middle of the leaf, and the margins of the median leaves of *H. trichocaulon* are denticulate. The phyllaries (involucral bracts) of *H. tridentatum* have pale green tips and margins, particularly the inner phyllaries, whereas *H. trichcaulon* has phyllaries with green margins, pale compared with the dark central stripe.

Pugsley (1948, p. 261) describes the indumentum of *H. tridentatum* phyllaries as "the outer obscurely floccose-edged, ± densely clad with longer dark-based and fine, pale pilose hairs, typically eglandular, but usually with ± numerous glandular hairs in British examples." Pugsley (1948, p. 262) goes on to discuss Swedish specimens that suggest the presence or absence of glandular hairs may be an unfixed character. Fries (1862, p. 116) in his last description of *H. tridentatum* writes "filiformes involucraque pallida undique canofloccosa et breviter pilosa, pilis raro glandulosis," [threadlike involucre pale on all sides greyish white floccose and shortly pilose, hair rarely glandular], which supports Pugsley's observation about the

presence of glands and undermines once again the statement of Sell & Murrell (2006 p. 251).

Pugsley (1948, p. 266) describes the indumentum of *H. trichocaulon* phyllaries as "usually efloccose, with numerous unequal, dark based pilose hairs and sometimes many dark (usually shorter) glandular hairs intermixed." Sell & Murrell (2006, p. 251) describe the indumentum of *H. trichocaulon* phyllaries as "with few to numerous, short to medium, pale simple eglandular hairs, numerous, short and minute, dark glandular hairs and few or no stellate hairs." Pugsley (1948) and Sell & Murrell (2006) describe the indumentum of the phyllaries of *H. trichocaulon* in much the same way and both allow some variability in the details. Dahlstedt (1894, p. 235) writes of *H. trichocaulon* "efloccose, v. basi levissime stellata pilis sparsis – densiusculis glandulis brevibus – minutis sparsis – densiusculis obtectae." [efloccose or base very faintly stellate with scattered hairs – short dense glands – minute glands – densely covered]. An examination of images of syntypes shows scattered hairs that extend well up from the base of the phyllaries and an examination of British specimens determined by Sell & West reveal that short and minute glandular hairs are very dense about the base.

The styles of *H. tridentatum* are described by Fries (1862, p. 116) as "Stylus lividus", by Backhouse (1856, p. 67) as "Styles livid, with dark hairs", by Zahn (1922, p. 866), "Styli obscuri", and Dahlstedt (1894, p. 219) descibes the Stylus "subluteus (– luteus) v. ferugineus more or less fusco-hispidulus, siccus haud raro sat fuscescens." Pugsley (1948, p. 261) opts for " *Styles yellow to livid* ". This last option seems to fit British specimens well as they start yellow but very quickly turn very dark with just a faint trace of yellow remaining.

The styles of *H. trichocaulon* are descibed by Dahlsted (1894, p. 236) as "Stylus ± ferrugineus fuscohispidulous, siccus ± fuscescens." [styles more or less rusty brown minutely hispid, dry more or less brownish.] Zahn (1922, p. 880) describes the styles as "Styli interdum fuscescentes." [styles sometimes brown, presumably as opposed to his description on p. 877 under Subgrex *H. rigidum* (Hartm.) Zahn "Styli lutei"], and Pugsley (1948, p. 266) descibes the styles as "yellowish to fuscous." Sell & Murrell (2006, p. 251) describe the stiles as "yellowish to discoloured".

Examination of the images of syntypes of *H. trichocaulon* show that at least in herbarium specimens, the styles start out yellowish and change through fuscous to dark, in much the same way as specimens of *H. tridentatum*, although often some yellow is retained.

Distribution

Pugsley (1948, p. 263) lists the vice-counties and localities from which he had recorded *H. tridentatum.* They are listed below followed by the number of localities in brackets:
v.c.5(1), 8(1), 9(1), 11(2), 12(1), 13(1), 14(3), 16(4), 17(6), 18(1), 21(1), 22(1), 23(1), 30(1), 33(1), 34(1), 36(2), 41(1), 42(2), 43(1), 48(1), 62(1) and 64(1), a total of 36 localities. An examination of the specimens in **OXF** confirms the distribution of *H. tridentatum* in v.c.8(1), 9(2), 11(1), 12(2), 16(1), 17(1), 21(1), 22(3), 36(1) 41(1), a total of 14 localities. Six records date back to the 19th century, seven are 1901-1960 and one is post-1960.

Clark (1900, p. 83) records that *H. tridentatum* appeared for the first time in British literature in Babington (1847), but Babington only gives the distribution as E [England]. The earliest specimen I have so far discovered in **OXF** was collected by G.C. Druce, in June 1882, near Brockenhurst, New Forest, v.c.11 (South Hants.). Townsend (1883, p. 199) records "Hedgebanks, Brockenhurst," together with 24 other localities in the three Vice-counties 10-12. Townsend also records the first record as "Herb. Bromfield, 1845" [for v.c.10, Isle of Wight], just two years ahead of Babington's publication. However, Pugsley (1948, p. 263) discovered plate 13 in Petiver (1713) and considered that figures 8 (Long hairy Hawklung) and 10 (Narrow hairy Hawklung), both from Hamsted Woods [v.c.21, Middlesex] depict *H. tridentatum*. Trimen & Dyer (1869, p. 178) suggest the first record dates back to 1705. Trimen & Dyer (1869) also record that the specimen in Herb. **Buddle** is labelled *H. fruticosum latifol. glabrum,* and if the label is correct, then according to Dillenius (1724, p.168), the specimen is 'The smoother broad-leaved bushy Hawkweed', or as Petiver (1713, pl. 13, 9) called it 'The Broad smooth Hawklung'. However, if the label states the specimen was collected at Hampstead or Hamsted, then it may well be the earliest record of *H. tridentatum* in Britain. Pugsley (1948, p. 263) states "I have myself collected this species [*H. tridentatum*] on Hampstead Heath," and there is a specimen collected on Hampstead Heath by G. Nicholson on 15th July 1878 [or 98?] in **OXF**. These early records are difficult to confirm and Pugsley (1948, p. 274) was of the opinion that Petiver (1713, pl. 13, 9) is actually *H. latobrigorum* (Zahn) Roffey, a member of section *Foliosa*. The name *H. latobrigorum* was published in 1925 and has now been replaced by *H. lanceolatifolium* (Zahn) Prain, published in 1921, on the Euro+Med Plantbase and IPNI.

Morphological Variation

Pugsley (1948, pp. 261-2) followed Zahn(1921-3, p. 866) in the treatment of variation in *H. tridentatum* but as Zahn's account is of the variation in the entire range of the species, Pugsley restricted his account to the variation that is present in Britain. Pugsley places the subvar. *glandulosiceps* Zahn as a new combination, f. *glandulosiceps* (Zahn) Pugsley, and states it differs from the type in "phyllaries with numerous dark glandular but no pilose hairs". This form has a restricted distribution: v.c.11(2), 12(1), 16(2), 17(1) and 22(1), a total of just 7 localities. The other taxon described by Zahn that Pugsley includes as British is *H. laevigatum* subsp. *tridentatum* var. *polyphyllum*, which he publishes as *H. tridentatum* var. *polyphyllum* (Zahn) Pugsley. This taxon varies considerably from the type and has a wide distribution: v.c.4(1), 9(1), 12(1), 13(3), 14(3), 16(3), 17(10), 19(1), 22(2), 34(1), 53(1) and 58(1 without locality), a total of 27 localities.

In the Fielding-Druce Herbarium at Oxford (**OXF**) there are no specimens of *H. tridentatum* Fr. (1848) *ex parte* f. *glandulosiceps* (Zahn) Pugsley. *H. tridentatum* (Fr.) Fr. var. *polyphyllum* (Zahn) J. Bevan has a scattered distribution: v.c.12(1) (Palmer), 13(1) (G.C. Druce), and 17(1) (E.S. Marshall, Set Brit Hierac. 44, as *H. rigidum* Hartm. var. *scabrescens* Johanss.), 19(1) (Brown) and 22(2) (H.J. M. Bowen & G.C.Druce). *H. tridentatum* (Fr.) Fr. f. *subpilosiceps* (Zahn) J. Bevan has been recorded on one occasion: v.c.22 Bracknell, 1931 (G.C. Druce, det. Zahn).

Sell & Murrell (2006, p.251) place *H. tridentatum* forma *glandulosiceps* (Zahn) Pugsley and *H. tridentatum* var. *polyphyllum* (Zahn) Pugsley as synonyms of *H. calcaricola* (F. Hanb.) Roffey. However the specimens in **OXF** of *H. calcaricola* determined by P.D. Sell are obviously different from the specimens of var. *polyphyllum,* none of which appear to have been seen by Sell & West or Sell.

In Sweden, Dahlstedt (1894) divided *Archieracia* into four sections. Section III *Rigida* Lindbg. included only two species, *H. tridentatum* Fr. and *H. rigidum* Hartm. Before 1894 *H. rigidum* had included a wide range of variation which Dahlstedt split into ten subspecies. In Britain, members of the Botanical Exchange Club were looking out for specimens that fitted into the new subspecies, and Linton (1905) recorded seven of the ten subspecies as present in Britain, but at the rank of variety. All ten subspecies are now published at the rank of species in Britain and Scandinavia, and those that Linton (1905) thought to occur in Britain are listed in Table 1.

Table 1. Approximate distribution of seven taxa formerly considered as subspecies of *Hieracium rigidum*. Column 1 = the number of sheets in the 6 Swedish herbaria that have contributed data to Sweden's Virtual Herbarium. The numbers can include multiple collections from the same locality. Column 2 = the number of locations in Britain, listed by Linton (1905). Column 3 = the number of sheets in OXF as at present identified. Column 4 = the number of Regions, as defined by POWO, from which the species has been recorded . *H. tridentatum* has been added for comparison.

Taxon	**1**	**2**	**3**	**4**
H. rigidum	536	4	10	22
H. acrifolium	980	5	4	4
H. friesii	71	7	7	8
H. trichocaulon	233	11	7	2
H. scabrescens	267	10	10	1
H. obatrescens	431	4	?	3
H. lineatum	612	3	?	13?
H. tridentatum	142	–	14	20

In Table 1 the number of sheets of *H. trichocaulon* in the **OXF** column has been restricted to those sheets confirmed by Sell & West and may increase as further study of the specimens is completed.

The British centre of this variation is in southern England and the variation was recorded in detail in Surrey and Sussex. Salmon (1931, p. 418) records five taxa as present in Surrey. Salmon confirms that he personally had seen a dried specimen, or living plants at a locality listed, of every one of the five taxa. Pugsley (in Salmon, 1931) contributed records of *H. tridentatum* F*r., H. scabrescens* Dahlst. and *H. rigidum* Hartm. Pugsley had obviously not compared British specimens with Scandinavian specimens at that time. Wolley-Dod (1937, p. 265) in Sussex, included four taxa, missing out any mention of *H. trichocaulon.*. H.W. Pugsley is only mentioned in connection with *scabrescens* Dahlst. and he does not confirm the records, merely saying "near this" and "(*cf.*)".

Pugsley (1948 pp. 262-3) discusses six of the seven species but dismisses their claims as British plants, allowing only *H. tridentatum* (Fr.) Fr. and *H. trichocaulon* (Dahlst.) Johanss. Unusually, Pugsley (1948) makes no suggestions about the correct names for the specimens of *H. rigidum, H. acrifolium, H. scabrescens, H. obatrescens* and *H. lineatum* which he does not consider to occur in Britain. Pugsley(1948, p. 245) does mention, when discussing *H. gothicoides,* that Hanbury (1892, p. 369), described a plant collected by the Clunie at Braemar and grown in his garden as *H. friesii* Hartm. var. *hirsutum.* Hanbury (1892, p. 370) also mentions that *H. friesii* Hartm. is also present at Breamar and possibly in Perthshire. Linton & Linton (1893, p. 199) record *H. friesii* Hartm. (*H. gothicum* Fries, Backh.), from Berriedale cliffs, Caithness. That record in Linton (1905, p. 77) is recorded as *H. gothicum* Fr. p.p. f. *latifolia* which Pugsley (1948, p. 248) records as *H. backhouseanum* (Zahn) Roffey var. *latifolium.* Specimens named *H. friesii* thus need careful examination before a current UK name is attached to them. Sell & Murrell (2006, p. 254) place var. *hirsutum* F. Hanb., as a synonym of *H. substrigosum* (Zahn) Roffey, and var. *latifolium* (Backh. fil.) E.F. & W.R. Linton, as a synonym of *H. aphyllopodioides* F.N. Williams. Of the latter name, Williams (1903 p.183), states, "*H. scoticum* 160 (syn.)". *H.scoticum* F. Hanb. (1888, p. 206) is the older name, therefore *H. aphyllopodioides* is a later synonym and a *nom. illeg*. The correct name for the taxon is *Hieracium backhouseanum* (Zahn) Roffey.

Sell & West (1958) place *H. obatrescens* auct. and *H. rigidum* auct. as synonyms of *H. pseudacrifolium* Pugsley, *H. acrifolium* auct. and *H. scabrescens* auct. as synonyms of *H. trichocaulon* (Dahlst) Johanss. and *H. scabrescens* auct. as a synonym of *H. calcaricola* (F. Hanb.) Roffey, without a mention of *pro parte.* Sell & West (1958) place *H. tridentatum* sensu Pugsley *pro parte,* under *H. trichocaulon, H eboracense* Pugsley and *H. calcaricola*.

Sell & Murrell (2006) place *H. rigidum* auct. as a synonym of *H. latobrigorum* (Zahn) Roffey a *nom illeg.* now known as *H. lanceolatifolium* (Zahn) Prain in section *Foliosa*. Rich & McCosh (2021, p. 96) explain this as "*H. rigidum* auct. angl., in part", really just a misplaced name. *H. obatrescens* auct. is not referred to in Sell & Murrell (2006). Instead they use *H. rigidum* var. *pullatum* auct. which they give as a synonym of *H. scabrisetum* (Zahn) Roffey. Dahlstedt (1894, p. 239) gives *H. *pullatum* Dahlst. Hier.exs. fasc. I n. 99 as the type of *H. rigidum* subsp. *obatrescens* Dahlst. Dahlstedt must have discovered that the name *pullatum* had been published at the rank of species in 1886 by Arvet-Touvet. *H. tridentatum* var. *acrifolium* auct. and *H. pseudacrifolium* Pugsley also appear as synonyms of *H. scabrisetum* (Zahn) Roffey. *H. scabrescens* auct. is not included as a synonym in Sell & Murrell (2006). *H. friesii* auct. and *H. rigidum* var. *friesii* auct. appear in Sell & Murrell (2006) under *H. subtruncatum* Beeby as synonyms and refer to the record (Linton, 1905, p. 82) from Ollaberry, Shetland Isles. Again this is really just a misplaced name. *H. lineatum* Almq. ex Stenström, non Arv.-Touv. and *H. rigidum* subsp. *lineatum* Dahlst are given as synonyms under *H. lissolepium* Roffey. Sell & Murrell (2006) place *H. tridentatum* auct. under the same three species as Sell & West (1958).

In the Fielding-Druce Herbarium at Oxford (**OXF**), at present there are 14 sheets of specimens which I have determined as *H. tridentatum,* with another 8 sheets determined as *H. tridentatum* in the past, but which I am confident are not

that species. Sell & West confirmed 7 sheets as *H. trichocaulon,* although one sheet has very dark styles and is probably *H. eboracense* Pugsley. A further 17 sheets named *H. trichocaulon,* or *H. rigidum* need further study. There are also 14 sheets named either as *H. acrifolium* (Dahlst) Dahlst., *H. freisii* Hartm. or *H. scabrescens* (Johanss. ex Dahlst.) Johanss., all species not accepted as British by Pugsley (1948), that await further study, although in the past the range of variation they display was sufficient to get them accepted at the rank of species.

New combinations

In section *Tridentata* (Fr.) Arv.-Touv.

Hieracium tridentatum (Fr.) Fr. (1845 p. 6)
var. ***polyphyllum*** (Zahn) J. Bevan **comb. nov**.
H. laevigatum subsp. *tridentatum* var. *polyphyllum* Zahn in Engler, H.G.A. (ed.) *Das Phlanzenreich*, 866 (1922).

Pugsley (1948, p. 262) published var. *Polyphyllum* (Zahn) as a comb. nov. of *H. tridentatum* Fries, Symb. 171 (1948), ex parte. Fries combined three taxa into one with that publication, hence ex parte. I have transferred var. *polyphyllum* to the publication of *H. tridentatum* by Fries at the rank of species.

Hieracium tridentatum (Fr.) Fr. (1845 p. 6)
f. ***subpilosiceps*** (Zahn) J. Bevan **comb. nov**.
H. laevigatum subsp. *tridentatum* var. *polyphyllum* f. subpilosiceps Zahn in Engler, H.G.A. (ed.) *Das Phlanzenreich*, 867 (1922).

The form *subpilosiceps* (Zahn) was not know to Pugsley as British, but it seems reasonable to maintain the simple approach taken by Pugsely to f. *glandulosiceps* (Zahn).

Commentary

As can be seen from the list of taxa in Table 1, there is a group of closely related species which were originally described in Sweden. All except *H. rigidum* Hartm. and *H. friesii* Hartm. had syntypes selected by the author. When all eight species are lectotypified, it is possible that British material may need to be re-examined in the light of new knowledge.

Figure 1 has an image of specimen UPS V-112720 on the left. There are three labels in the bottom right hand corner, the original label being the lowest one on the right. Fries (1837) took over the issuing of the Herb. Norm. exsiccata in 1836 after two fascicles had been issued. As mentioned in the introduction, the taxon now known as *H. tridentatum* (Fr.) Fr. was originally published as *H. vulgatum* var. *tridentatum* Fr. in 1819. A year later, in 1820, Hartman published his new hawkweed species *H. rigidum* Hartm. (1820 p. 300), and Fries had his labels printed thinking that the new species was the taxon he had called *H. vulgatum* var. *tridentatum* Fr. in 1819. When he issued Herb. Norm. fascicle III:4 in 1837, the fascicle number was hand written on the label. Subsequently in 1845 he had decided that *H. tridentatum*

(Fr.) Fr. differed from *H. rigidum* Hartm. and should be published at the rank of species. The label *Hieracium rigidum* Hartm. subsp. *asperum* Fr., determinavit 1906, *Hugo Dahlstedt* can be ignored as the specimen is a syntype of *H. tridentatum* (Fr.) Fr. (1845 p. 6), so that name has priority. The first version of the International Code of Nomenclature was only published in 1906, so Dahlstedt had no guidelines to follow. The taxon was called *H. laevigatum* subsp. *asperatulum* Zahn (1921-23, p. 885), a subspecies name that does not appear to have been published at the rank of species. *H. asperum* Bernh. (1800 p. 136) makes *asperum* unavailable. The large type written label confirms the information on the printed label below.

Only *H. trichocaulon* (Dahlst.) Johanss. was recorded as occurring in Britain by Sell & Murrell (2006), and their list has been followed by all subsequent authors. Further work will be carried out to try and determine the correct identity of the remaining unidentified specimens in **OXF**.

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References

Babington, C.C. 1847. *Manual of British botany*, 2nd ed. London: John Van Vorst.

Backhouse, J. fil. 1856. *A Monograph of the British Hieracia.* York: W. Simpson.

Bernhardi, D.J.J. 1800. *Systematisches Verzeichnis der Pflanzen, welche in der Gegend um Erfart gefunden werden.* Erfurt: Hoyer und Rudolphi. [*n.v.*]

Clapham, A.R., Tutin, T.G. & Warburg, .E.F. 1952. *Flora of the British Isles.* Cambridge Cambridge University Press.

Clark, W.A. (1900) *First Records of British Flowering Plants*; 2nd ed. London: West, Newman & Co.

Dahlstedt, H. 1889. *Hieracia* exsiccata I-III. [Exsiccata]

Dahlstedt, H. 1894. Bidrag till sydöstra Sveriges Hieracium-flora III. Archieracia. *Kongl. Sv. Vet.-Ak. Handl*. 26 n. 3: 218-242.

Dillenius, J.J. ed. 1724. *John Ray Synopsis Methodica Stirpium Britannicarum*, ed. 3, facsimile 1973. London: The Ray Society.

Fries, E. 1819. *Novitiae florae suecicae.* Lundae: [*n.v.*]

Fries, E. 1837. Herbarium normale plantarum rariorum et criticarum Sueciae. Fasc. III. [Exsiccata]

Fries, E. 1845. *Summa Vegetabilium Scandinaviae.* Upsaliae: E Typographia Acedemica.

Fries, E. 1848. Symbolae ad Historiam Hieraciorum. *Nov. Act. Soc. Sc. Ups.*13-14: 1-220.

Fries, E. 1862. *Epicrisis Generis Hieraciorum.*Uppsaliae: Edquist & Berglund.

Hanbury, F.J. 1888. Notes on some *Hieracia* new to Britain. *Journal of Botany, British and Foreign* 26: 204-206.
Hanbury, F.J. 1892. Further notes on *Hieracia* new to Britain. *Journal of Botany, British and Foreign* 30: 129-134; 165-170; 206-209; 366-370.
Hanbury, F.J. 1894a. Notes on British *Hieracia. Journal of Botany, British and Foreign* 32: 225-233.
Hanbury, F.J. 1894b.Tentative List of British *Hieracia. Journal of Botany, British and Foreign* 32(7): after 224.
Hanbury, F.J. & Thompson, R.F. 1904. *Hieracia* L. in Babington, C.C., eds. Groves, H.& J. *Manual of British botany*, 9th ed., pp. 232-270. London: Gurney & Jackson.
Hartman, C.J. *Handbok i Skandinaviens flora,*1st ed. Stockholm: [*n.v.*]
Johansson, K. 1902. Archhieracium - Floran inom Dalarnes Silurområde I Siljanstrakten. *Bihang Till K. Svenska Vet.-Akad. Handlingar* 28 (3)7: 1-156.
Linnaeus, C. 1753. *Species Plantarum,* 1st ed. Vol 2: 799-805. Stockholm: Laurentii Salvii.
Linton, E.F. & W.R. 1893. British Hawkweeds. *Journal of Botany, British and Foreign* 31: 145-149; 177-182; 195-202.
Linton, W.R. 1905. *An Account of the British Hieracia*. London: West, Newman & Co.
Linton, W.R. 1908. *Hieracium* L. in Hanbury F.J. *The London Catalogue of British Plants,* 10th ed., pp. 23-26. London: George Bell & Sons,
Petiver, J. 1713-15. *Catalogue of Mr. Ray's English Herball*. London:[s.n.]
Pugsley, H.W. 1948. A Prodromus of the British *Hieracia*. *Journal of the Linnean Society* (*Botany*) 54: 1-356.
Rich, T.C.G. & McCosh D. 2021. Monograph of British and Irish *Hieracium* section *Foliosa* and section *Prenanthoidea*. BSBI Handbook no. 21. Durham: Botanical Society of Britain and Ireland.
Roffey, J. 1925. *Hieracium* L. in Hanbury F.J. *The London Catalogue of British Plants,* 11thed., pp. 26-30. London: George Bell & Sons.
Salmon, W.H. 1931. *Flora of Surrey*. London: G. Bell & Sons, Ltd.
Sell, P. & Murrell, G. 2006. *Hieracium* L. in *Flora of Great Britain and Ireland*, vol 4: 218-421. Cambridge: Cambridge University Press.
Sell, P.D. & West, C. 1955. Notes on British *Hieracia* - I. *Watsonia* 3: 233-236. https://archive.bsbi.org.uk/Wats3p233.pdf
Sell, P.D. & West, C. 1958. *Hieracium* L., in Dandy, J.E., *List of British Vascular Plants*, pp. 120-130. London: British Museum (Natural Hisory) & Botanical Society of the British Isles.
Stace, C. 1991. *New Flora of the British Isles.* Cambridge: Cambridge University Press.
Townsend, F. 1883. *Flora of Hampshire including the Isle of Wight.* London: L. Reeve & Co.
Trimen, H. & Thisleton Dyer, W.T. 1869. *Flora of Middlesex: a Topographical and Historical Account.* London: Robert Hardwicke.
Williams, F.N. 1901-12. *Prodromus Florae Britannicae.* Brentford: Agent, C.Stutter.
Wolley-Dod, A.H. 1937. *Flora of Sussex.* Hastings: Kenneth Saville.

Zahn, K.H. 1921-23. IV. 280 *Compositae-Hieracium* in Engler, H.G.A. (ed.) *Das Phflanzenreich,* [Heft 75-77 & 79]. Leipzig: William Englemann.

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IPNI - International Plant Names Index - https://www.ipni.org

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