# New species, varieties and combinations of *Hieracium* from the Swedish provinces Gotland and Östergötland

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Three new species, i.e. *Hieracium evae* T. Tyler, *Hieracium jonsbergense* T. Tyler, *Hieracium subnitidum* Dahlst. *ex* T. Tyler, and one variety, i.e. *H. ravidum* Brenn. var. *exaltifrons* T. Tyler *var. nov.* are described. *Hieracium myrtillinum* (Johanss. *ex* Dahlst.) T. Tyler *comb. nova* is proposed. All are based on material collected in the SE Swedish provinces Gotland and Östergötland.

Key words: Hieracium, taxonomy, nomenclature

While reexamining all available material of *Hieracium* sect. *Hieracium* and *Hieracium* sect. *Vulgata* from the SE Swedish provinces of Gotland and Östergötland, a number of previously undescribed taxa were identified. Three new species, one new variety and one new combination at the rank of species were consequently included as unpublished taxa in my recently published treatments of the *Hieracium* species of these provinces (Tyler 2002a, 2002b, 2003). However, since these publications were written in Swedish, published in local journals and mainly intended for Swedish amateurs, I considered it less appropriate to formally publish the novelties there.

When examining the enormous amount of material of Swedish *Hieracium* preserved in Swedish public herbaria, single gatherings that appear to represent new taxa are now and then encountered. As long as these morphotypes are not particularly distinct and are known from single gatherings only, they are best overseen

as indeterminable specimens. However, when the same morphotype has been collected repeatedly from one or more localities it deserves to be described. During my work with the Hieraciumflora of Gotland and Östergötland I encountered the following such morphotypes which are here formally described as taxa. Owing to the enormous number of taxa described in this genus (possibly ca. 20 000) it is almost impossible to tell with absolute certainty if a taxon is new or has been previously described. However, with the knowledge I have about the Scandinavian Hieracium-flora, and considering the fact that almost all species in these groups have small and well defined distributions, I feel justified to say that the following taxa are really new. In addition, it must be considered most unfortunate if many well-defined local species will remain unnamed simply because no taxonomist has enough knowledge of all previously described taxa to say if a presumably new taxon is new or not.



Fig. 1. Part of the holotype of *Hieracium evae*, showing the characteristic leaf shape.

#### Hieracium evae T. Tyler, sp. nova (Fig. 1)

Caulis altus, 1- vel saepe 2-folius. Folia rosularia subtus saepe ± violascentia, elliptica, cum petiolis longe et sat dense pilosa, subtus estellata, apice  $\pm$  acuto, basi cuneata ad rotundata, margine regulariter longe ad longissime falcato-dentato, apicem versus serrata (Fig. 1 vide). Petiolus appendiculatus. Folium caulinum triangulari-lanceolatum, acutum, basi truncata, prope basin profundissime acuteque pinnato-incisum (Fig. 1 vide). Anthela paniculata, ramis erectis et potius crassis; acladium 2–3 cm longum; rami ut acladium et pedicelli glandulis mediocris fuscis crebris pilisque sat sparsis obsiti. Involucra 11-13 mm longa, squamis angusto-obtusis, glandulis crebris fuscis longis brevibusque mixtis et pilis longe albo-apiculatis copiose obsitis; margines squamarum basin versus manifeste stellato-limbati, pili stellati prope apicem pauci. Apices calathiorum densissime ciliati. Stylus siccus leviter fusco-hispidulus.



Fig. 2. Part of the holotype of *H. jonsbergense*, showing the characteristic leaf shape.

TYPE: Sweden. Gotland, Hogrän, söder om anhalten på järnvägsvallen, 10.VI.1937, *E. Th. Fries* (holotype S; four isotypes S).

A very characteristic species so far only known from the type locality. The shape of the stem leaves and the longly appendiculate petioles of the basal leaves distinguish this species from all other Nordic members of sect. *Hieracium*. Owing to the tall habit and commonly two stem leaves, this species may at first sight be taken for a member of sect. *Vulgata*, but the stem leaves are distant and broadly triangular unlike in most members of that section. Further, the densely ciliate ligules will at once distinguish *H. evae* from all members of sect. *Vulgata*.

## *Hieracium jonsbergense* T. Tyler, *sp. nova* (Fig. 2)

Caulis mediocris. Folia rosularia saepe violascentia, anguste elliptica, basi cuneata ad anguste rotundata, margine subintegerrimo vel perfecte integerrimo (Fig. 2 vide). Folia caulina 1–2, anguste lanceolata, integerrima, subtus dense stellata. Anthela subpaniculata, acladio c. 3 cm longo. Acladium pedicellique glandulis nigris crebris pilisque paucis vel sparsis obsiti. Involucra 10–11 mm longa; squamae latae, obtusae vel breviter acutae, intimae interdum subulatae, glandulis mediocris nigris crebris–creberrimis pilisque sparsis obsitae, fere omnino estellatae. Stylus siccus luteus–subluteus.

TYPE: Sweden. Ög. Jonsberg: Gässlingbo, 20.VII.1899 J.A. Lewin (holotype S).

Among Nordic *Hieracium*, morphologically most similar to *H. diaphanum* (= *H. pseudodiaphanum*), but that species never has any simple hairs in the inflorescense and the leaves are distinctly denticulate. *Hieracium diaphanoides* also never has any simple hairs on the phyllaries, which furthermore are very broadly obtuse-truncate.

SELECTED SPECIMENS EXAMINED (paratypes). — There are several additional gatherings from the type locality by the same collector in LD & S that should be regarded as paratypes, these are dated: 28.VI.1896, 5.VIII.1898, and 30.VI.1903. Apart from this locality I have seen material from the province Småland, Järeda parish, sydvänd brant, 250 m NV Skarnevikens östra spets, 2001, and Vena parish, 550 m NO flygplatsen, 2002, both collected and kept by *T. Nilsson*, Virserum, which most probably belong to this same species.

# *Hieracium subnitidum* Dahlst. *ex* T. Tyler, *sp. nova* (Fig. 3)

Caulis potius altus. Folia rosularia virida, exteriora elliptica vel interdum obovata, basi anguste cuneata, apice ± late obtuso vel rotundato, margine irreguliter denticulato vel interdum grosse vel mammiforme serrato-dentato (Fig. 3 vide). Folia caulina 3-6, lanceolata, regulariter potius profunde et anguste triangolari-dentata, subtus haud stellata. Anthela dense paniculata, ramis acladioque angustis erectis. Rami et pedicelli glandulis nigris copiose-crebre et pilis brevibus copiose obsiti. Involucra 9–10 mm longa; squamae angusto-obtusae vel subacutae, glandulis brevibus fuscis-nigris crebris et pilis brevibus albo-apiculatis crebris obsitae; margines squamarum prope basin sparse stellati vel squamae omnino estellata. Stylus siccus vivusque luteus-subluteus.



**Fig. 3.** Part of the holotype of *H. subnitidum*, showing the characteristic leaf shape and the branching pattern of the synflorescence.

TYPE: Sweden. Norrköping, Torshag, Gransjön ad margin. silv., VII.1900 P. Olsson (holotype LD).

The name *subnitidum* has been proposed by Dahlstedt (*in sched.*) and material belonging to this species is already placed under this name in several herbaria, however, as far as could be ascertained, no formal description of this species has ever been published, although the material as described above is clearly distinct from all previously known species.

SELECTED SPECIMENS EXAMINED (paratypes). — There are several additional gatherings from the type locality (Gransjön) by the same collector in S & LD that should be regarded as paratypes, these are dated: VII.1898, VII.1899, and VII.1901.

*H. ravidum* Brenn. var. *exaltifrons* T. Tyler, *var. nova* (Fig. 4)

Ab H. ravido e H. galbanuo (Dahlst.) Dahlst. typicis differt foliis rosularibus late ellipticis, profundisseme crebreque pinnatifido-laciniatis,



**Fig. 4.** Part of the holotype of *Hieracium ravidum* var. *exaltifrons*, showing the characteristic leaf shape.

segmentis longis brevibusque regulariter alternatibus, petiolis saepe appendiculatis; foliis caulinis acutissime et crebrissime pinnatifidis (Fig. 4 vide); ramis anthelae saepe pseudoumbellatis confertis.

TYPE: Sweden. Gotland, Fröjel sn, Fröjel, 9VI.1938 H. Hylander (holotype LD).

The name *Hieracium galbanum* (Dahlst.) Dahlst. (1895) has been used for this widespread and variable species by all previous Swedish authors. However, as first pointed out by Sennikov (1999), the name *H. ravidum* Brenner (1892) should have priority. In general I dislike the usage of infraspecific ranks in apomictic complexes. I regard all taxa that are unambiguously distinguishable by means of presumably genetically fixed characters within such complexes as species. The usage of infraspecific ranks generally indicates inferences about phylogenetic relationships and evolutionary distinctiveness that can hardly ever be made among apomictic taxa, at least not based on morphologi-



**Fig. 5.** Part of the lectotype of *H. myrtillinum*, showing the characteristic leaf shape.

cal characteristics alone. However, the species H. ravidum s. lato shows a morphological variability that is not encountered among any other Fennoscandian Hieracium species. After studying this group in great detail, Sennikov (1999) decided to circumscribe this species very widely and I generally agree with his treatment. However, in particular on Gotland, there are a few morphotypes, among them the variety described above, that deviate very significantly from the type, but which cannot always be distinguished from the latter owing to the existence of intermediate forms and single very aberrant specimens. To dismiss these repeatedly occurring forms as taxonomically worthless is not satisfactory and therefore I have accepted the usage of varietal rank in this species as an exception to the rule (cf. Tyler 2002b). Meanwhile, it would be most interesting to study the origin of the exceptional variability of this species by means of molecular techniques.

SELECTED SPECIMENS EXAMINED (paratypes). — There is a rather extensive material of this variety in S and LD from the following parishes, all on the island of Gotland: Bunge, Etelhem, Fleringe, Fröjel, Hall, Hangvar, Lummelunda, Lärbro, Othem, Tofta and Tingstäde. It is not known from mainland Sweden but, according to A. Sennikov (pers. comm.), similar morphotypes possibly referable to this variety occur in the Baltic states.

*Hieracium myrtillinum* (Johanss. *ex* Dahlst.) T. Tyler, *comb. et stat. nov.* (Fig. 5)

— *H. panaeolum* f. *myrtillinum* Johanss. *ex* Dahlst., Bidr. II p. 125. 1893.

Diagn. nov.: Ab H. panaeolo Dahlst. differt foliis rosularibus dense hepatitico-maculatis, late ellipticis subobtusis, crebriter mediocre triangularo-dentatis, basibus rotundatis vel late angustatis (Fig. 5 vide); stylo sicco valde obscuro vel nigrescenti, apicibus calathiorum  $\pm$ ciliatis.

LECTOTYPE (designated here): Sweden. Suecia: Gotland in aggeribus litoralibus silvaticis prope Ar träsk paroeciae Fleringe, 2.VI.1890 K. Johansson (ex. H. Dahlstedt, Herb. Hierac. Scand. I 68) (S).

The type material of *Hieracium panae*olum f. myrtillinum, distributed in Dahlstedt's exsiccates, consists partly of only moderately modified forms of *H. panaeolum*, partly of the above described taxon, and the original diagnosis (Dahlstedt 1893) is very vague. Therefore, a new diagnosis is given here. In my view, the close relationship between this species and *H. panaeolum* proposed by Dahlstedt is, like most such propositions in this genus, a guess only. The leaf-shape of *H. myrtillinum* is not more similar

to that of *H. panaeolum* than to many other species and the capitula are distinct as well.

SELECTED SPECIMENS EXAMINED (paratypes). — Apart from the lectotype gathering only known from a single gathering in LD from the nearby parish Bunge, Stux, 1977 S. Nordenstam & E. Evers.

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