BioOne COMPLETE

Typification of the Linnaean name Hieracium cerinthoides (Compositae)

Authors: Ferrer-Gallego, P. Pablo, Greuter, Werner, Egido, Fermín Del, and Mateo, Gonzalo

Source: Willdenowia, 45(3) : 385-389

Published By: Botanic Garden and Botanical Museum Berlin (BGBM)

URL: https://doi.org/10.3372/wi.45.45302

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Downloaded From: https://bioone.org/journals/Willdenowia on 24 Apr 2024
Terms of Use: https://bioone.org/terms-of-use

P. PABLO FERRER-GALLEGO[1*], WERNER GREUTER[2], FERMÍN DEL EGIDO[3] & GONZALO MATEO[4]

Typification of the Linnaean name *Hieracium cerinthoides* (*Compositae*)

Abstract

Ferrer-Gallego P. P., Greuter W., Egido F. del & Mateo G.: Typification of the Linnaean name *Hieracium cerinthoides* (*Compositae*). – Willdenowia 45: 385–389. 2015. – Version of record first published online on 1 October 2015 ahead of inclusion in December 2015 issue; ISSN 1868-6397; © 2015 BGBM Berlin.

DOI: http://dx.doi.org/10.3372/wi.45.45302

The typification of the Linnaean name *Hieracium cerinthoides* (*Compositae*) is discussed. Original material conserved in LINN is designated as the lectotype. An epitype is also designated here in order to avoid any ambiguity in the interpretation of the type specimen.

Additional key words: epitype, *Hieracium* sect. *Cerinthoidea*, lectotype, Linnaeus, nomenclature

Introduction

Hieracium cerinthoides L. provides the type of *H.* sect. *Cerinthoidea* Monnier (1829: 48), a complex and diverse group of agamospecies inhabiting the W part of the Mediterranean Basin (Mateo 1990, 2008). The name has been, and still is, applied to a glabrescent plant with basal leaves oblanceolate to elliptic, entire or slightly dentate; stem leaves several, usually ovate, amplexicaul; and peduncles and involucral bracts (phyllaries) with scabrid eglandular hairs, stellate hairs and glandular hairs; its distribution is restricted to the Pyrenees and the Cantabrian mountain range (Mateo 2007).

Two other well-known species, and several recently described ones (see below), are very similar in appearance to *Hieracium cerinthoides*: *H. ramondii* and *H. gymnocerinthe*.

Hieracium ramondii Grisebach (1853: 100) lacks glandular hairs (or occasionally has very scattered and short ones) on the peduncles and involucral bracts, but has abundant blackish or greyish scabrid eglandular hairs.

Hieracium gymnocerinthe Arvet-Touvet & Gautier (1904: xlviii) has virtually only glandular hairs (most of them long) on the peduncles and involucral bracts. Some authors have included it as a subspecies in *H. cerinthoides* (see Zahn 1921: 162), whereas others consider *H. cerinthoides* as an intermediate species between *H. gymnocerinthe* and *H. ramondii* (Mateo 2007, 2008).

As part of the preliminary studies for preparing the *Hieracium* account for *Flora iberica* (see Mateo 2007, 2008), the original material of *H. cerinthoides,* a name that has not yet been typified (Jarvis 2007: 572), has been examined. The present type designation is made with the

1 Servicio de Vida Silvestre, Centro para la Investigación y Experimentación Forestal, Generalitat Valenciana – VAERSA, Avda. Comarques del País Valencià 114, 46930 Quart de Poblet, Valencia, Spain; *e-mail: flora.cief@gva.es (author for correspondence).
2 Herbarium Mediterraneum, c/o Orto Botanico, Via Lincoln 2/A, 90133 Palermo, Italy.
3 Departamento de Biodiversidad y Gestión Ambiental (Área de Botánica), Facultad de CC Biológicas y Ambientales, Campus de Vegazana, Universidad de León, 24071 León, Spain.
4 Jardín Botánico e Instituto Cavanilles de Biodiversidad y Biología Evolutiva, Universitat de València, C/ Quart 80, 46008 Valencia, Spain.

Downloaded From: https://bioone.org/journals/Willdenowia on 24 Apr 2024
Terms of Use: https://bioone.org/terms-of-use

Fig. 1. One of Linnaeus's original specimens of *Hieracium cerinthoides*; Herb. A. van Royen – L No. 900.316-336, barcode L0053099. – Photography by courtesy of the herbarium L; reproduced with permission.

Downloaded From: https://bioone.org/journals/Willdenowia on 24 Apr 2024
Terms of Use: https://bioone.org/terms-of-use

Fig. 2. Epitype of *Hieracium cerinthoides* L. – VAL210645. – Photography by courtesy of the herbarium VAL; reproduced with permission.

Downloaded From: https://bioone.org/journals/Willdenowia on 24 Apr 2024
Terms of Use: https://bioone.org/terms-of-use

explicit purpose of stabilizing the use of that name in the sense in which it has been and is being applied.

Typification

Linnaeus's (1753: 803) protologue of *Hieracium cerinthoides* consists of a diagnostic phrase (nomen specificum legitimum) *"HIERACIUM foliis radicalibus obovatis denticulatis, caulinis oblongis semiamplexicaulibus",* reproduced from two earlier, cited works (Royen 1740: 124; Linnaeus 1748: 238), followed by a synonym, "*Hieracium pyrenaicum, foliis cerinthes, latifolium*", cited from Tournefort (1700: 472) and the indication of geographical origin "*Habitat in* Pyrenaeis".

In the absence of cited illustrations, the entire original material (see Jarvis 2007: 572) consists of the two specimens described below. We have been unable to trace further original material in any other Linnaean and Linnaeus-linked herbarium.

(1) Herb. Linn. No. 954.28 (LINN) (image available at http://linnean-online.org/8846/) is annotated by Linnaeus "18 *cerinthoides*", where 18 is the species number that appears in the protologue of *Hieracium cerinthoides* (Linnaeus 1753: 803) (see Turland & Jarvis 1997; Turland 2006; Jarvis 2007: 41–46, 397); the sheet bears one terminal synflorescence and one fertile side branch, both with ovate, amplexicaul leaves, plus two separate, slightly dentate, oblanceolate, glabrescent basal leaves, all of which may well have been taken from one and the same individual; the stem is subglabrous; the inflorescence branches are hairy; the involucral bracts and peduncles bear abundant glandular and eglandular hairs. This specimen fits the protologue and is compatible with the traditional concept of *H. cerinthoides* (e.g. Fries 1848; Grisebach 1853; Zahn 1921).

(2) A sheet from Herb. A. van Royen (L No. 900.316-336, barcode L0053099; Fig. 1), annotated by Royen: "*Hieracium foliis radicalibus obverse ovatis denticulatis, caulinis oblongis semi-amplexicaulibus* Roy. prodr. 124. / *Hieracium pyrenaicum, folio cerinthes, latifolium*. Tourn. inst. 472. Boerh. lugdb. 1. p. 88. Vaill. act. 1721. p. 184. / *Hieracium* (*cerinthoides*) / Herb. v Royen". It bears a plant (or assemblage) with several basal leaves forming a rosette and a fertile stem (or branch) with two leaves and three flower heads, but with the diagnostically important involucral bracts and receptacles destroyed by insect damage. This specimen is original material, because Linnaeus studied Royen's herbarium during his stay in Leyden, before his return to Sweden in 1738 (see Jarvis 2007: 153).

As the specimen at LINN is more complete and better preserved than the Royen specimen, it is the obvious choice to typify the name *Hieracium cerinthoides*. However, it lacks some important diagnostic features, such as the basal and middle part of the stem that would be necessary for distinguishing it with confidence from some other closely related species (e.g. *H. altaneuense* Mateo & Egido, *H. cantalicum* Arv.-Touv., *H. drazeticum* Arv.-Touv. & Marcailhou, *H. lamprophyllum* Scheele and *H. trichodoronicum* Arv.-Touv. & Gaut.). Therefore, an epitype is here designated, as provided for in Art. 9.8 of the *Melbourne Code* (McNeill & al. 2012). The epitype selected is a modern, well-prepared specimen with duplicates in several herbaria, from which a DNA sample is being prepared for storage in a DNA bank for enable future molecular studies. It represents the traditional concept (e.g. Fries 1848; Grisebach 1853; Zahn 1921) and current use of the name *H. cerinthoides* (e.g. Sell & West 1976; Mateo 2007).

Hieracium cerinthoides L., Sp. Pl.: 803. 1753. – **Lectotype (designated here):** Herb. Linn. No. 954.28 (LINN) (image available at http://linnean-online.org/8846/). – **Epitype (designated here)**: Spain, Lleida: Tredòs (Vall d'Aran), cap al Lac de Baish de Bacivèr, 31TCH3329, datum ED50, 1920 m, 24 Jul 2012, roques calcàries, *G. Mateo, J. A. Rosselló, Ll. Sàez & F. del Egido s.n.* (VAL barcode VAL210645!; isoepitypes: B!, LEB!, PAL-Gr!, VAL227665!) (for an image of the epitype, see Fig. 2).

Acknowledgements

The authors thank Jesús Riera (Herbarium of the University of Valencia) and Gerard Thijsse and Roxali Bijmoer (National Herbarium Nederland, Leiden University) for their help. Günter Gottschlich (Tübingen) is also thanked for his review of an earlier version of this article.

References

Arvet-Touvet C. & Gautier G. 1904: *Hieracium* nouveaux pour la France ou pour l'Espagne. Deuxième part. – Bull. Soc. Bot. France **51:** xxiii–cxi.

Fries E. M. 1848: Symbolae ad historiam *Hieraciorum*. – Uppsala: Leffler & Sebell.

Grisebach A. H. R. 1853: Commentatio de distributione *Hieracii* generis per Europam geographica. – Abh. Königl. Ges. Wiss. Göttingen **5:** 83–160.

Jarvis C. 2007: Order out of chaos: Linnaean plant names and their types. – London: The Linnean Society of London in association with the Natural History Museum, London.

Linnaeus C. 1748: Hortus upsaliensis. – Stockholm: Laurentius Salvius.

Linnaeus C. E. 1753: Species plantarum. – Stockholm: Laurentius Salvius.

Mateo G. 1990: Sobre las especies pirenaicas de *Hieracium* sect. *Cerinthoides* presentes en el Sistema Ibérico. – Monogr. Inst. Piren. Ecol. **5:** 163–168.

Mateo G. 2007: *Hieracium* L. in: Talavera S. & al. (ed.). Flora iberica **16(2).** – Madrid: Real Jardín Botánico,

Downloaded From: https://bioone.org/journals/Willdenowia on 24 Apr 2024
Terms of Use: https://bioone.org/terms-of-use

CSIC. – Draft manuscript published at: http://www.floraiberica.es/PHP/cientificos_.php?gen=Hieracium

Mateo G. 2008: Revisión sintética del género *Hieracium* L. en España, V. Sect. *Cerinthoidea*. – Flora Montiber. **38**: 25–71.

McNeill J., Barrie F. R., Buck W. R., Demoulin V., Greuter W., Hawksworth D. L., Herendeen P. S., Knapp S., Marhold K., Prado J., Prud'homme van Reine W. F., Smith G. F., Wiersema J. H. & Turland N. J. (ed.) 2012: International Code of Nomenclature for algae, fungi, and plants (Melbourne Code) adopted by the Eighteenth International Botanical Congress Melbourne, Australia, July 2011. – Regnum Veg. **154.**

Monnier A. 1829: Essai monographique sur les *Hieracium* et quelques genres voisins. – Nancy: C.-J. Hissette & imprimeur de l'academie.

Royen A. van 1740: Florae Leydensis prodromus, exhibens plantas quae in horto academico Lugduno-Batavo aluntur. – Leiden: Samuelem Luchtmans.

Sell P. D. & West C. 1976: *Hieracium* L. – Pp. 358–410 in: Tutin T. G., Heywood V. H., Burges N. A., Moore D. M., Valentine D. H., Walters S. M. & Webb D. A. (ed.), Flora europaea **4.** – Cambridge: University Press.

Tournefort J. P de 1700: Institutiones rei herbariae. Tomus primus. – Paris: Typographia Regia.

Turland N. J. 2006: Lectotypification of *Campanula saxatilis*, *Phyteuma pinnatum* and *Verbascum arcturus*, Linnaean names of three taxa endemic to Crete. – Willdenowia **36** (Special Issue): 303–309.

Turland N. J. & Jarvis C. E. 1997: Typification of Linnaean specific and varietal names in the *Leguminosae* (*Fabaceae*). – Taxon **46:** 457–485.

Zahn K. H. 1921–1923: *Hieracium* L. – Pp. 1–1146 in: Engler A. (ed.), Das Pflanzenreich. Regni vegetabilis conspectus, **IV, 280** [pars *Compositae–Hieracium*]. – Leipzig: Wilhelm Engelmann.

Downloaded From: https://bioone.org/journals/Willdenowia on 24 Apr 2024
Terms of Use: https://bioone.org/terms-of-use