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Typification of *Crepis sancta* (L.) Babc. (Compositae, Cichorieae)

P. P. FERRER-GALLEGO^{1,2} & S. TALAVERA³

¹ Servicio de Vida Silvestre, Centro para la Investigación y Experimentación Forestal de la Generalitat Valenciana (CIEF), av. Comarques del País Valencià, 114, ES-46930 Quart de Poblet, València, Spain

² VAERSA, av. de les Corts Valencianes, 20, ES-46015 València, Spain

³ Departamento de Biología Vegetal y Ecología, Universidad de Sevilla, ES-41012 Sevilla, Spain

Author for correspondence: P. P. Ferrer-Gallego (flora.cief@gva.es)

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Abstract

TIPIFICACIÓN DE *CREPIS SANCTA* (L.) BABC. (COMPOSITAE, CICHORIEAE).— The typification of the name *Crepis sancta* (L.) Babc. in Unif. Calif. Public. Bot. 19: 403 (1941) [≡ *Hieracium sanctum* L., Cent. Pl. II: 30 (1756), basionym] (Compositae, Cichorieae) is discussed. The designation of the corresponding type is based on the consultation of the Linnaeus original material and the literature cited in the respective protologue. Original material conserved in LINN (The Linnean Herbarium at the Linnean Society of London) is designated as the lectotype.

Key words: Asteraceae; *Hieracium sanctum*; lectotypification; Linnaeus; nomenclature.

Resumen

TIPIFICACIÓN DE *CREPIS SANCTA* (L.) BABC. (COMPOSITAE, CICHORIEAE).— Se discute la tipificación del nombre *Crepis sancta* (L.) Babc. in Unif. Calif. Public. Bot. 19: 403 (1941) [≡ *Hieracium sanctum* L., Cent. Pl. II: 30 (1756), basiónimo] (Compositae, Cichorieae). La designación del correspondiente tipo está basada en la consulta del material original de Linneo y la bibliografía citada en el respectivo protólogo. El material original conservado en LINN (Herbario de Linneo en la Sociedad Linneana de Londres) es designado como el lectotipo.

Palabras clave: Asteraceae; *Hieracium sanctum*; lectotipificación; Linneo; nomenclatura.

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INTRODUCTION

The genus *Crepis* L. (Compositae, Cichorieae) comprises over 200 species (Bremer, 1994) and is one of the largest genera of the Crepidinae and even of the Cichorieae. Species of the genus are distributed throughout the Northern Hemisphere. Some species also occur in tropical east Africa, south Africa and west Africa (Sell, 1976; Mabberley, 2008). The

origin of *Crepis* is thought to be in the Altai-Tian Shan region in Central Asia (Babcock, 1947). From there, the genus spread north-eastwards into North America, south-westwards into southern Europe and north-eastern Europe (Babcock, 1947; Bogler, 2006). The genus presently has its highest species diversity in the circum-Mediterranean area. As was indicated by Enke (2009), the genus *Crepis* is paraphyletic and comprises three well supported clades.

One accommodates *Crepis s. str.* but a second clade includes, among others, morphologically rather distinct genera like *Lapsana* L. and *Rhagadiolus* Tourn. ex Scop. According to Enke (2009), both should, at least for the time being, be maintained in their current generic circumscription.

Crepis sancta (L.) Bab. is a fruit-heteromorphic species, achene morphology varies within every fruit head. Central achenes are light and wind-dispersed, whereas peripheral achenes are heavier and fall close to the mother plant (Imbert *et al.*, 1997, 1999). According to Euro+Med (2006), *C. sancta* occurs in Europe, western Asia and Egypt. This species has been the subject of many studies regarding its ecology, taxonomy and genetics. However, from the standpoint of nomenclature, the name *Crepis sancta* is not typified [= *Hieracium sanctum* L., basionym] (Jarvis, 2007: 574). The aim of this paper is to lectotypify the name *Crepis sancta*; the designation of the corresponding type is based on the consultation of the Linnaeus original material of *Hieracium sanctum* and the literature cited in the respective protologue.

TYPIFICATION

Linnaeus's protologue (1756) consisted of a *nomen specificum legitimum* "*HIERACIUM (sanctum) foliis lyratis obtusis dentatis, scapo nudo multifloro*", and the natal patria and collector "*Habitat in Palaestina. Hasselquist.*", followed by a detailed morphological description after the *locus classicus* "*Radix tenuis, fibrosa. folia radicalia, plura, obovata, lyrata, dentata, obtusa, petiolata, pubescentia, Scapus foliis duplo altior, subpubescens, apice gerens Flores 5, s. 7, parvos, luteos, Pedunculis villosis, Calycibus impricatis, acutis*".

Lamond (1975: 834) treated the herbarium sheet Herb. Linn. No. 954.19 (LINN) (image available at: <http://linnean-online.org/8837/>) as the type of *Crepis sancta*, concretely was indicated: Type: Palestine, *Hasselquist?* (Hb. Linn. No. 954/19, photo!). However, the sheet lacks any annotation by Linnaeus, and is not original material for the name. The Hasselquist material in Linnaeus's own herbarium in LINN often carries a symbol "Ø", written by Linnaeus, which has been interpreted to be geographical, denoting the Near East (Jarvis, 2007: 209). The sheet Herb. Linn. No. 954.19 (LINN) lacks this symbol.

This sheet contains only one plant with leaves and inflorescences, and the only annotation is "*Hieracium caule nudo scabro*" but not written by Linnaeus. Therefore, this specimen was not indicated by Jarvis (2007: 574) as Linnaeus's original material of the name *Hieracium sanctum*.

A specimen relevant to *Hieracium sanctum* is preserved in the Linnaean herbaria: Herb. Linn. No. 954.18 (LINN) (image available at: <http://linnean-online.org/8827/>). This herbarium sheet came from the collection History of Hasselquist. In July of 1755, Linnaeus received a collection of plants from Fredrik Hasselquist in the eastern Mediterranean (Jarvis, 2007: 77), so there is no doubt that this material was used by Linnaeus to describe *Hieracium sanctum*, as Linnaeus indicated in the protologue (1756: 30). This sheet is annotated with the Linnaeus's symbol "Ø" at the base of the plant placed in the central part of the sheet. This specimen (clearly the same gathering) contains three plants and leaves, but only two plants with inflorescences, in the herbarium sheet is annotated "*sanctum*" by Linnaeus. This material is in good condition and constitutes the best candidate to be considered as the lectotype.

On the other hand, in the Hasselquist Herbarium at UPS there is an herbarium sheet (Herb. *Hasselquist* 675, UPS) (Fig. 1) with Linnaeus's original material (see Jarvis 2007: 209). This sheet bears a plant that corresponds to *Crepis sancta*, with inflorescences and leaves. We have been unable to trace any further original material in any other Linnaean and Linnaean-linked herbaria.

Although these two sheets are identifiable as Linnaeus's *Crepis sancta*, we prefer to designate the herbarium sheet Herb. Linn. No. 954.18 (LINN) as lectotype of this name, because this sheet is the most complete and informative, and it is in a good state of preservation. This material agrees with the traditional and current usage of the Linnaean name *Hieracium sanctum*.

Crepis sancta (L.) Bab. in Unif. Calif. Public. Bot. 19: 403 (1941).

= *Hieracium sanctum* L., Cent. Pl. II: 30 (1756) [basionym].

Ind. loc.: "*Habitat in Palaestina. Hasselquist?*".

Lectotype (**designated here**): Herb. Linn. No. 954.18 (LINN) (image available at: <http://linnean-online.org/8827/>).



Figure 1. Linnaeus's original material of *Crepis sancta* (L.) Bab., Herb. Hasselquist 675, UPS. © Herbarium UPS, reproduced with permission.

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