



## Typifications of the Linnaean names *Carduus eriophorus*, *Carduus eriophorus* var. *spurius*, and *Cnicus ferox* (Asteraceae)

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Two specimens from the Linnaeus Herbarium (at LINN) and an illustration by Bauhin & Cherler are designated as the lectotypes of, respectively, *Carduus eriophorus* ( $\equiv$  *Cirsium eriophorum*), *Carduus eriophorus* var. *spurius* [= *Cirsium*  $\times$  *gerhardtii*, *syn. nov.* (*Cirsium vulgare*  $\times$  *Cirsium eriophorum*)], and *Cnicus ferox* ( $\equiv$  *Cirsium ferox*). All the taxa involved in this study belong to *Cirsium* sect. *Eriolepis*.

**Keywords:** *Cirsium*, hybrid, lectotype, new synonymy, nomenclature

As part of ongoing studies on the rare and endemic plants occurring in central and southern Italy (see e.g. Cennamo *et al.* 2013, De Castro *et al.* 2013, 2015, Del Guacchio 2009, Del Guacchio & Caputo 2005, 2008, 2013) and researches related to the treatment of the family Asteraceae Bercht. & J.Presl. for the new edition of Italian Flora, ed. S. Pignatti (see e.g., Iamónico 2012, 2013a, 2013b, 2015, Iamónico & Hjertson 2015, Iamónico & Managlia 2015, Iamónico *et al.* 2014), we present a nomenclatural assessment of the following so far untypified Linnaean names: *Carduus eriophorus* Linnaeus (1753: 823), *Carduus eriophorus* var. *spurius* Linnaeus (1753: 823), and *Cnicus ferox* Linnaeus (1767: 109). The name *Cirsium*  $\times$  *grandiflorum* Kittel (1844: 551) is also discussed, for nomenclatural purposes.

### Materials and methods

This paper is based on analysis of the relevant literature (protologues included) and examination of specimens preserved in the Herbaria LINN, P, and UPS (acronyms follow Thiers 2015).

Comments on typification are provided for each name. Accepted names are in bold, while synonyms are in italics and not in bold. Handwritings on herbarium labels were identified according to Burdet (1979). We checked also Savage (1937) for possible useful indications from Linnaeus' manuscripts. The nomenclatural articles cited thorough the text follow the ICN (McNeill *et al.* 2012).

### Typification of the names

#### *Carduus eriophorus*

Linnaeus (1753: 823–824) described *Carduus eriophorus* providing a short diagnosis “CARDUUS *foliis sessilibus bifariam pinnatifidis, laciniis alternis erectis, calycibus globosis villosis*” taken from Linnaeus (1748: 249) and Sauvages (1751: 290). Synonyms were cited from Royen (1740: 133), Dalibard (1749: 247), Bauhin (1623: 382), and Lobel (1591: 9); the distribution was also given: “*Habitat in Anglia, Gallia, Hispania, Lusitania*”. Lobel (1591) provided an illustration of his “*Carduus tomentosus Corona fratrum*” (image available at <http://bibdigital.rjb.csic.es/ing/Libro.php?Libro=4362&Hojas=>) which is original material for the name *Carduus eriophorus*.

Two specimens were found at LINN (Herb. Linnaeus no. 966.32), and UPS (Burser's collection XXI-38), both consisting of a terminal part of one plant with capitula and some stem leaves, whose characteristics match the Linnaean diagnosis. Original annotations are: “*eriophorus 15*” (on the Linnaean specimen, “15” being the species number in Linnaeus' protologue), and “*Carduus capite rotundo tomentoso Bauh.*” [on the Burser specimen; a polynomial perfectly matching Bauhin's synonym cited by Linnaeus (1753)]. There is evidence, in Linnaeus' manuscripts, that he saw the Burser specimen (Savage 1937: 70). As a consequence, both specimens could be considered as part of the original material, and may be used for typification purposes.

Among the original elements, we prefer to exclude the illustration as lectotype since specimens are preferable (Jarvis