



Lectotypification of the Linnaean name *Linum campanulatum* (Linaceae)

FABRIZIO BARTOLUCCI¹*, DUILIO IAMONICO² & ROBERT P. WAGENSOMMER³

¹School of Biosciences and Veterinary Medicine, University of Camerino – Floristic Research Center of the Apennine (National Park of Gran Sasso and Laga Mountains), San Colombo, 67021 Barisciano (L'Aquila), Italy; e-mail: fabrizio.bartolucci@gmail.com

²Laboratory of Phytogeography and Applied Geobotany, Department PDTA, University of Rome Sapienza, Via Flaminia 72, 00196 Rome, Italy.

³Department of Biological, Geological and Environmental Sciences, University of Catania, Via A. Longo 19, 95125 Catania, Italy.

*author for correspondence

The genus *Linum* Linnaeus (1753: 277) consists of about 200 species distributed in temperate and tropical regions of the world. The Mediterranean area can be considered one of the centers of diversity of this genus (Greuter *et al.* 1989, Yilmaz *et al.* 2003, Yilmaz & Kaynak 2008, 2010, Tugay *et al.* 2010, Peruzzi 2011, Ruiz-Martin *et al.* 2015).

Linnaeus described 23 species of *Linum* (Linnaeus 1753, 1754, 1762) and most of them have been already typified (Jarvis 2007, Ferrer-Gallego 2014). As part of an ongoing taxonomic study of *Linum campanulatum* Linnaeus (1753: 280), we here present a nomenclatural investigation of this name which appears to be as yet untypified.

The Linnaeus' protologue (1753: 280) consists of a short diagnosis "LINUM foliorum basi utrinque puncto glanduloso. Linum foliis imis spatulatis, floribus luteis" taken from Sauvage (1751: 76), a detailed provenance "*Habitat in Galloprovinciae montibus, Monspelii in monte lupi*" and three synonyms, the first one "*Linum sylvestre luteum, foliis subrotundis*" cited from Bauhin (1623: 214), Tournefort (1700: 340) and Magnol (1720: 261), the other ones "*Campanula lutea linifolia montis lupi, flore volubilis*", and "*Campanula linifolia lutea*" respectively from Lobel (1581: 414) and Bauhin & Cherler (1651: 817).

Lobel (1581: 414) and Bauhin & Cherler (1651: 817) provided illustrations (available respectively at <http://bibdigital.rjb.csic.es/ing/Libro.php?Libro=4360&Pagina=422>, and <http://bibdigital.rjb.csic.es/ing/Libro.php?Libro=4176&Pagina=839>) matching the Linnaeus' diagnosis. These images can be considered part of the original elements and useful for the lectotypification purpose.

There are three specimens at LINN-HS (Herb. Linn. Nos. 553.21.1, 553.21.2 and 553.22, available at <http://www.linnean-online.org>) which are named as *Linum campanulatum*. Unfortunately, they lack annotations concerning the *Species Plantarum* numbering, can be considered a post-1753 addition to the collection and therefore not as original material for the name. Furthermore, the specimens Nos. 553.21.1 and 553.21.2 are not identifiable as *L. campanulatum* and they belong to a species included in the *L. flavum* Linnaeus (1753: 279) aggregate.

As indicated by Jarvis (2007: 634), in the Herbarium Burser at UPS, which is connected with the Linnaeus citations of Bauhin (see e.g., Stearn 1957, Jarvis 2007), there is a specimen identifiable as *Linum campanulatum* and collected in "*Montis Lupi Advers. In Gallo Provinciae montibus*" [Herb. Burser XII: 38 (UPS!)]. The original annotations "*Linum sylv. [sylvestre] luteum foliis subrotundis Bauh.*" and "*Campanula lutea linifolia*" also occur on the label and they perfectly correspond respectively to the synonyms of Bauhin (1623: 214) and Bauhin & Cherler (1651: 817) cited by Linnaeus (1753: 280) in the protologue. The plant beared on the sheet shows features matching the diagnosis. The Burser's specimen can be considered as original material. We have been unable to trace any further original material in any of the other Linnaean and Linnaean-linked herbaria.

From among the original elements (illustrations by Lobel and Bauhin & Cherler, and specimen at UPS), all corresponding to the current concept of the species (see e.g., Ockendon & Walters 1968, Tison & Foucault 2014), we prefer to designate the Burser's specimen as lectotype of *Linum campanulatum*, since herbarium specimens are better choices than illustrations owing to their ability in providing useful additional characters that cannot be matched by images (see Jarvis 2007: 21–22).

Linum campanulatum Linnaeus (1753: 280)

Type (lectotype, designated here):—FRANCE. "*Montis Lupi Advers. In Gallo Provinciae montibus*", Herb. Burser XII: 38 (UPS-BURSER [digital image!]), Fig. 1.