# Lectotypification of three Linnaean names of Lonicera

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Received 7 Jan. 2013, final version received 23 Apr. 2013, accepted 26 Mar. 2013

Ferrer-Gallego, P., Miedes-Marqués, E. & Pyke, S. 2013: Lectotypification of three Linnaean names of *Lonicera. — Ann. Bot. Fennici* 50: 229–232.

Lectotypes for *Lonicera periclymenum* L., *L. pyrenaica* L. and *L. xylosteum* L. are designated from original material conserved in BM (Clifford Herbarium), LINN (Linnaean Herbarium) and UPS-BURSER (Joachim Burser Herbarium).

Several nomenclatural types have yet to be designated for the Linnaean binomial names included within the genus *Lonicera* (Caprifoliaceae). In this paper, a lectotype is chosen for three names: *L. periclymenum*, a climbing shrub widely distributed across Europe and NW Africa; *L. pyrenaica*, an erect deciduous shrub in which several infraspecific taxa have been recognised based on leaf, corolla and fruit morphology (Ruiz Téllez & Devesa 2004, 2007), distributed in the western Mediterranean region; and *L. xylosteum*, applied to an erect shrub widely distributed in Europe.

#### Lonicera periclymenum L.

Sp. Pl.: 173. 1753. Ind. loc.: "Habitat in Europa media". — Lectotype (designated here): Herb. Burser XVII: 47 (UPS-BURSER!) (Fig. 1).

Linnaeus's protologue consisted of a very general diagnosis (*capitulis ovatis imbricates terminalibus*, *foliis omnibus distinctis*), with three synonyms. The first was cited from Bauhin

(1623: 302), the second as a varietal name " $\beta$  Caprifolium non perfoliatum", and the third was cited from de Tournefort (1719: 226) "Caprifolium germanicum, flore rubella, serotinum". Among the original material (see Jarvis 2007: 641), Miller's excellent illustration (1730: t. 6) "Caprifolium non perfoliatum", cited by Linnaeus in the protologue (variety  $\beta$ ), matches the current concept of L. periclymenum.

Linnaeus's citing the polynomial from Bauhin's *Pinax* (1623) provides a link to the specimen Herb. Burser XVII: 47 (UPS-BURSER). Joachim Burser's herbarium was arranged and labelled according to *Pinax* (Jarvis 2007) and was cited in the introduction to *Species Plantarum* (7th unnumbered page) as one of the sources for that work. This herbarium was in Uppsala when it was used by Linnaeus for the interpretation of the names that appear in Bauhin's work. Therefore, this specimen is undoubtedly original material. The sheet Burser XVII: 47 (UPS-BURSER) is labelled "*Periclymenum non perfoliatum germanicum*" (Bauhin 1623: 302), a polynomial cited in the protologue, and this includes one fragment



**Fig. 1.** Lectotype of *Lonicera periclymenum* L., Herb. Burser XVII: 47 (UPS-BURSER). Photograph courtesy of the Herbarium UPS. Reproduced with their permission.

that is a good match with the Linnaean diagnosis. Although both specimens (Herb. Burser XVII: 47) and Miller's illustration are identifiable as Linnaeus' *Lonicera periclymenum*, we prefer to designate the specimen UPS-BURSER as the lectotype because, obviously, the specimen makes a much better lectotype.

The Linnaean herbarium (S-LINN) also conserves this material; Herb Linn. No. 84.20 (LINN-S!) (image available at http://linnaeus.nrm.se/botany/fbo/l/lonic/loniper.html.en). That herbarium sheet contains a fragment of this species but it is doubtful if it constitutes original Linnaean material. On the label is written "Lonicera 2 / Periclymenum / Linn / var. quercifolium. / Sp. Pl. 173". That fragment is well preserved,

and contains both leaves and flowers. Nevertheless, it has sinuate-lobed leaves, an exceptional character for *L. periclymenum*. The choice of this material (Herb. Linn. No. 84.20 [LINN-S!]) as lectotype is unadvisable, as the traditional use of the Linnaean epithet applies to plants with entire leaves. In addition, the herbarium sheet is apparently not original material for the name.

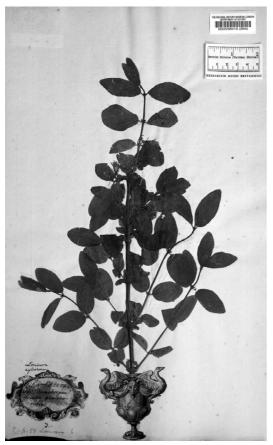
Only one specimen relevant to *L. periclymenum* could be traced in the Linnaean herbaria: Herb. Linn. No. 235.6 (LINN) (image available at http://www.linnean-online.org/1803/) is annotated "*Periclymenum*" and "*Caprifolium germanicum*" (on verso) by Linnaeus, but it lacks the original Linnaean species number annotation (in this case No. 3) from *Species Plantarum* and is therefore almost certainly a post-1753 addition to the Linnaean herbarium (*see* Turland & Jarvis 1997, Jarvis 2007: 41–46, 397). Therefore, it cannot be regarded as original material for the name.

### Lonicera pyrenaica L.

Sp. Pl.: 174. 1753, Ind. loc.: "Habitat in Pyrenaeis". — LECTOTYPE (designated here): Herb. Linn. No. 235.9 (LINN!) (image available at http://www.linnean-online.org/1806/).

Linnaeus gave a new nomen specificum legitimum followed by two synonyms: one from van Royen (1740: 238) and other one "Xylosteum pyrenaicum" from de Tournefort (1719: 609), Magnol (1697: 209) and Ray (1704: 29), this latter accompanied by an illustration (Magnol 1697). In the Linnaean Herbarium at LINN-S, there is a herbarium sheet (No. 85.7) (image available at http://linnaeus.nrm.se/botany/fbo/l/ lonic/lonipyr.html.en), bearing a specimen of this species, annotated "pyrenaica" by Linnaeus but without the original annotation of the Species Plantarum number (in this case No. 7). This suggests (see Jarvis 2007: 41-46, 397) that the material is probably a post-1753 addition to the collection and thus not the original material for the name L. pyrenaica.

Only one specimen relevant to *L. pyrenaica* could be traced in the Linnaean herbaria: Herb. Linn. No. 235.9 (LINN) is annotated "7 pyrenaica" by Linnaeus. This material corresponds to the traditional and current application of this name. Magnol's illustration "*Xylosteon Pyrenai*-



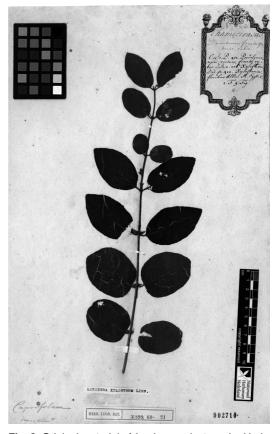
**Fig. 2.** Lectotype of *Lonicera xylosteum* L., Herb. Clifford: 58, *Lonicera* 6 (BM 000558016). Photograph courtesy of the Herbarium BM. Reproduced with their permission.

cum / Elem. bot.", in which the details of the leaves and fruit are also portrayed, is a good likeness of a whole flowering plant of L. pyrenaica, but the specimen makes a much better lectotype, and it is therefore here designated as such.

### Lonicera xylosteum L.

Sp. Pl.: 174. 1753. Ind. loc.: "Habitat in Europae frigidioris sepibus". — Lectotype (designated here): Herb. Clifford: 58, Lonicera 6 (BM 000558016!) (Fig. 2).

Linnaeus's protologue consisted of a diagnosis, with three synonyms. The first was cited from *Hortus Cliffortianus* (Linnaeus 1738: 58), with a second from Bauhin (1623: 451), and a third from Dodoëns (1616: 412). Besides the icon published



**Fig. 3.** Original material of *Lonicera xylosteum* L., Herb. Adriaan van Royen No. 899.69-21 (L 0077406). Photograph courtesy of the Herbarium L. Reproduced with their permission.

by Dodoëns with the name "Xylosteum", the following are also considered to be original Linnaean material (see Jarvis 2007: 641): 1. The herbarium sheet Burser XXIII: 69 (UPS-BURSER!) with a well-conserved fragment. 2. The herbarium sheet Linn. No. 235.8 (LINN!) (image available at http://www.linnean-online.org/1805/), and 3. The herbarium sheet conserved in Adriaan van Royen's collection, No. 899.69-21 (L0077406!) (Fig. 3). This latter sheet is original material because Linnaeus worked with A. van Royen and consulted his herbarium for the preparation of Leiden's Hortus Botanicus during his stay in this city before departing to Sweden in 1738 (Jarvis 2007: 153). We have been unable to trace any further original material in any of the other Linnaean or Linnaean-linked herbaria. The original material

is in good condition and constitutes a good candidate to be considered the lectotype, thus allowing us to maintain the traditional use of the Linnaean name. However, the herbarium sheet: Herb. Clifford: 58, *Lonicera* 6 (BM 000558016) is the most complete of several sheets constituting original Linnaean material. Thus, it is here designated as the lectotype for the name *Lonicera xylosteum*.

### **Acknowledgements**

Thanks are due to Dr. Mats Hjertson (Museum of Evolution, Botany Section Uppsala University, Sweden) for his great help in the study of the UPS-BURSER collection. To Dr. Gerard Thijsse (National Herbarium Nederland, Leiden University) for his help in the study of some sheets deposited in the L collection. To Dr. C. E. Jarvis (Natural History Museum, London) for nomenclatural advice.

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