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Iberis violacea R. Br. (*Brassicaceae*)

Abstract

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In 1812, Robert Brown described a new species, *Iberis violacea*, based on a specimen which had been grown at the Lee & Kennedy Nursery, Hammersmith, Middlesex, England, in 1782. Although the name was widely used in British horticultural literature for over a hundred years and the type material has been available at BM since before 1812, *I. violacea* has been neglected in continental Europe since 1821. It proves to be conspecific with *I. pruitii* Tineo (1817), which name must now give way to it.

Key words: *Brassicaceae*, *Iberis*, nomenclature, Robert Brown.

Introduction

Following the death of Jonas Dryander in 1810, Scottish botanist Robert Brown (1773–1858) was tasked by Sir Joseph Banks with the completion of the final three volumes of the second edition of *Hortus Kewensis* (the first two volumes having already been edited by Dryander), an account of plants grown in southern England, not merely at Kew (Britten 1912). Brown wrote entire accounts for the Gynandria (orchids) and the *Cruciferae* (*Brassicaceae*) in addition to overseeing the preparation of the whole text and writing accounts of parts of other groups. He had to follow the Linnaean system then prevalent in England and already used in the earlier volumes of the book, though this was inimical to him, a British pioneer in the use of the natural system of classification promoted in France (Mabberley 1985). In the account of the *Brassicaceae*, Brown included 50 genera and over 300 species, published in the fourth volume of the book (Aiton 1812; Mabberley 1985). Fifty-eight new combinations and names for species and varieties were published, with three new genera and six species described as new. The majority of the new combinations and species are currently accepted and only one of the new generic names, *Hutchinsia* R. Br. (= *Hornungia* Rchb.), has been lost to synonymy. However, one species, *Iberis violacea* R. Br., has not been included in modern continental European botanical literature (since de Candolle 1821, though taken up in at least one French horticultural publication), despite type material being readily available at BM (Fig. 1) and the name being widely used in British horticultural literature for over a hundred years after publication.



Fig. 1. Digital scan of the type material of *Iberis violacea* R. Br. (courtesy of The Natural History Museum, London). Annotations from the reverse of the sheet are overlaid.

Brown's type specimen was examined by de Candolle during his visit to London in January 1816 (Mabberley 1985), when preparing his account of *Cruciferae* for *Regni vegetabilis systema naturale* (de Candolle 1821). The country of origin of the *Iberis violacea* type material grown at the Lee & Kennedy Nursery in Hammersmith is unknown (Willson 1961). Although initially suspected by us to be native to Italy, it is not mentioned in any Italian botanical literature. Indeed, Brown's name appears to be absent from all accounts of wild Mediterranean flora, including the Med-Checklist database (<http://ww2.bgbm.org/mcl/query.asp>). Examination of *Iberis* material shows clearly that Brown's type is conspecific with *I. pruitii* Tineo (1817), the latter known to be distributed across the Mediterranean region from Spain and North Africa, north to southern France and east to Greece.

Unfortunately, Tineo's specimens in his own herbarium, potential type material of *I. pruitii* at PAL, were destroyed in 1821 (G. Domina pers. comm.), as a result of revolutionary activity in Sicily during the Carbonari insurrections of 1820-21. Of extant Tineo material elsewhere, Moreno (1984a) found, at C, two sheets which bore specimens of *I. pruitii* allegedly from Tineo, though not annotated by him. Moreno (1984a) designated a lectotype sheet from these, the label on the lectotype sheet appearing to be in the hand of Johan Lange, in whose herbarium it is preserved. The locality written on the sheet is 'Madonie Siciliae' whereas the protologue states 'Nebrodis a Munti Scaluni' [Mount Scalone, in the Nebrodi mountain range as currently designated]. Although at first these seem to be incongruous, the geographical delimitation of the mountain ranges was shifted at the end

of the nineteenth century (Werner Greuter *in litt.*). Thus, the former use of the names Mt. Scalone and Nebrodi mountains (at the time of (?Tineo's) collection) concerned the Madonie massif and not the current delimitation of the Nebrodi mountain range (formerly the Valdemone range), further to the east. However, Moreno's typification was not formally published (Moreno 1984a) according to Article 30.5 of the Code and so it is formally designated below.

In his protologue Tineo also cited '*Bonan. Tav. 244*', a plate printed by Antonino Bonanno (1657–1719). The plate was created as a copper engraving by Francesco Cupani (1657–1710) for his *Panphyton siculum*. Cupani had announced his ambitious project on the Sicilian flora in 1697, subsequently making over 600 copper plates illustrating 800 plant species (Greuter 2004). Unfortunately, this colossal work was, by the time of his demise, unfinished. Before his death, Cupani entrusted his unpublished engravings and manuscripts to Bonanno. Bonanno attempted to complete and edit Cupani's work but in 1719 he, too, died and the work was not finished, the original volumes of it now being stored in the Biblioteca Centrale della Regione Siciliana (Sicily Central Library). Before this, Antonio Epiro had received the first proof sets of figures from Cupani's engravings, compiling his own three-volume version in 1713 (of which six copies were made), while Bonanno edited many of the plates (retouching and/or adding plate numbers). Thus, several similar early printed versions exist in various states of completeness.

The *Iberis* plate (t. 244) cited by Tineo was among those produced for Bonanno's edition, although the material for the 'Bonanno edition' was not published (Greuter 2004). The image seen by Tineo and cited in his protologue of *I. pruitii* is an original plate in unpublished form, edited by Bonanno from Cupani's engraving, and now preserved in the Sicily Central Library in Palermo. Should there ever be any evidence brought forward to show that the specimen selected as lectotype by Moreno was not in fact collected by Tineo after all, then this image would be an appropriate lectotype.

The Director of the Sicily Central Library recently published the complete work (Pastena & al. 2003; Greuter 2004). Although Pastena & al. (2003) was based on volumes compiled by Epiro, the botanical images are as in Bonanno's set, but the figures differ in arrangement and numbering. A copy of the plate from Pastena & al. (2003), representing *I. pruitii*, is shown in Fig. 2.

Conclusion

Iberis violacea R. Br. in Aiton f., Hort. Kew. ed.2, 4 (1812) 85; Sweet, Hort. Suburb. Lond. (1818) 144; DC., Syst. Nat. (Candolle) 2 (1821) 403; Sweet, Hort. Brit. (1826) 23; Loudon, Encycl. Plants (1829, 1855) 546, Loudon, Hort. Brit. (1830) 259; Johnson, Cott. Gard. Dict. (1857, 1859, 1865) 452; Brown, Johnson's Gard. Dict. (1882) 452; Nicholson, Illus. Dict. Garden. (1885) 172; Wright & Dewar, Johnson's Gard. Dict. (1894) 506; Nicholson & Mottet, Dict. Prat. Hort. 2 (1894) 699; Fraser & Hemsley, Johnson's Gard. Dict. (1917) 450.

Type: England, Middlesex, Hammersmith, cultivated at Lee & Kennedy Nursery, *Anon.* s.n. (holo–BM 000582575! [photo K!]; Fig. 1).

= *Iberis pruitii* Tineo, Pl. Rar. Sic. Pug. 1 (1817) 11 [as '*pruitii*']. **syn. nov.**

Type: Italy, Sicily, 'Madonie Siciliae [Madonie massif] (leg. Tineo)', [?] Tineo *s.n.* (lecto C [image seen]; selected here to confirm the unpublished selection by Moreno 1984a).

Low, caespitose herb, annual or perennial. Stems procumbent-ascending, often pubescent near apex, 3–15 cm tall. Leaves alternate, somewhat fleshy, margins entire or often dentate with 1 or 2 pairs of teeth near the leaf apex, glabrous or pubescent with simple hairs; lower leaves oblanceolate-spathulate ($20\text{--}40 \times 4\text{--}6$ mm); upper leaves narrower ($12\text{--}17 \times 2\text{--}3$ mm). Inflorescence corymbose, dense in fruit. Petals white to lilac or violet, spatulate and often slightly angular, $6\text{--}9 \times 2.5\text{--}4$ mm. Sepals white to lilac/mauve, $2\text{--}2.5 \times 0.8$ mm. Silicula $5.5\text{--}8 \times 4\text{--}6$ mm, broadly winged, lobes triangular-acute, style emergent by 2–2.5 mm.

Rock crevices, commonly on mountains, 500 to 1900 m above sea-level, in the Mediterranean region from Spain and North Africa north to southern France and east to Greece.



Fig. 2. A proof sheet of the Cupani plate of *Iberis* as received by Epiro (from Pastena & al. 2003, 2: 297). This image is the same as that designated here as the lectotype of *Iberis pruitii* Tineo, but is from the recent facsimile.

Taxonomic notes

A list of other synonyms (of *I. pruitii*) is presented by da Silva & Franco (1993). Earlier, Moreno (1984a) mistakenly included two legitimate older names in synonymy under her concept of *I. pruitii*, namely *I. pubescens* Willd. (1814) and *I. pilosa* (1815). However, she subsequently (Moreno 1984b, 1993) referred *I. pruitii* to *I. carnosa* Willd. (1800), but this disposition is not supported by the type material and protologues (especially with respect to leaf shape/size and silicula form). Indeed, current floras (Pignatti 1982; da Silva & Franco 1993) have not followed this. *Iberis carnosa* was reduced to *Iberis ciliata* All. var. *carnosa* (Willd.) O. Bolòs & Vigo by Bolòs & Vigo (1990) but it has since been included in *I. spathulata* J. P. Bergeret (1784) by da Silva & Franco (1993). We do not consider either *I. spathulata* s.s. or *I. carnosa* to be conspecific with *I. violacea* (incl. *I. pruitii*) because of clear differences in leaf shape and silicula form (*I. spathulata* s.s. and *I. carnosa* have much broader, distinctly spathulate leaves, simple stems and siliculae with shorter lobes).

On the other hand, the Pyrenean *Iberis bernardiana* Gren. & Godr., which da Silva & Franco (1993: 77) list as ‘of uncertain affinity’ and ‘may be another subspecies of 6 [*I. spathulata*]’ is very similar in aspect to *I. violacea*. Although it is currently maintained as a distinct species (da Silva & Franco 1993; Moreno 1993), it is possible that it represents a high-altitude *lusus* of *I. violacea*. In the absence of a critical review of the genus, however, we do not propose any nomenclatural change for this taxon.

Note: although provision exists in Art. 14 of the Code (a consequence of the Tokyo XV International Botanical Congress in 1993) for maintenance of widely-used names, we have not proposed conservation of *Iberis pruitii* Tineo as there became considerable confusion over *Iberis* names in the literature (see above), while *I. violacea* has an unambiguous type and is a name that has been established in horticultural literature for over a century.

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