PROPOSALS TO CONSERVE OR REJECT NAMES

Edited by John McNeill, Scott A. Redhead & John H. Wiersema

(2116) Proposal to conserve the name *Xiphion vulgare* against *Iris xiphium* (*Iridaceae*, *Iridoideae*)

Manuel B. Crespo¹ & Gea Zijlstra²

1 CIBIO, Instituto de la Biodiversidad, Universidad de Alicante, P.O. Box 99, 03080 Alicante, Spain

2 Laboratory of Palaeobotany & Palynology, Budapestlaan 4, 3584 CD Utrecht, The Netherlands

Author for correspondence: Manuel B. Crespo, crespo@ua.es

(2116) Xiphion vulgare Mill., Gard. Dict. ed. 8: Xiphion No. 2. 16 Apr 1768 [Monocot.: Irid.], nom. cons. prop. Typus: [icon] "Iris bulbosa mixta" in Besler, Hort. Eystett. 2

(Classis Aestiva), Ord. 4, fol. 11, fig. 3 [on reverse of text of fol. 10]. 1613.

 (=) Iris xiphium L., Sp. Pl.: 40. 1753. Lectotypus (vide Crespo in Flora Montiber. 53: 56. 2012): Herb. Clifford: 20, Iris: 12 (BM 000557649).

The name *Xiphion vulgare* Mill. is currently applied to an iris species with the outer tunics of the bulb membranous, not fibrous, at the apex, perianth tube inconspicuous or absent, outer tepals panduriform and inner tepals oblong-lanceolate to ovate-lanceolate, erect, about as long as the outer. It is found in the western Mediterranean basin, from Italy to Portugal and north-western Africa (cf. Christiansen in Brit. Iris Soc. Sp. Group, Guide Sp. Irises: 224. 1997; Martínez-Rodríguez & al. in Candollea 64: 127–132. 2009), and many of its cultivars are commercialised as the "Spanish irises".

In the protologue, Miller (l.c.) included the nomen specificum legitimum "XIPHIUM (*Vulgare*) foliis subulato-canaliculatis, caule brevioribus", and mentioned the polynomial "*Iris bulbosa caeruleo violacea*" of Bauhin (Pinax: 40. 1623), though incorrectly referred as to page number 38. He also added that the species occurred naturally in the warm parts of southern Europe, and that a wide range of colour variation existed in flowers owing to cultivation, they being bluish (the most typical), yellow, white or even variegate-coloured.

Miller (Gard. Dict. Abr., ed. 4. 1754) had previously validly published the generic name Xiphion, but the included species were referred to only by polynomials. Miller, who explicitly adopted in 1768 the binomial system of Linnaeus, included four species in Xiphion Mill. referring to Tournefort's (Inst. Rei Herb. 1: 362. 1700) earlier use of the name, which he cited as "XIPHION or XIPHIUM", but definitively favouring the latter spelling of the generic name. Since in 1754 Miller only used the Xiphion spelling, we treat his 1768 Xiphium combinations as orthographic variants, to be corrected to Xiphion combinations. Two of the accepted species can be related to those mentioned by Linnaeus in the second edition of Species plantarum (1762). In view of Miller's statement in the Preface to the 1768 edition on applying Linnaeus's method Xiphion persicum can certainly be taken as a new combination based on Iris persica L. (Sp. Pl.: 40. 1753) under Art. 41.3 of the ICN (McNeill & al. in Regnum Veg. 154. 2012)-cf. Art. 41 Ex. 5), and X. vulgare may correspond in some extent to I. xiphium L. (l.c. 1753), although no reference was made to the Linnaean name. The remaining X. latifolium Mill. and X. planifolium Mill. are most probably described as new. Of those four species, X. persicum was later transferred to Juno Tratt. as J. persica (L.) Tratt. (Auswahl Gartenpfl. 1: 136. 1821).

Despite the common presumption that X. vulgare was proposed as a nomen novum to replace *I. xiphium*, the situation is not quite as simple as it seems to be. Miller did not directly re-name the Linnaean species, but carefully distributed elements in the Linnaean protologue between two species in 1768. Among the polynomials cited by Linnaeus in relation to I. xiphium, the first three fit the current concept of Xiphion latifolium; in particular the third one, "Iris bulbosa latifolia, caule donata Bauh. pin. 38", corresponds to "Xiphion latifolium, caule donatum, flore caeruleo" of Tournefort (1.c.: 363), which was explicitly cited in Miller's protologue. Accordingly, X. latifolium has recently been lectotypified by Crespo (in Flora Montiber. 53: 57. 2012) with the illustration of "Iris bulbosa, Anglica, flore coeruleo" from Besler (Hort. Eystett. 2 (Classis Aestiva), Ord. 4, fol. 9, fig. 1 [on reverse of text of fol. 8]. 1613), which is connected with Tournefort's plant. The fourth polynomial was treated as a variety by Linnaeus, "B Iris bulbosa caeruleo-violacea Bauh. pin. 40", and Miller included it as the only synonym of X. vulgare. The fact that the Linnaean concept of I. xiphium undoubtedly included two different species was pointed out very early by several authorities (cf. Ehrhart, Beitr. Naturk. 7: 139-141. 1792; Ker Gawler in Bot. Mag. 18, tab. 686 & 687. 1803; Baker in J. Bot. 9: 11-13. 1871; in J. Linn. Soc., Bot. 16: 122-123. 1877; Richter, Pl. Eur. 1: 258. 1890; Dykes, Genus Iris: 214-215. 1912), and the original arrangement of Miller (l.c. 1768) is entirely accepted today.

Whenever Xiphion has been accepted as a distinct genus, X. vulgare has been used for this species for almost two centuries by most authors (cf. Parlatore, Nuov. Gen. Sp. Monocot.: 45. 1854; Fl. Ital. 3(2): 306-307. 1860; Alefeld in Bot. Zeitung (Berlin) 21: 297. 1863; Baker, l.c. 1871; in Gard. Chron. ser. 2, 5: 559. 1876; l.c. 1877; Rodionenko, Rod Iris: 199-200. 1961), and it has been considered to provide the type of the generic name (cf. Pfeiffer, Nomencl. Bot. 2: 1632. 1874; Rodionenko, l.c.). Perhaps the only exceptions in the use of X. vulgare are Schrank (in Flora 7, Beil. 2: 16. 1824) and Klatt (in Linnaea 34: 569. 1865-1866; in Bot. Zeitung (Berlin) 27: 498. 1872), who favoured respectively X. verum Schrank and X. angustifolium Tourn. ex Klatt, both names being illegitimate. As Miller did not preserve specimens or cite any illustration of X. vulgare, no original material appears to exist and so the illustration of "Iris bulbosa mixta", which corresponds to fig. 3 in fol. 11 of the Fourth order of Classis Aestiva from Besler's Hortus Eystettensis vol. 2 (1613), is designated here as neotype of X. vulgare (which under Art. 14.8 is in effect a conserved type). It is connected to "Iris bulbosa caeruleo violacea" of Bauhin (1.c.), and is a good match for the traditional concept of that name in its typical form.

Were *Xiphion vulgare* proposed as a nomen novum to replace *Iris xiphium*, this would certainly make Miller's name nomenclaturally superfluous when described, and hence illegitimate, in the light of Art. 52.1. However, this would require that the type of *I. xiphium* would be

"definitely included" (as qualified in Art. 52.2) in the protologue of the former. In the absence of a holotype or any syntypes, or any previously designated type (and in 1753 *I. xiphium* had none of these) Art. 52.2 states that inclusion of the type of an earlier name requires "citation of the name itself or any name homotypic at that time ..." In association with his *X. vulgare*, Miller (l.c. 1768) did not cite any other name (as defined in Art. 6.3) or any specimen, and therefore *X. vulgare* is clearly legitimate. [Although not relevant for names of species Miller did not even include all elements from which types might be sought since he assigned three of them to another species, *X. latifolium*.] This apparently parallels the case of legitimacy of *Plantago indica* L. under Art. 52.2, which was favourably voted by the Nomenclature Committee for Vascular Plants (cf. Brummitt in Taxon 58: 281. 2009).

Xiphion vulgare does certainly represent at least part of *Iris xiphium*, as deduced from the shared synonymy, but that does not make the name illegitimate. Crespo (l.c.: 56) has, however, recently lecto-typified *I. xiphium* by the only element of original material, "Herb. Clifford: 20, *Iris*: 12" (BM 000557649), which absolutely makes the two names taxonomic synonyms. Consequently, should the Linnaean *I. xiphium* be transferred to *Xiphion* on the basis of its priority, the yet to be published and perhaps undesirable paratautonymic new

combination, "Xiphion xiphium (L.) Xxx", would be needed. This would be most disruptive, threatening the currently well-established X. vulgare. Therefore, for the reasons set out before and because this name is being accepted in the forthcoming account of *Iridaceae* for *Flora iberica* vol. 20 (http://www.floraiberica.es/floraiberica/texto/ imprenta/tomoXX/20_185_00_IRIDACEAE.pdf), we formally propose to conserve X. vulgare (Art. 14.1 & 14.2) against I. xiphium, which is perhaps the best choice both to avoid the real threat of eventual disadvantageous nomenclatural changes and to best serve stability of nomenclature. Because of the existence of the heterotypic *Iris vulgaris* Pohl (Tent. Fl. Bohem. 1: 46. 1809), generally considered a synonym of *I. germanica* L., acceptance of the present proposal would not preclude the use of *I. xiphium* when *Xiphion* is included in *Iris*, whereas failure to accept would create a permanent and unnecessary threat to Miller's generally accepted name, which would be highly undesirable.

Acknowledgements

John McNeill (RBG Edinburgh) is, as always, thanked for his nomenclatural advice and help. This research was partly supported by *Flora iberica* project, parts VIII and IX (CGL2008-02982-C03 and CGL2011-28613-C03-01), from the Spanish Government.

(2117) Proposal to conserve the name *Pabstiella* against *Phloeophila* (*Orchidaceae*)

Guy R. Chiron¹ & Cassio van den Berg²

- 1 Herbiers, Université Claude Bernard Lyon I, 9 rue Dubois, 69622 Villeurbanne Cedex, France
- 2 Universidade Estadual de Feira de Santana, Departamento Ciências Biológicas, Av. Transnordestina s.n., 44036-900 Feira de Santana-BA, Brazil

Author for correspondence: Guy R. Chiron, g.r.chiron@wanadoo.fr

- (2117) Pabstiella Brieger & Senghas in Orchidee (Hamburg) 27: 195.
 1976 [Monocot.: Orchid.], nom. cons. prop. Typus: Pabstiella mirabilis (Schltr.) Brieger & Senghas (Pleurothallis mirabilis Schltr.).
- (=) Phloeophila Hoehne & Schltr. in Arch. Bot. São Paulo 1: 199. 1926, nom. rej. prop. Typus (vide Garay in Orquideologia 9: 117. 1974): Phloeophila paulensis Hoehne & Schltr.

The name *Phloeophila* was originally proposed to accommodate two species, *P. echinantha* (Barb. Rodr.) Hoehne & Schltr. and a new species described at the time, *P. paulensis*. The authors did not choose a type in the original publication. However both species names are nowadays treated as synonyms of *P. nummularia* (Rchb. f.) Garay. The generic circumscription was first enlarged by Garay (in Orquideologia 9: 118. 1974), who transferred to it eight additional species and designated *P. paulensis* as type of the generic name. Luer (in Monogr. Syst. Bot. Missouri Bot. Gard. 20: 17. 1986) treated *Phloeophila* species as members of a section of *Pleurothallis* subg. *Acianthera*, adding one extra species. Based on their extensive molecular phylogenetic study (Pridgeon & al. in Amer. J. Bot. 88: 2286. 2001), Pridgeon & Chase (in Lindleyana 16: 235. 2001) resurrected the genus and transferred to it all the species treated by Luer in the above section as well as further species that were recognized in the genera *Luerella* Braas and *Ophidion* Luer. Despite these transfers, Pridgeon & al. (l.c.) included in their analysis only one taxon from each of these groups, and none of the taxa associated with the type (*P. echinantha*, *P. nummularia* or *P. paulensis*). Besides, half of the species transferred to *Phloeophila* by Garay (l.c.) were embedded in this analysis in *Acianthera*. Luer (in Monogr. Syst. Bot. Missouri Bot. Gard. 105: 191. 2006) accepted *Phloeophila*, however with only four species, in addition to the genera *Luerella* and *Ophidion*.

In their work on phylogenetic relationships in Brazilian *Pleuro-thallidinae*, Chiron & al. (in Phytotaxa 46: 34. 2012) included two extra species of *Phloeophila* sensu Pridgeon & Chase (l.c.): *P. nummularia* and *P. bradei* (Schltr.) Garay. Neither of them falls into the *Phloeophila* group as defined by these authors. *Phloeophila bradei* has already been accommodated in a new genus (Chiron in Richardiana 12: 78. 2012) and *P. nummularia*, of which the type of *Phloeophila* (*P. paulensis*) is a synonym, falls within the genus *Pabstiella*. The latter species is represented by two different samples and both are sister taxa, deeply embedded within various successive nodes of *Pabstiella* with good bootstrap support.

Pabstiella was proposed as a monotypic genus to accommodate *Pleurothallis mirabilis* Schltr., characterized by a very long column foot and an elongate mentum. Luer (l.c. 1986: 47) accommodated *P. mirabilis* in a subgenus of *Pleurothallis* and the genus was forgotten. Pridgeon & Chase (l.c.) found that two of their taxa formed a clade