

(2849) Proposal to conserve the name *Ophrys sphegodes* (Orchidaceae) with a conserved type

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(2849) *Ophrys sphegodes* Mill., Gard. Dict., ed. 8: *Ophrys* No. 8. 16 Apr 1768 [Angiosp.: *Orchid.*], nom. cons. prop.
 Typus: [United Kingdom], England, Cantia (Kent), Wye, 7 Jun 1902, *Lowne 1461* (K barcode K000718068), typ. cons. prop.

Ophrys sphegodes Mill. (Gard. Dict., ed. 8: *Ophrys* No. 8. 1768) (sect. *Araniferae* Rchb. f.) is a species of southern and central Europe. It comprises a very complex grouping, with several infraspecific taxa (Kreutz, *Kompend. Europ. Orchid.* 2004; Baumann & al., *Orchid. Eur.* 2006; Pedersen & Faurholdt, *Ophrys: Bee Orchids Eur.* 2007). The species can self-pollinate, but pollination is also carried out by males of the rare solitary bee *Andrena nigroaenea* (Schiestl & al. in *J. Chem. Ecol.* 23: 2881–2895. 1997). Plants that do not flower or produce seeds die back quickly, whereas those with fruits persist until after seed dispersal (Hutchings in *J. Ecol.* 75: 711–727. 1987a, 75: 729–742. 1987b; Pritchard, *Modern Meth. Orchid Conserv.*: 101–115. 1989; Sanger & Waite in *Bot. J. Linn. Soc.* 126: 75–81. 1998).

The traditional concept and current use of the name *Ophrys sphegodes* has been applied to a species with the labellum orbicular to ovate, velutinous, rarely with a small appendage, not globose-inflated, with margins deflexed or flattened; speculum usually H-shaped (the cross-line sometimes absent), rarely scutelliform, bluish-violet or blackish-purple (Camus & Camus, *Iconogr. Orchid. Eur.*: 330. 1928; Soó in *Tutin & al., Fl. Eur.* 5: 346. 1980; Aldasoro & Sáez in *Castroviejo & al., Fl. Iber.* 21: 186–187. 2005; Delforge, *Orchid. d’Eur. d’Afr. N. Proch.-Orient*: 479. 2016).

In accordance with the rules outlined by Miller in the “Introduction” to the eighth edition of the *Gardeners dictionary*, the protologue of *Ophrys sphegodes* Mill. (l.c.) includes a Latin diagnosis “8. OPHRYS (*Sphogodes*) bulbis subrotundis, caule subfolioso, nectarium labio trifido hirsuto” and its English translation “*Twyblade with roundish bulbs, a leafy stalk, and a hairy trifid lip to the nectarium*”, followed by the synonym “*Orchis sive testiculus sphegodes hirsuto flore. J. B. 2. 727 [recte 767]*” translated into English as “*Humble Bee Satyrion with green wings*.” The reference to “J. B. 2. 727” is to Bauhin & Cherler (*Hist. Pl.* 2: 767. 1651) (see Miller, l.c.: “An explanation of the authors names and works”; “J. B. An Universal History of Plants, by John Bauhin, in three volumes. Printed at Embrun 1650, fol.”).

The protologue is also accompanied by a more detailed description in the main article for the genus *Ophrys*: “The eighth sort grows naturally in dry pastures in several parts of England, and is commonly called the Humble Bee Orchis; of this there are two or three varieties found wild in England, and several more in Spain and Portugal. This hath a roundish bulbous root; the leaves are like those of the narrow-leaved Plantain. The stalk rises six or seven inches high, having two

or three sheath-shaped leaves embracing it, which are erect; at the top of the stalk come out two or three flowers without spurs, having purplish crests and wings. The nectarium is large, shaped like the body of a humble bee, of a dark sooty colour, with two or three lines running across it of a darker or lighter colour, which appear brighter or duller according to the position of the flower to the sun. It flowers early in June. There are some varieties of this sort, which differ in the colour and size of their flowers.”

No particular specimens are cited in the protologue. However, the polynomial cited from Bauhin & Cherler (l.c.) is accompanied by an illustration that is part of the original elements used by Miller to describe his *Ophrys sphegodes*. Thus, a lectotype has to be selected from any elements of original material that were available to Miller when the eighth edition of the *Gardeners dictionary* was published in 1768, including Bauhin & Cherler’s drawing.

Miller’s personal herbarium, said to contain almost 10,000 specimens, was purchased by Sir Joseph Banks in 1774 and was later incorporated into the General Herbarium at BM (Britten in *J. Bot.* 51: 132–135. 1913). Unfortunately, no specimens identifiable as *Ophrys sphegodes* can now be found in Miller’s own collection at BM. In this sense, according to Raynaud (in *Coll. Soc. Franç. Orchidophilie* 4: 61. 1981 [“1980”]) any original material collected by Miller seems to have been lost.

Therefore, the only surviving original element is Bauhin & Cherler’s illustration “*Orchis sive testiculus sphegodes hirsuto flore*” (l.c.: 767). This image illustrates a complete plant, with tubers, leaves and flowers. This drawing is the same one that was published by Dodoens (*Fl. Coroniar. Hist.*: 212. 1568) as “*Orchis Serapias secundus*” (image available at <https://www.biodiversitylibrary.org/item/188130#page/216/mode/1up>), and by Lobel as “*Testiculus vulpinus secundus, Sphogodes*” in his *Kruidtboeck* (1581a: 217), in *Plantarum seu Stirpium icones* (1581b: 179), and in the *Icones stirpium* (1591: 179). In addition, this drawing was also included by Gerard & Johnson (*Herball*, ed. 1636: 212. 1636), as “*Testiculus vulpinus, 2. Sphegodes*”, and Parkinson (*Theatr. Bot.*: 1350. 1640), as “*Orchis sphegodes sive sucum referens*”, and was also cited in the protologue of *Ophrys apifera* by Hudson (*Fl. Angl.*: 340. 1762) (see Künkele & Lorenz in *Mitteilungsbl. Arbeitskreis Heimische Orchid. Baden-Württemberg* 22: 541–691. 1990).

Nevertheless, Raynaud (l.c.) designated a “neotype” for the name *Ophrys sphegodes*. This designation was accepted by Baumann & Künkele (in *Mitteilungsbl. Arbeitskreis Heimische Orchid. Baden-Württemberg* 18: 372. 1986) and Baumann & al. (*Orch. Deutschl.*: 562. 2005). The “neotype” specimen was collected in France (Vendée, Réserve de la Pointe d’Arçay) and is preserved at MPU (with barcode MPU002482; image available at <https://herbier.umontpellier.fr/zoomify/zoomify.php?fichier=MPU002482>). However, since Miller cited a

drawing in his protologue, it is not possible to select a neotype, and the “neotypification” published by Raynaud must be superseded because original material exists (see Art. 9.8 and Art. 9.19(a) of the *ICN*; Turland & al. in *Regnum Veg.* 159. 2018).

Later, Devillers-Terschuren & al. (in *Naturalistes Belges* 87(Orchid. 19). 85–112. 2006) accepted the “neotype” mentioned by Raynaud (l.c.) and proposed an “epitype” from a specimen collected in England (Cantia, Kent), preserved at K (now barcoded K000718068). However, the “epitype” designated by Devillers-Terschuren & al. (l.c.: 102, 104) is ineffective, being contrary to Art. 9.9 and Art. 9.20 Note 8 of the *ICN*.

Finally, Hennecke (in *Ber. Arbeitskreis. Heimische Orchid.* 34: 162–179. 2017) mentioned “Da Miller im Protolog einen Text mit Abbildung zitiert, ist es nicht möglich, einen Neotypus zu bezeichnen. Damit wird die Typuswahl von Raynaud (Compt. rend. Coll. Soc. France. Orchid. 4: 61. 1981; zitiert von Baumann & Künkele 1986 und Baumann 2005) leider hinfällig. Da Miller selbst keinen Holotypus nennt, steht die Zeichnung von Bauhin als möglicher Lectotypus zur Verfügung. Die von Raynaud definierte Pflanze könnte man dazu zweckmäßiger Weise als Epitypus bezeichnen” (Since Miller quotes a text with an illustration in the protologue, it is not possible to designate a neotype. This unfortunately makes Raynaud’s choice of type (Compt. Rend. Coll. Soc. France. Orchid. 4: 61. 1981; quoted by Baumann & Künkele 1986 and Baumann 2005) obsolete. Since Miller himself does not name a holotype, Bauhin’s drawing is available as a possible lectotype. The plant defined by Raynaud could appropriately be referred to as an epitypus). However, this mention does not constitute an effective designation of the lectotype according to Art. 7.11 of the *ICN*.

In conclusion, the only original material currently available for designation of a lectotype for *Ophrys sphegodes* is Bauhin & Cherler’s illustration (l.c.: 767 “Orchis sive testiculus sphegodes hirsuto flore”). As this illustration was cited by Miller under *O. sphegodes* it is part of the protologue and cannot be in conflict with it (cf. *ICN* Art. 9 Note 7). However, as the same illustration was designated as the lectotype of

O. apifera (see Ferrer-Gallego in *Phytotaxa* 521(1): 59. 2021), with such a designation the name *O. sphegodes* would become a homotypic synonym of the earlier *O. apifera* Huds. (1762).

Consequently, for the purpose of nomenclatural stability and to support the continued and well-established use of the name *Ophrys sphegodes*, I propose to conserve the name with a conserved type under Art. 14.9 of the *ICN*. Rejection of the present proposal would have an undesirable consequence because current usage of the name *O. sphegodes* would be replaced by *O. aranifera* Huds. (Fl. Angl., ed. 2: 392. 1778) (see Soó in *Acta Bot. Acad. Sci. Hung.* 5: 437–471. 1959, l.c. 1980; Vêla in *Orchidophile (Asnières)* 33: 259–261. 2002; Soca in *Monde Pl.* 98(480): 23–26. 2003; Devillers-Terschuren & al., l.c.), a later synonym of *O. sphegodes* auct.

A complete and well-preserved specimen at K (with barcode K000718068) (image available at <http://specimens.kew.org/herbarium/K000718068>) is here proposed as the conserved type of the name *Ophrys sphegodes*. The specimen corresponds with the material ineffectively designated by Devillers-Terschuren & al. (l.c.) as the “epitype” of the name. This material was collected in England at Wye (Cantia, Kent), within the populations of the North Downs, explicitly mentioned by Miller, who collected at Northfleet (see Devillers-Terschuren & al., l.c.). The specimen displays the relevant diagnostic characters mentioned above, and it clearly represents the traditional concept (Miller, l.c.) and current use and application of the name *O. sphegodes* (e.g., Soó, l.c.; Soca, l.c.; Delforge, l.c.; Devillers-Terschuren & al., l.c.).

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(2850) Proposal to conserve the name *Warczewiczella marginata* against *Zygopetalum fragrans* (Orchidaceae)

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(2850) *Warczewiczella marginata* Rchb. f. in *Bot. Zeitung* (Berlin) 10: 636. 10 Sep 1852 [Angiosp.: *Orchid.*], nom. cons. prop. **Lectotypus (hic designatus):** “Mittelamerika”, “194” (W [Rchb.-Orch. No. 25891]).

(=) *Zygopetalum fragrans* Linden, *Établ. Linden, Prix-Courant* 6: 9. 15 Feb 1851, nom. rej. prop.

Lectotypus (hic designatus): [icon ined.] “N° 6. *Zygopetalum fragrans*, Bucaramanga” (W [Rchb.-Orch. No. 49773, upper right-hand illustration]).

With the advent of the digitization of hundreds of rare nursery catalogues, the protologue of *Zygopetalum fragrans* Linden (*Établ.*