

described by Aublet.

It was not until Bremekamp's work (in *Recueil Trav. Bot. Néerl.* 31: 268–272. 1934) that the correct conclusion was reached: that Aublet's illustration was based on a mixed collection. Bremekamp was the first to obtain authentic, but newly collected, fruits of *Coupoui aquatica*. These were very different from the fruit illustrated by Aublet. Bremekamp speculated that Aublet's fruit could have been collected from a climber, possibly belonging to the *Apocynaceae*, growing on the same tree from which Aublet collected his leaves, but without the original fruit this cannot be ascertained. In any event, the lectotype of *Coupoui aquatica* comprises the two detached leaves collected by Aublet preserved at BM, and not his published illustration. *Coupoui*, based solely on *C. aquatica*, is also typified by these two leaves. Because the original material, except for the putative apocynaceous fruit illustrated by Aublet, and all associated later-collected material of *C. aquatica* completely agree with *Duroia*, Bremekamp synonymized *Coupoui* with *Duroia*. He also made some synonymizations and new combinations under *Duroia*, among them *D. aquatica* (Aubl.) Bremek., but failed to observe that *Duroia* is a later name than *Coupoui*.

Miers (l.c.: 16) never adopted the name *Coupoui* because, in his opinion, it was too similar to the names

*Couepia* Aubl., *Goupia* Aubl., and *Cupia* DC. He considered *Coupoui* to be a later “sub-homonym” and therefore unavailable for use, replacing it with *Cupirana* Miers, but under the rules of the present *ICBN* Art. 53.1 (Greuter & al. in *Regnum Veg.* 138. 2000) *Coupoui* is not a later homonym, and having a different pronunciation and derivation it is not sufficiently alike to be confused with these other names (Art. 53.3), and remains legitimate. On the other hand, *Cupirana* is an illegitimate *nomen superfluum*.

As *Coupoui* is an earlier heterotypic synonym of *Duroia*, the latter name is threatened by the former. But the name *Duroia* is already conserved against another earlier synonym, *Pubeta* L. (*Pl. Surin.*: 16. 1775), and is consistently used in current literature. Furthermore, about 45 specific combinations have been made under *Duroia*, compared to only four under *Coupoui*. To avoid the loss of the well-established and already conserved name *Duroia* L. f., we therefore propose to add *Coupoui* Aubl. to its list of *nomina rejicienda*.

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## (1717) Proposal to reject the name *Lindernia palustris* (*Scrophulariaceae*)

Enrique Rico<sup>1</sup>, M. Montserrat Martínez-Ortega<sup>1</sup>, Alberto Herrero<sup>2</sup> & Steve Cafferty<sup>3</sup>

<sup>1</sup> *Departamento de Botánica, Universidad de Salamanca, E-37007 Salamanca, Spain. erico@usal.es (author for correspondence)*

<sup>2</sup> *Real Jardín Botánico, CSIC, Plaza de Murillo 2, E-28014 Madrid, Spain*

<sup>3</sup> *Department of Botany, The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.*

(1717) *Lindernia palustris* Hartmann, *Primae Lin. Inst. Bot.*, ed. 2: 77. 1767 [*Dicot.: Scrophular.*], *nom. utique rej. prop.*  
Typus: non designatus.

The only species native to Europe of the genus *Lindernia* All. had been named “*L. pyxidaria* All.” (cited erroneously from Allioni, *Mélanges Philos. Math. Soc. Roy. Turin* (Misc. Taur.) 3(1): 178, t. 5, f. 1. 1766), until Philcox (in *Taxon* 14: 30. 1965) demonstrated that the first valid publication of this name was by Linnaeus (*Mant. Pl. Alt.*: 252. 1771) and that the Linnaean name was illegitimate, being a superfluous renaming of *Capraria gratioides* L., itself a superfluous renaming of *Gratiola dubia* L. This latter name had been typified by Pennell (in *Torreya* 19: 149. 1919) [*Herb. Clayton* 164 (BM); see Linnaean type register on the Natural History Museum's Web site: <http://www.nhm.ac.uk/botany/linnaean/>] and the type material taxonomically corresponds with the taxon nowadays known as *L. dubia* (L.) Pennell, a species introduced in Europe. Philcox (l.c.) considered that the first legitimate name for the *Lindernia* native to Europe was *Anagalloides procumbens*

Krocker 1790 (*Fl. Siles.* 2(1): 398, t. 26. 1790), and proposed the combination *L. procumbens* (Krock.) Philcox as the correct name for this species [It should be noted that the attribution of this combination to Borbás (Békés Vámegey *Fl.* 80. 1881) in some references, e.g., Yamazaki (in Iwatsuki & al., *Fl. Japan* 3a: 337. 1993) and Hong & al. (in Wu & Raven, *Fl. China* 18: 32. 1998) is incorrect]. The name *L. procumbens* has been persistently used since 1965 in the literature, but in the *Index Synonymique de la Flore de France* (see <http://www.dijon.inra.fr/flore-france/>) the prior name *L. palustris*, proposed by Hartmann in 1767 (l.c.: 77), is used.

*Lindernia procumbens* is found in temperate and subtropical Eurasia and is sporadically naturalized in America and Australia. This species is easily recognizable mainly by its four stamens and by a placenta retaining only a few fibres from the ovary septum after capsular dehiscence. Moreover, the leaves are usually entire and the fruit varies from widely ellipsoid to subspheric. In contrast, *L. dubia*, originating in North America but now expanding throughout SW Europe, bears two stamens plus two staminodes, a placenta retaining a narrow longitudinal wing from the

ovary septum after capsular dehiscence, usually denticulate leaf margins, and an ellipsoid fruit.

The protologue of *L. palustris* by Hartmann includes “In Pedemontii, Americae paludosis”, so there is some doubt as to which plant the author was referring (l.c.: 76–77). Nevertheless, some of the characters mentioned in the protologue of the species (“folia... integerrima...”), as well as the description of the genus itself (“stamina 4 quorum inferiora bifurcata”), make it clear that the author was referring to the plant native to Europe and not to *L. dubia*.

There is no extant original material relevant for the typification of the name *L. palustris*. According to Stafleu & Cowan (Taxonomic Literature, ed. 2, 2: 68. 1979) it is unknown whether Hartmann’s herbarium is preserved. Two references are found in the protologue of *L. palustris*: the first is a direct mention of the *Hortus Alsaticus* by Lindern (1747) and the second an indirect reference to a work by Allioni. The latter is most probably in Allioni (l.c.: 176–184), as there is complete coincidence between the polynomial synonym (“Antirrhinum palustre minus centaurei minoris foliis”) used there by Allioni and by Hartmann in the protologue. Moreover, Hartmann (l.c.) makes an explicit mention of Gagnebin (“Gagnebin apud Allionium”), whose material is also cited by Allioni.

Nevertheless, in the protologue of *L. palustris* no illustration is cited, although a *Lindernia* is nicely depicted in Allioni (l.c.) and Lindern (1747) makes reference to an icon that appeared in his previous work (Tournefortius *Alsaticus* 156, t. 5, f. 9. 1728). With no surviving original material it is only possible to select a neotype and, had we chosen to do so, we would have selected the superb illustration in Allioni (l.c.: t. 5, f. 1), as the stamens are drawn with such precision that it is beyond doubt that they correspond to *L. procumbens*. The illustration in Lindern’s *Tournefortius Alsaticus* is ambiguous as the stamens—the best diagnostic character—are not depicted.

The combination by Philcox, though proposed only 40 years ago, is used in most Floras, e.g., by Soó (Magyar Fl. 3: 183. 1968), Webb & Philcox (in Tutin & al., Fl. Eur. 3: 204. 1972), Guinochet & Vilmorin (Fl. France 2: 608. 1975), Zangheri (Fl. Ital. 1: 592. 1976), Edmondson (in Davis, Fl. Turkey 6: 679. 1978), Pignatti (Fl. Italia 2: 525. 1982), Franco (Nova Fl. Portugal 2: 211. 1984), Gleason & Cronquist (Man. Vasc. Pl. NorthE. U.S. Canad., ed. 2: 471. 1991), Barker (in Harden, Fl. New South Wales 3: 565. 1992), Kozuharov & Kuzmanov (Fl. Nar. Republ. Balgarija 10: 22. 1995), Goliášová (Fl. Slov. 5(2): 72. 1997), Hong & al. (l.c.), Slavík (Fl. Czech Republ. 6: 316. 2000), Kamelin in Fedorov (Fl. Russ.: Eur. Pt. & Bord. Reg. 5: 275. 2001), and Lambinon & al. (Nouv. Fl. Belgique, ed. 5: 628. 2004); in a recent revision of the genus in America by Lewis (in *Castanea* 65: 93–122. 2000); as well as in “red” or plant conservation lists (e.g., Danton & Baffray, Invent. Pl. Protég. France: 166. 1995); and weed reports (e.g., Holm & al., Geogr. Atlas World Weeds: 217. 1979; Wiersema & León, World Econ. Pl.: 300. 1999).

On the contrary, no examples of usage of *L. palustris* have been found prior to its 1999 use in the Index Synonymique de la Flore de France, although this name

antedates the Linnaean *L. pyxidaria*. A Google search on 6 October 2005 returned 714 hits for “*Lindernia procumbens*” while only 13 for “*Lindernia palustris*” (most related to the Index Synonymique de la Flore de France). Some continued usage of “*Lindernia pyxidaria*” is also apparent, as a similar search on this name returned 443 hits, although many of these mentioned this name only as a synonym.

Philcox (l.c.) proposed as lectotype of *L. procumbens* the only available material, Krock’s illustration. But, in our opinion, the identity of this illustration is not evident, because the most important features distinguishing *L. procumbens* from *L. dubia* (i.e., details of stamens and placenta) were not drawn. Therefore, in order to enable the precise application of this name, we here designate an epitype under Art. 9.7 of the ICBN (Greuter & al. in *Regnum Veg.* 138. 2000):

***Lindernia procumbens*** (Krock.) Philcox in *Taxon* 14: 30. 1965. – Lectotype (designated by Philcox, l.c.): [icon] in Krock, *Fl. Siles.* 2(1): t. 26. 1790. – Epitype (designated here): “*Lindernia pyxidaria*”, W.[irtgen] Herb. plant. select. flor. rhenan. Ed. 2. 11. 505. Auf den Gänsewäldern um Ichenheim (Baden) auf feuchtem thonigen Boden, August 1864, *W. Bauer* (BM).

In summary, recent usage of the long-neglected name *L. palustris* threatens to displace the widely and persistently used (at least over the last four decades) *L. procumbens* for the native European species of *Lindernia*. To resolve this problem the rejection of the former name is here proposed under Art. 56 and an epitype is selected for the latter to clarify its taxonomic interpretation. We have refrained from neotypification of *L. palustris*, believing this to be unnecessary for a name that has been rarely in use. Outright rejection of *L. palustris* seems the most effective way to establish a clear, stable nomenclature for this species.

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