



Nomenclatural corrections to the taxonomic revision of *The Old World species of Boehmeria (Urticaceae, tribus Boehmerieae)* by Wilmot-Dear & Friis (2013)

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Key words

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Abstract This nomenclatural note, a sequel to a recently published taxonomic revision of the Old World species of the genus *Boehmeria* (*Urticaceae*), establishes: 1) a holotype of *B. maugereti*, synonym of taxon no. 8b in the revision (*B. clidemioides* var. *diffusa*); 2) *B. zollingeriana* Wedd. var. *blinii* (H.Lév.) C.J.Chen in Chen et al. (2003) as the correct name for the variety named in the revision as *B. zollingeriana* var. *podocarpa* in Chen et al. (2003); 3) that the combination *B. spicata*, based on *Urtica spicata*, is not illegitimate, as stated in the revision in synonymy of *B. japonica* and in an attached note; 4) a corrected synonymy for *B. splitgerbera* and the designation of a lectotype for *Splitgerbera japonica* and its nomenclatural synonyms; and 5) identifications of types for a number of excluded names: *Boehmeria amaranthus*, *B. bodinieri*, *B. cavaleriei*, *B. martini* and *B. vanioiti*.

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Subsequent to the publication of our taxonomic revision of the Old World species of *Boehmeria* (Wilmot-Dear & Friis 2013) a few points regarding the nomenclature have been discussed with Rafaël Govaerts, Royal Botanic Gardens, Kew. We have jointly examined the comments and we propose the following five nomenclatural changes to Wilmot-Dear & Friis (2013).

The type of *Boehmeria maugereti*, a synonym of 8b. *Boehmeria clidemioides* var. *diffusa*

Boehmeria maugereti H.Lév. & Vaniot, a synonym of 8b. *Boehmeria clidemioides* var. *diffusa*, is listed with two syntypes in Wilmot-Dear & Friis (2013) 117.

However, as pointed out by Lauener (1983), the holotype of *B. maugereti* is *Bodinier 1715* at E. The other specimen cited by Wilmot-Dear & Friis (2013) is not a type. The correct citation for *B. maugereti* is therefore:

Boehmeria maugereti H.Lév. & Vaniot in Léveillé (1904) CXLIV. — Type: *Bodinier 1715* (holo E, barcode E00109371), China, Kweichow [Guizhou], mont du Collège, bord des ruisseaux, 21.7.1897.

This correction applies also to the citation of the place of publication of *B. maugereti* in Wilmot-Dear & Friis (2013) 117, where the year of publication is erroneously given as '1907' instead of '1904'. The reference to its publication is missing in Wilmot-Dear & Friis (2013) in the References on p. 208, where it should be added as:

Léveillé H. 1904. Contribution jubilaire à la Flore du Kouy-Tchéou. Bulletin de la Société Botanique de France 51 (Session extraordinaire): CXLIII–CXLVI.

The correct name for 9b. *Boehmeria zollingeriana* var. *podocarpa*

When Wang (1981) established *Boehmeria blinii* var. *podocarpa* W.T.Wang he automatically also established the autonym *Boehmeria blinii* var. *blinii*. This autonym is not included in the account of *B. zollingeriana* Wedd. in Wilmot-Dear & Friis (2013) 121. According to Art. 11.6 of the Melbourne Code (McNeill et al. 2012) an autonym is treated as having priority over the name or names of the same date and rank that established it. Since Wilmot-Dear & Friis (2013) consider *Boehmeria blinii* var. *blinii* and *B. blinii* var. *podocarpa* to represent the same variety of *B. zollingeriana* this variety has to be named *B. zollingeriana* var. *blinii*. This reduction is new; in Chen et al. (2003) 168 both *B. zollingeriana* var. *blinii* and *B. zollingeriana* var. *podocarpa* were accepted.

The synonymy for *B. zollingeriana* var. *podocarpa* in Wilmot-Dear & Friis (2013) 121 has therefore to be modified as this:

b. var. *blinii* (H.Lév.) C.J.Chen in Chen et al. (2003) 168. — Fig. 8d–h; Map 11

Boehmeria blinii H.Lév. (1913) 551. — *Boehmeria blinii* H.Lév. var. *blinii* [autonym created by Wang 1981]. — *Boehmeria wattersii* (Hance) B.L.Shih & Yuen P.Yang var. *blinii* (H.Lév.) B.L.Shih & Yuen P.Yang (1998) 151. — *Boehmeria zollingeriana* Wedd. var. *blinii* (H.Lév.) C.J.Chen in Chen et al. (2003) 168. — Type: *Esquirol 940* (holo E, E00109219; iso PE), China, Guizhou, Potchang, Aug. 1908. See also Lauener (1983) 486, where the specimen at E is referred to as a holotype.

Boehmeria zollingeriana Wedd. var. *podocarpa* (W.T.Wang) W.T.Wang & C.J.Chen in Chen et al. (2003) 168. — *Boehmeria blinii* H.Lév. var. *podocarpa* W.T.Wang (1981) 323. — Type: *Masamune 827* (holo not traced, possibly Tl; iso PE, stated to be holo [HT]), Taiwan, Xindien, 19 June 1930.

Boehmeria wattersii (Hance) B.L.Shih & Yuen P.Yang (1998) 150. — *Pilea wattersii* Hance (1885) 327. — Type: *Watters in Herb. Hance* 22296 (holo BM, photo K), Taiwan, Tam Sui, Apr. 1882.

The name *B. zollingeriana* var. *podocarpa* has to be changed to *B. zollingeriana* var. *blinii* on the following pages in Wilmot-Dear & Friis (2013): p. 118 (legend to Fig. 8), p. 120–121 (including legend to Map 11), p. 138, p. 210 (including the abbreviation zol-pod to zol-bli in the Identification list on p. 210–214).

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The synonymy of 28. *Boehmeria japonica*

The combination *Boehmeria spicata* (Thunb.) Thunb., based on *Urtica spicata* Thunb., is not illegitimate. It was superfluous when published because Thunberg, when he established the new combination *B. spicata*, cited the earlier *Urtica japonica* L.f. in synonymy, but, being a combination, it was not illegitimate, cfr. Art.52.3 of the Melbourne Code (McNeill et al. 2012). The designation ‘nom. illeg. superfl.’ has therefore to be replaced with ‘nom. superfl. when published’ in the synonymy of *B. japonica* in Wilmot-Dear & Friis (2013) 186 and the word ‘illegitimate’ replaced with ‘superfluous’ in Note 1 on p. 187.

The synonymy of 29. *Boehmeria splitgerbera* and the typification of *Splitgerbera japonica* Miq.

In his review of the family of *Urticaceae* Weddell (1854) 199 published the name *Boehmeria biloba* Wedd. without a description, but with reference to “*Splitgerbera biloba* Miquel, Comm. Bot., 134, t. 14” and the nomen nudum *Urtica biloba* Hort.

However, at the place in Miquel’s *Commentarii phytographici* which Weddell refers to only one species is described and illustrated, “*Splitgerbera japonica* Miq. (1840) 134, t. 14, f. A–K” and Weddell’s reference to “*Splitgerbera biloba* Miq.” is an erroneous indirect reference to *Splitgerbera japonica* Miq. According to Art. 41.3 of the Melbourne Code (McNeill et al. 2012) *Boehmeria biloba* Wedd. must be considered a validly published name, because Weddell refers clearly and unambiguously to the page and illustration of *Splitgerbera japonica* Miq. It might be considered a bibliographic error to be corrected, as the name *Urtica biloba* is used on p. 133, but was not accepted by Miquel in the subsequent text. However, in Weddell it is an illegitimate name because the epithet *japonica* should have been applied according to Art. 52 of the Melbourne Code (McNeill et al. 2012) and the combination *B. japonica* (L.f.) Miq. was only proposed in 1867, after which date such a combination was prevented in *Boehmeria*.

The synonymy for this taxon in Wilmot-Dear & Friis (2013) 195 has therefore to be modified as this, including a lectotypification of *Splitgerbera japonica*:

29. *Boehmeria splitgerbera* Koidz. — Fig. 36a–f; Map 38

Boehmeria splitgerbera Koidz. (1926) 345. — *Urtica biloba* Miq. (1840) 133, nom inval. (not accepted by author). — *Splitgerbera japonica* Miq. (1840) 134, t. 14, f. A–K, non *B. japonica* (L.f.) Miq. (1867). — *Boehmeria biloba* Wedd. ([March] 1854) 199, nom. illeg., based on *Splitgerbera japonica* Miq. (1840: 134, t. 14), erroneously cited as ‘*Splitgerbera biloba* Miq., Coment. Bot, 134, t. 14’. — See Note 1 [Note 1 on p. 195 of Wilmot-Dear & Friis (2013) has to be modified, see below]; *Boehmeria biloba* Miq. in Zoll. ([later than March] 1854) 100, isonym of *B. biloba* Wedd. — *Boehmeria bifida* Blume (1857) 222, nom. illeg., based on *Splitgerbera japonica* Miq. — Type: Not clearly indicated in Miquel (1840: 133), where the new species is illustrated by t. 14, f. A–K, and it is stated that description and illustration were made from a Japanese plant lately introduced and cultivated in the Botanic Garden of Rotterdam (where Miquel was director) and other Dutch ('Batavis') gardens. A specimen at L is labelled by Miquel ‘*Urtica biloba* – h. Roterod. 1 Aug. 1834’, and identified as *B. splitgerbera* by Wilmot-Dear & Friis on a det.-slip on L (sheet no. 908.190.938). This must be considered part of the original material of *Splitgerbera japonica* Miq. The introduction surely was made by Von Siebold, the only source for the introduction of Japanese plants worldwide before c. 1855, e.g. to The Netherlands, but also to Cipanas, Indonesia (see below). In Wilmot-Dear & Friis (2013) 195 the type is erroneously stated to be ‘Unknown collector, cultivated in Indonesia, originally from Japan’, which is based on a later statement in Miquel (1854: 100): ‘H. 3119. ... E japonica, in horto Tjipannas [sic] culta’, meaning ‘From Japan, cultivated in the garden near Cipanas’. This is a village (formerly ‘Tjipanas’, ‘hot river’) in W Java between Bogor and Bandung where there used to be an acclimatisation garden in the early 19th century. The specimen cited in Miquel (1854) is Zollinger 3119, represented by numerous duplicates in many herbaria, but as appears from Miquel (1840) this collection cannot be the type of *Splitgerbera japonica*

Miq. Instead, and in agreement with Art. 9.2 of the Melbourne Code (McNeill et al. 2012), we here designate the Miquel specimen from the Botanical Garden in Rotterdam as lectotype of *Splitgerbera japonica* Miq.: *Miquel s.n.* (lecto, here designated L, sheet no. 908.190.938), marked “*Urtica biloba* – h. Roterod. 1 Aug. 1834”.

Note 1 in Wilmot-Dear & Friis (2013) 195 has to be modified as this: *Boehmeria biloba* Wedd. ([March] 1854) 199, nom. illeg., was based on *Splitgerbera japonica* Miq. (1840) 134, t. 14, the epithet of which according to Art. 52 of the Melbourne Code (McNeill et al. 2012) should have been adopted. Weddell’s reference to *Splitgerbera japonica* Miq. is indirect, as Weddell erroneously, but unambiguously, referred to *Splitgerbera japonica* Miq. as the basionym of *S. biloba* Miq., with full reference to page and illustration, but citing a wrong name for the only species in the new genus *Splitgerbera*. Also *B. bifida* Blume is illegitimate.

In Wilmot-Dear & Friis (2013) 195 it is stated that Weddell (1854) was first published as an independent preprint. This is incorrect; Stafleu & Cowan (1988) 139 state that the independently paginated copies of Weddell (1854) are reprints and the journal should be cited as the place of publication.

ADDITIONAL INDICATIONS OF TYPES FOR EXCLUDED NAMES

Types have been traced or references to search for lost types found for a number of the excluded names listed by Wilmot-Dear & Friis (2013) 206, especially through Lauener & Ferguson (1982) and Lauener (1983), which was overlooked by us.

Boehmeria amaranthus H.Lév. (1913) 550 = *Acroglochin persicarioides* Moq. (Amaranthaceae), according to an identification of the type *Leon Martin & Emile M. Bodinier s.n.* (holo E, barcode E00317870), China, environs de Gan-pin, 29.8.1897, identification by Handel-Mazzetti, dated 7.1.1927. See also Lauener & Ferguson (1982) 193, where the specimen is referred to as a holotype, and Lauener (1983) 486.

Boehmeria bodinieri H.Lév. (1913) 550 = *Laportea bulbifera* (Siebold & Zucc.) Wedd. (1856), according to type *Emile M. Bodinier* 1748 (holo E, no barcode or digital image seen), China, Kweichow, mont du Collège, à l’entrée de la grotte de Kema tong, 9.8.1897. See also Lauener (1983) 500, who refers to the type collection as a holotype.

Boehmeria cavaleriei H.Lév. (1913) 550 = *Pilea trinervia* (Roxb.) Wight (Urticaceae), according to the two syntypes: *Pierre Julien Cavalerie* 310 & 625 (syn E, mounted on same sheet, barcode E00240961), China, Pinfa, grande grotte, 25.8.1902, identified by Handel-Mazzetti, 7.1.1928, and *Pierre Julien Cavalerie* in Herb. *Bodinier* 2589 (syn E, barcode E00240960), China, Kweichow, district de Tou-chan à Yang-Kia-tchong, fleurs vertes, 19.9.1898, identified by Handel-Mazzetti, 7.1.1928. See also Lauener (1983) 502, where no lectotypification is made.

Boehmeria esquirolii H.Lév. & Blin. in Léveillé (1912) 372 = *Maoutia puya* (Hook.) Wedd. According to the type: *J. Esquirol s.n.* (holo E, barcode E00275361), China, Ouang-Mou, 6.1904, identified by Handel-Mazzetti, 7.1.1928. See also Lauener (1983) 500, who states that *Esquirol s.n.* is the holotype.

Boehmeria martinii H.Lév. (1913) 551 = *Pilea martini* (H.Lév.) Hand.-Mazz. According to the type: *Leon Martin & Emile M. Bodinier* 1902 (holo E, barcode E00275382), China, environs de Gan-pin, plante rare, au fond d’une excavation profonde en forme de grotte, 20.9.1897, identification by Handel-Mazzetti, dated 7.1.1928. See also Lauener (1983) 501, who states that *Martin & Emile M.Bodinier* 1902 is a holotype.

Boehmeria vanioiti H.Lév. (1913) 551 = *Pilea notata* C.H. Wright. According to the three syntypes: *Leon Martin & Emile M. Bodinier* 1655 (syn E, barcode E00275374), China environs de Gan-pin, abonde dans les ruisseaux à l'intérieur de la ville, 5.7.1897; *Pierre Julien Cavalerie* 279 (syn E, barcode E00275373), China, Pin-Fa, Sud-ouest, entrée de grotte, 21.8.1902, and *Emile M. Bodinier* 1697 (syn E, barcode E00275375), China, Mont. du Collège, rocallies à Ke-ma-tong, 21.7.1897. See also Lauener (1983) 502, who does not make a lectotypification.

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