New combinations in *Guilandina* (Leguminosae: Caesalpinioideae)

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Summary. The *Caesalpinia* Group (Leguminosae: Caesalpinioideae) and the genus *Caesalpinia* sensu lato were recently reclassified resulting in a reduction in the number of species in *Caesalpinia* sensu stricto to nine. Of the genera now accepted as distinct from *Caesalpinia*, the pantropical genus *Guilandina* lacks any recent global taxonomic account and estimates of the number of species in the genus range from seven to as many as 20. Seven putative species are currently known only under *Caesalpinia* binomials and have no published combination in *Guilandina*. This inconvenience is rectified here. Putting these binomials into the correct genus will ensure that they are not overlooked in any future revision of *Guilandina*, a genus of taxonomic complexity and including some nomenclatural conundrums.

Key Words. Fabaceae, nomenclature.

Introduction

Up to the turn of the last millennium, the genus *Caesalpinia*, as traditionally circumscribed, comprised between 120 and 130 species and included 25 generic names in synonymy (Lewis 1998). A series of publications (Lewis & Schrire 1995; Ulibarri 1996, 2008; Simpson & Miao 1997; Lewis 1998, 2005; Simpson 1998, 1999; Bruneau *et al.* 2001, 2008; Herendeen *et al.* 2003; Simpson & Lewis 2003; Simpson *et al.* 2003; Simpson & Ulibarri 2006; Manzanilla & Bruneau 2012; Gagnon *et al.* 2013, 2015; Clark & Gagnon 2015; Clark 2016) culminating in *A New Generic System for the Pantropical Caesalpinia Group* (Gagnon *et al.* 2016) have successively revealed that several names synonymised under *Caesalpinia* sensu lato needed to be reinstated as distinct genera, and that other unique species, or small clusters of taxa, required new generic status.

The genus *Guilandina* L. was first described by Linnaeus (1753) but subsequently most studies have considered it to be synonymous with or a subgenus of *Caesalpinia*, although some authors have continued to consider it to be a distinct genus (e.g., Britton & Rose 1930; Lewis 2005), while others have implied that it should be reinstated at separate genus rank (e.g., Verdcourt 1979). Chemical analyses (Kite & Lewis 1994), a unique suite of morphological characters (including paripinnate leaves armed with recurved prickles, unisexual flowers on separate male and female racemes, sepals valvate in bud, inflated pods usually clothed in robust trichomes, and ovoid to globular, smooth seeds with parallel fracture lines concentric with a small apical hilum; Gagnon *et al.* 2016) together with molecular studies (Gagnon *et al.* 2013, 2016), all support recognition of *Guilandina* as distinct from *Caesalpinia* sensu stricto. By morphological comparison with *Guilandina*, *Caesalpinia* s.s. species are shrubs or small trees (vs lianas or

scrambling shrubs), have bisexual (vs unisexual) flowers, sepals imbricate (vs valvate) in bud, petals barely extending beyond the sepals (vs evidently longer), laterally compressed, unarmed pods (vs inflated pods usually armed with robust spinescent bristles) and compressed (vs globose) seeds.

Guilandina has a pantropical distribution, occurring as far north as Japan and as far south as South Africa. The hard, marble-shaped seeds can drift on ocean currents and arrive on island beaches and continental shores. Ten species (or more precisely binomials) occur in the Caribbean, nine are endemic to various island groups in the region (Acevedo-Rodríguez & Strong 2012). Pending a global revision of the genus, the exact total number of species remains uncertain. Here, added to the list of 19 names included under *Guilandina* by Gagnon *et al.* (2016) is *Caesalpinia robusta* (C.T.White) Pedley (Pedley 1977), endemic to Queensland, Australia. This is one of seven *Caesalpinia* names which belong in *Guilandina* but have yet to receive a published combination in that genus. To ensure that these names are not overlooked in any future revision of *Guilandina*, new combinations for these seven names are presented below, and it is likely that most, if not all, of these will retain their species status after scrutiny.

New combinations

Herbarium acronyms follow *Index Herbariorum* (Thiers n.d. continuously updated).

***Guilandina delphinensis* (Du Puy & R.Rabev.)
G.P.Lewis, comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77204841-1>

Caesalpinia delphinensis Du Puy & R.Rabev., in Du Puy *et al.*, *The Leguminosae of Madagascar*: 47 (2002). Type: SE Madagascar, Fort Dauphin [Taolañaro], *Alluand* 3 (holotype: P).

***Guilandina homblei* (R.Wilczek) G.P.Lewis, comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77204842-1>

Caesalpinia homblei R. Wilczek, *Bull. Jard. Bot. État. Bruxelles* 21: 85 (1951). Type: Democratic Republic of the Congo [Belgian Congo]: Upper Katanga Distr. [Haut-Katanga], *Hombé* 88 (holotype: BR).

***Guilandina minax* (Hance) G.P.Lewis, comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77204843-1>

Caesalpinia minax Hance, *J. Bot.* 22: 365 (1884). Type: China, “juxta oppidum Shiu-hing, secus fl. North River, prov. Cantonensis, detexit rev. R. H. Graves (Herb. propr. n. 22284)”, type not traced, n.v.

Caesalpinia morsei Dunn, *J. Linn. Soc., Bot.* 35: 492 (1903). Type: China, Kwangsi, Lungchow, *H. B. Morse* 303 (lectotype: K!, barcode: K00544235, here designated, flowering specimen; isolectotype: a second sheet of *Morse* 303 at K!, barcode: K000789324, in flower and immature fruit, but lacking locality data); Other original material: China, Yunnan, Szemao, north-west mountains, *A. Henry* 10739 (K!, barcode: K000789325); Vietnam, Tonkin, *B. Balansa* 2145 (K!, barcode: K000789321).

***Guilandina murifructa* (Gillis & Proctor) G.P.Lewis, comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77204844-1>

Caesalpinia murifructa Gillis & Proctor, *J. Arnold Arbor.* 55: 427 (1974). Type: Bahamas: Great Inagua Island, Matthew Town, *Proctor & Gillis* 33371 (holotype: A, photo K!, isotypes: IJ, BM).

***Guilandina robusta* (C.T.White) G.P.Lewis, comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77204845-1>

Caesalpinia robusta (C.T.White) Pedley, *Austrobaileya* 1: 34 (1977).

Mezoneuron robustum C.T.White, *Contr. Arnold Arbor.* 4: 43 (1933). Type: Australia, Queensland, Atherton Tableland, Boonjie, *S. F. Kajewski* 1206 (holotype: BRI; isotype: K!, barcode: K000264159).

***Guilandina solomonensis* (Hattink) G.P.Lewis, comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77204846-1>

Caesalpinia solomonensis Hattink, *Reinwardtia* 9 (1): 54 (1974). Type: E. Malesia, Solomon Is., SE New Georgia, Viru R., *L. Maenu'u* BSIP 6068 (holotype: L; isotypes: HON, K!, barcode: K000789388, LAE, SING, US).

***Guilandina volkensii* (Harms) G.P.Lewis, comb. nov.**

<http://www.ipni.org/urn:lsid:ipni.org:names:77204847-1>

Caesalpinia volkensii Harms, *Bot. Jahrb. Syst.* 45 (2): 304 (1910). Type: Tanzania, Lushoto Distr., Kwa Mshusa, Handei, *C. Holst* 9123 (lectotype: K!, barcode: K000544234, here designated; isolectotype: B †); Other original material: Moshi Distr., Marangu, *G. Volkens* 1454 (B†); Moshi, *Merker* 509 (B†, BM, drawing); Amani, Monga, *Braun* 1549 (B†, EA).

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