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Subgeneric delimitation of the plant genus *Phyllanthus* (*Phyllanthaceae*)

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Key words

infrageneric taxonomy
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Abstract Over two centuries of taxonomic studies on the species rich genus *Phyllanthus* have culminated in a broad and complicated classification with many subgenera and (sub)sections. Past taxonomic work has only focused on local revisions, mostly because of the size of the genus. In this study we aim to summarize most of the taxonomic work in a list containing the infrageneric delimitations of *Phyllanthus*. This work will serve as a reference, placing most currently recognized species in subgenera and if possible, in sections for further study. Here we recognize 880 species of *Phyllanthus*, classified in 18 subgenera, 70 sections and 14 subsections. A few taxonomic changes are necessary to reconcile published phylogenetic data with the current classification. Subsections *Callidisci* and *Odontadenii* are raised to sectional rank, while section *Eleutherogynium* and section *Physoglochidion* are reduced to subsections and *P. oxycarpus* is transferred to the genus *Glochidion*. A provisional key for the subgeneric classification of *Phyllanthus* is provided.

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INTRODUCTION

With almost 900 species, the mostly pantropical *Phyllanthus* L. is the largest genus in the family *Phyllanthaceae* (Govaerts et al. 2000). When considering all vegetative and reproductive organs, *Phyllanthus* is one of the most diverse groups in the Angiosperms (Webster 1956). This diversity is exemplified by the multitude of subgenera and (sub)sections defined within the genus. In the past, most of these subgenera and some sections were treated at generic rank (De Jussieu 1824, Baillon 1858), but were eventually all subsumed in a broad genus concept of *Phyllanthus* with numerous sections (Müller 1863, 1865, 1866). The last major changes to this concept at genus level have been the segregation of the genera *Glochidion* J.R.Forst. & G.Forst. (Kurz 1873) and *Margaritaria* L.f. (Webster 1957, 1979). The infrageneric structure of *Phyllanthus* was improved with the creation of several subgenera in a monographic work on the *Phyllanthus* species of the West Indies by Webster (1956, 1957, 1958). Subsequent revisionary work followed Webster's outline of subgenera and sections to illustrate the relations among groups within *Phyllanthus* (e.g., Bancelhon 1971, Webster & Airy Shaw 1971, Punt 1972, Airy Shaw 1975, 1980a, Brunel 1987, Rossignol et al. 1987, Santiago et al. 2006, Ralimanana & Hoffmann 2011, 2014, Ralimanana et al. 2013). Regional work on *Phyllanthus* (Merrill 1920, 1926, Pax & Hoffmann 1922, Beille 1925, 1927, Croizat 1942, 1943, Leandri 1958, Airy Shaw 1963, 1969, 1972, 1975, 1976, 1980a, b, 1982, Webster 1986, Chantaranothai 2005, Silva & Sales 2006, 2008) and morphological studies (Punt 1967, 1972, 1980, 1986, Punt & Rentrop 1973, Lobreau-Callen et al. 1988, Stuppy 1995, Chen

et al. 2009, Jangid & Gupta 2016, Wu et al. 2016) extended the infrageneric groupings to create a working classification for most *Phyllanthus* species.

However, recent phylogenetic studies showed that several subgenera were polyphyletic and even *Phyllanthus* itself proved to be paraphyletic (Kathriarachchi et al. 2006). In the following taxonomic revisions some of the polyphyletic subgenera were divided in new monophyletic subgenera (Ralimanana & Hoffmann 2011, 2014, Ralimanana et al. 2013), but discussion remained whether *Breynia* J.R.Forst. & G.Forst., *Glochidion* and *Sauropus* Blume should be subsumed into *Phyllanthus*. One solution is to subsume these genera in *Phyllanthus* to create a giant genus (Hoffmann et al. 2006, followed by Chakrabarty & Balakrishnan 2009, Wagner & Lorence 2011, Kurosawa 2016) and the other is to split *Phyllanthus* into smaller, morphologically recognizable, monophyletic groups (Pruesapan et al. 2012, Van Welzen et al. 2014, Telford et al. 2016, followed by Chakrabarty & Balakrishnan 2012). A more exhaustive phylogenetic study with higher sampling presented the case to maintain *Breynia* (including *Sauropus*), *Synostemon* F.Muell. and *Glochidion* as monophyletic and morphologically recognizable genera (Pruesapan et al. 2008, 2012, Van Welzen et al. 2014), still leaving the rest of *Phyllanthus* in its current state, a paraphyletic genus. If *Phyllanthus* would be split, a larger phylogenetic study, which includes all subgenera and the majority of sections, is needed to prove which groups are monophyletic.

Phyllanthus is currently classified in about 18 subgenera with numerous sections by past revision work. The most notable revisions of *Phyllanthus* are those for the neotropics (Webster 2001b, 2002a, b, 2004), Asia (Airy Shaw 1960, 1975, 1977, 1980a, 1981, Webster & Airy Shaw 1971, McPherson & Schmid 1991) and tropical Africa and Madagascar (Leandri 1958, Radcliffe-Smith 1974, 1996, Brunel & Roux 1975, 1976, 1977, 1981, 1984, 1985, Brunel 1987, Ralimanana & Hoffmann 2011, 2014, Ralimanana et al. 2013). There is some discussion regarding the validity as publication of Brunel's thesis (1987). The thesis covers a large amount of work on the *Phyllanthus* species of Madagascar and Africa with many notes on subgenera and

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sections. Because it is a thesis, this work was treated as not validly published based on article 32 of the International Code of Botanical Nomenclature (McNeill et al. 2012) by Kathriarachchi et al. (2006). However, the thesis contains the name of a printing company and numbered copies have been distributed to several institutes, which is all in agreement with article 30.8, making it a validly published book. As such it is used in this publication. Several of the decisions in Brunel's thesis were accepted in recent revisions of *Phyllanthus* in Madagascar (Ralimanana & Hoffmann 2011, 2014, Ralimanana et al. 2013).

The checklist by Govaerts et al. (2000) is often used to estimate the number of species within *Phyllanthus*, but it does not contain an infrageneric division. An attempted synopsis of all the subgenera and sections was published by Kathriarachchi et al. (2006). However, only the species included in the phylogenetic study were mentioned and a complete taxonomic treatment of the genus is still wanting. We hope that this list may serve as a framework for future studies. If *Phyllanthus* should ever be split into various genera, this list can serve as a recommendation for the species to include.

METHODS

In this study, we record 880 species, which are divided into 18 subgenera, 70 sections and 14 subsections (Appendix 1). Govaerts et al. (2000) recorded 833 species and the difference is mainly caused by the acceptance of Brunel (1987) and the addition of newly published species after their work. Based on a combination of morphological descriptions, classifications in literature and published phylogenetic work (e.g., Samuel et al. 2005, Kathriarachchi et al. 2006, Pruesapan et al. 2008, 2012, Manissorn et al. 2010, Challen et al. 2011, Luo et al. 2011), we propose the current list for the subgeneric classification of *Phyllanthus*, in which we assign as many species as possible to subgenera and sections. Some placements are adopted from and are now validly published from Webster's unfinished manuscripts, which are available online (http://herbarium.ucdavis.edu/webster_manuscripts.html). For those species that were unplaced, we studied the distribution and morphological descriptions (mainly branching type and the morphology of the staminate flower), which allowed us to place them at least in subgenera. A synoptic key is provided by which most species can be placed in the appropriate subgenera and/or sections. However, sections and the species included have often not been the subject of recent taxonomic revisions or are based solely on palynological differences. This complicates the creation of a key that can accommodate all species of *Phyllanthus*. The most important literature is cited after each species, which either provides a direct placement or a morphological description. Hybrid species and infraspecific taxa were not included. Some combinations, partly required by changes in level, are published here, but only to solve nomenclatural anomalies (e.g., subsections that cannot be classified anymore in a section due to splitting of sections and changes in the taxonomic level of the taxa).

TAXONOMY LISTING OF PHYLLANTHUS

We could assign 837 of the 880 species to a particular subgenus or (sub)section (Appendix 2), with some only listed as formerly in subgenus *Isocladus* or the synonymized section *Paraphyllanthus* Müll.Arg. One species of subgenus *Isocladus* G.L.Webster, *P. maderaspatensis* L., was designated as the lectotype of the whole genus *Phyllanthus* by Ralimanana & Hoffmann (2011). However, *Phyllanthus niruri* L. was already designated as the lectotype of the genus *Phyllanthus* by Small (1913) and later independently confirmed by Webster

(1956). Unfortunately, the remaining 43 species could not be assigned due to either incomplete descriptions, destroyed type specimens, or lack of collections. We have opted to place these species *incertae sedis* as their true relations need further detailed study.

The classification of several subgenera from Webster's original monographs (1956, 1957, 1958) has changed drastically. Subsequent palynological (e.g., Punt 1967, 1972, 1973, 1980, 1986, Lobreau-Callen et al. 1988) and phylogenetic studies (Kathriarachchi et al. 2006) have led to many new combinations and necessary transfers, some of which are discussed below.

Subgenus *Isocladus* was created to include about 60 species with non-phyllanthoid branching (leaves on main stem not reduced to scales and lateral axes not deciduous) and consisted of originally four sections, *Loxopodium* G.L.Webster, *Anisobolium* Müll.Arg., *Macraea* (Wight) Baill. and *Paraphyllanthus* Müll.Arg. (Webster 1956). However, subsequent studies (Brunel 1987, Webster 2002b) have reduced the size of this subgenus considerably. The sections *Macraea* and *Ceramanthus* (Hassk.) Baill. (the latter with section *Anisobolium* merged with it; Punt 1972) were raised to subgeneric level by Brunel (1987). Section *Loxopodium* has been transferred to subgenus *Phyllanthus* on the basis of pollen characteristics and section *Paraphyllanthus* was placed in the synonymy of section *Isocladus* (Brunel 1987). Webster did create a new section in subgenus *Isocladus*, *Antipodanthus* G.L.Webster, which contained several neotropical and Australian species (Webster 2002a), but the Australian species appear to be better placed in section *Lysiandra* (F.Muell.) G.L.Webster of subgenus *Phyllanthus* (Bouman, unpubl. data). Phylogenetic studies have confirmed the distinctness of subgenera *Macraea* and *Ceramanthus* from *Loxopodium* (Kathriarachchi et al. 2006). For section *Antipodanthus*, only one Australian species, *P. calycinus* Labill., and no neotropical species were included in the phylogeny by Kathriarachchi et al. (2006), in which the group appeared to be distinct from subgenus *Isocladus*. However, to elucidate the relationship between sections *Antipodanthus* and *Lysiandra* it is necessary to include more species in a phylogenetic study. Therefore, section *Antipodanthus* is here maintained with no formal subgeneric placement. Ralimanana & Hoffmann (2011) made the remainder of subgenus *Isocladus* (including former section *Paraphyllanthus*) monotypic, to only include *P. maderaspatensis* L., leaving some species unplaced and in need of revision.

All small shrubs and herbaceous *Phyllanthus* species were originally placed in subgenus *Phyllanthus*. The subgenus was shown to be polyphyletic (Kathriarachchi et al. 2006) and several subgenera are now recognized separately: subgenus *Swartziani* (G.L.Webster) Ralim. & Petra Hoffm., containing the neotropical herbaceous species of subsection *Swartziani*; subgenus *Afroswartziani* Ralim. & Petra Hoffm., comprising the palaeotropical species of former subsection *Swartziani* (largely comparable with section *Anthophyllus* Jean F.Brunel (Brunel 1987)), subgenus *Tenellanthus* Jean F.Brunel and subgenus *Phyllanthus*. Subgenus *Phyllanthus* now only contains sections *Almadenses* G.L.Webster, *Choretropsis* Müll.Arg., *Loxopodium* G.L.Webster, *Lysiandra*, *Phyllanthus* and *Salvinia-opsis* Holm-Niels. ex Jean F.Brunel. Section *Praephyllanthus* Jean F.Brunel was found to be closely related to the species of subgenus *Afroswartziani* (Kathriarachchi et al. 2006) and is transferred here to subgenus *Afroswartziani*. The type of section *Anthophyllus* was placed in subgenus *Swartziani*, but all other palaeotropical species, including subsections *Callidisci* Jean F.Brunel, *Fluitantoides* Jean F.Brunel and *Odontadenii* Jean F.Brunel & Jacq.Roux (here raised to section level) are better placed in subgenus *Afroswartziani*. These two subgenera are closely related (see Kathriarachchi et al. 2006) and mostly

distinguished by the inflorescences (unisexual in *Afroswartziani*, bisexual in *Swartziani*) (Ralimanana et al. 2013). The species in sections *Odontadenii*, *Fluitantoides* and *Callidisci* have unisexual inflorescences and are tentatively placed in subgenus *Afroswartziani*.

Subgenus *Kirganelia* (A.Juss.) Kurz is polyphyletic (Kathirarachchi et al. 2006) and currently consists of eight sections: *Anisonema* (A.Juss.) Griseb., *Brazzeani* Jean F.Brunel & Roux, *Chorisandra* (Wight) Müll.Arg., *Cicca* (L.) Müll.Arg., *Hemicicca* (Baill.) Müll.Arg., *Omphacodopsis* Jean F.Brunel, *Polyanthi* Jean F.Brunel and *Pseudomenarda* Müll.Arg. As noted by Ralimanana & Hoffmann (2011), the type species for subgenus *Kirganelia* is *P. casticum* P.Willemet, but *P. reticulatus* Poir. is the type species for the type section *Anisonema*. Some African and Madagascan species, originally attributed to this subgenus, were shown to be phylogenetically separate and placed in subgenus *Anesonemoides* (Jean F.Brunel) Ralim. & Petra Hoffm. (Ralimanana & Hoffmann 2014). Subgenus *Anesonemoides* differs from subgenus *Kirganelia* in fruit morphology (dehiscent in subgenus *Anesonemoides* vs baccate in subgenus *Kirganelia*), a lack of brachyblasts in some species of subgenus *Anesonemoides*, pollen with colpi bordered by parallel muri and the androecium (free or centrally fused stamens in subgenus *Anesonemoides* vs two sets of stamens (one fused, one free) in subgenus *Kirganelia*) (Ralimanana & Hoffmann 2014). Subgenus *Kirganelia* sections *Cicca* and *Chorisandra* were also shown to be in a clade separate from section *Anisonema* (Kathirarachchi et al. 2006), but no nomenclatural changes have yet been published. The sections *Omphacodopsis*, *Polyanthi* and *Brazzeani* have not yet been included in any phylogenetic study. Section *Brazzeani* was originally placed in subgenus *Conami* (Aubl.) G.L.Webster based on pollen characters (Brunel & Roux 1977), but these seem to have arisen through convergence and *Brazzeani* is better placed in subgenus *Kirganelia* (Meeuwis & Punt 1983). The stamen in the staminate flowers of section *Brazzeanii* are arranged in two sets, similarly to subgenus *Kirganelia* section *Anisonema*. Though still used in Kathirarachchi et al. (2006) and Ralimanana & Hoffmann (2011), section *Floribundi* Pax & K.Hoffm. was reorganized by Brunel (1987) into two new sections *Polyanthi* and *Omphacodopsis*, while the type species of section *Floribundi* (*P. muellerianus* (Kuntze) Exell) was transferred to section *Anisonema*, and the two sections were combined. Sections *Polyanthi* and *Omphacodopsis*, though distinguished by pollen and fruit (in)dehiscence by Brunel (1987), can possibly be combined (see Breteler 2012). The staminate flowers of these sections are similar to species in subgenus *Anesonemoides*, but the indehiscent fruit is more like subgenus *Kirganelia* section *Anisonema* or *Cicca*.

Subgenus *Emblica*, sections *Microglochidion* (Müll.Arg.) Müll. Arg., *Pityrocladus* G.L.Webster (subg. *Emblica*) and subgenus *Cyclanthera* G.L.Webster were not yet included in any phylogenetic research and their relationships within *Phyllanthus* are not well known. Webster chose to include section *Microglochidion* and *Pityrocladus* in the Asiatic subgenus *Emblica* on account of their similarity in pollen (Webster 2002b, Webster & Carpenter 2002, 2008). A possible relationship between subgenus *Cyclanthera* and subgenus *Xylophylla* was suggested by Brunel (1987), but not incorporated in the latest revision by Webster (2002b).

Kathirarachchi et al. (2006) listed several sections as 'not assigned to subgenus', which are either already placed by other authors, placed here, or treated as synonyms. Sections *Bivia* Jean F.Brunel & Jacq.Roux, *Ceramanthus* (Hassk.) Baill. and *Cluytopsis* Müll.Arg. are all placed in subgenus *Ceramanthus* (Punt 1972, Brunel & Roux 1985, Brunel 1987). Section *Nymphanthus* (Lour.) Müll.Arg. has often been treated in subgenus

Phyllanthus (Li 1987a), but is placed here in subgenus *Eriococcus* (Hassk.) Croizat & Metcalf based on its pollen morphology (see Webster 1958, Brunel 1987, Webster & Carpenter 2008). Species of subgenus *Eriococcus* occur in Asia and Australia and are characterized by the staminate flower with four sepals and two or four stamens. Section *Physoglochidion* Müll.Arg. is placed here as a subsection under section *Gomphidium* Baill. based on the treatment of McPherson & Schmid (1991), which is discussed below. Subgenus *Gomphidium* is a diverse group, with its main centres of diversity in New Guinea and New Caledonia. The monotypic section *Hemicicca* Baill. is here placed in subgenus *Kirganelia* based on its similarity in pollen (see Brunel 1987) and baccate fruits. The remaining previously un-assigned sections are here treated as synonyms: section *Heteroglochidion* Müll.Arg. is a synonym of subsection *Eleutherogynium* (Müll.Arg.) G.L.Webster ex R.W.Bouman (see below for new combinations based on Webster 1986); sections *Meiandrogluchidion* S.Moore and *Polyandrogluchidion* S.Moore are synonyms of section *Adenoglochidion* (Müll.Arg.) Müll. Arg. (McPherson & Schmid 1991); section *Pentaglochidion* Müll.Arg. is a homeotypic synonym of section *Leptonema* Baill. (see Baillon 1862, Müller 1863). The type species of section *Hedycarpidium* Müll.Arg. has been re-identified as *Baccaurea javanica* (Blume) Müll.Arg. (see Müller 1866, Haegens 2000) and even though the name is sometimes still used (Thin 2007), it is invalid and the other species assigned to this section need to be re-evaluated. A small number of *Phyllanthus* species from Vietnam was placed in subgenus *Eriococcus* subsection *Integra* Thin (see Thin 2007), which is not included in our list. No description was provided and it is quite possibly a synonym of subgenus *Eriococcus* subsection *Spiciferens* Jean F.Brunel as they include some of the same species, but we were not able to see the original publication.

Some nomenclatural issues are still present within *Phyllanthus*, particularly when looking at the names of subdivisions of certain subgenera. Recommendation 22A of the International Code of Nomenclature (McNeill et al. 2012) states that if there are no problems any subdivision of a subgenus that bears the type, should be given the same epithet. However, in a few subgenera, this is currently not the case (Webster 1960). The type section of subgenus *Conami* is section *Nothoclema* G.L.Webster and the type section of subgenus *Kirganelia* is *Anisonema*. In subgenus *Kirganelia* section *Cicca*, the type species, *P. acidus* (L.) Skeels, is in subsection *Cheramela* Kuntze (Webster 2001b).

TAXONOMIC CHANGES

***Phyllanthus* L. subgenus *Afroswartziani* Ralim. & Petra Hoffm. section *Callidisci* (Jean F.Brunel) R.W.Bouman, stat. nov.**

Phyllanthus L. subgenus *Afroswartziani* Ralim. & Petra Hoffm. section *Callidisci* (Jean F.Brunel) R.W.Bouman. — *Phyllanthus* L. subsect. *Callidisci* Jean F.Brunel, Gen. *Phyllanthus* Afr. Intertrop. Madag. (1987) 334. — Type: *Phyllanthus callidiscus* Jean F.Brunel.

Note — Species of section *Callidisci* were originally placed by Brunel (1987) in subgenus *Phyllanthus* section *Anthophyllus* together with other palaeotropical subsections and recognized by the fringed disc in the pistillate flowers. As this group has recently been shown to be polyphyletic (Kathirarachchi et al. 2006) and after revision were split into a few new subgenera (Ralimanana et al. 2013), it seems necessary also to transfer Brunel's subsections. All other palaeotropical species of subgenus *Phyllanthus* were placed in subgenus *Afroswartziani* and were distinguished from the neotropical subgenus *Swartziani* by their unisexual inflorescences (Ralimanana et al. 2013). This is in agreement with species of subsection *Callidisci*, which is transferred here and raised to sectional level to accommodate the separation from section *Anthophyllus*.

Phyllanthus L. subgenus **Afroswartziani** Ralim. & Petra Hoffm. section **Odontadenii** (Jean F.Brunel & Jacq.Roux) R.W.Bouman, *stat. nov.*

Phyllanthus L. subgenus *Afroswartziani* Ralim. & Petra Hoffm. section *Odontadenii* (Jean F.Brunel & Jacq.Roux) R.W.Bouman. — *Phyllanthus* L. subsect. *Odontadenii* Jean F.Brunel & Jacq.Roux, Willdenowia 11 (1981) 70; Jean F.Brunel, Gen. *Phyllanthus* Afr. Intertrop. Madag. (1987) 339. — Type: *Phyllanthus odontadenensis* Müll.Arg.

Note — Species in the palaeotropical section *Odontadenii* also have unisexual inflorescences and are therefore more suited to be placed in subgenus *Afroswartziani* than the neotropical subgenus *Swartziani*. The species are distinguished from other sections by their winged plagiotropic branchlets (Brunel & Roux 1981).

Phyllanthus L. subgenus **Gomphidium** (Baill.) G.L.Webster section **Adenoglochidion** (Müll.Arg.) Müll.Arg. subsection **Eleutherogynium** (Müll.Arg.) G.L.Webster ex R.W.Bouman, *stat. nov.*

Phyllanthus L. subgenus *Gomphidium* (Baill.) G.L.Webster section *Adenoglochidion* (Müll.Arg.) Müll.Arg. subsection *Eleutherogynium* (Müll.Arg.) G.L.Webster ex R.W.Bouman. — *Phyllanthus* L. sect. *Eleutherogynium* Müll.Arg., Linnaea 32 (1863) 4, 14. — Type: *Phyllanthus loranthoides* Baill. *Glochidion* J.R.Forst. & G.Forst. sect. *Chorizogynium* Müll.Arg. (1863) 58, 59. — Lectotype (designated by Webster 1986): *Phyllanthus macrochiron* Baill.

Phyllanthus L. sect. *Heteroglochidion* Müll.Arg. (1866) 319. — Type: *Phyllanthus baladensis* Baill.

Phyllanthus L. sect. *Scleroglochidion* Müll.Arg. (1866) 317. — Type: *Phyllanthus myrianthus* Müll.Arg.

Note — Section *Scleroglochidion* was previously placed in synonymy by Webster (1986) who expanded the description of *Eleutherogynium* to include also *Phyllanthus* species with 3 free filaments. Section *Heteroglochidion* was defined by Müller on its biseriate sepals, which is a common character for subgenus *Gomphidium*. All of these sections are characterized by a rudimentary to absent nectar disc (see Müller 1866). Lobreau-Callen et al. (1988) in a palynological study, showed that the pollen of these groups showed a continuous variation in pollen characters and were difficult to differentiate. The lack of distinguishing floral and vegetative characters and the overlap in palynological characters leads us to the decision to combine the above sections in one subsection *Eleutherogynium*, with as main character the absent nectar disc to distinguish it from other species within section *Adenoglochidion*.

Phyllanthus L. subgenus **Gomphidium** (Baill.) G.L.Webster section **Gomphidium** Baill. subsection **Physoglochidion** (Müll.Arg.) R.W.Bouman, *stat. nov.*

Phyllanthus L. subgenus *Gomphidium* (Baill.) G.L.Webster section *Gomphidium* Baill. subsection *Physoglochidion* (Müll.Arg.) R.W.Bouman. — *Glochidion* J.R.Forst. & G.Forst. sect. *Physoglochidion* Müll.Arg., Linnaea 32 (1863) 58. — *Phyllanthus* L. sect. *Physoglochidion* (Müll.Arg.) Müll.Arg., Prodr. 15, 2 (1866) 318. — Type: *Phyllanthus faguetii* Baill.

Phyllanthus L. sect. *Phyllocalyx* Baill. (1862) 236 (nom. illeg., non *Phyllocalyx* A.Rich., 1847). — *Glochidion* J.R.Forst. & G.Forst. sect. *Physoglochidion* Müll.Arg. (1863) 58, 71. — Lectotype (designated here by R.W.Bouman, but see Webster (2001) manuscript synopsis of *Gomphidium*): *Phyllanthus faguetii* Baill.

Note — *Phyllanthus* section *Physoglochidion* (Müll.Arg.) Müll.Arg. is characterized by 3 free stamens, 6 sepals in two whorls and a calyx that becomes saccate in fruit. Apart from the saccate calyx, these characters also occur in section *Gomphidium* and within section *Physoglochidion* and the saccate calyx shows a continuous variation between species (Lobreau-Callen et al. 1988). Since these groups can also not be distinguished on palynological data we opt to reduce section

Physoglochidion to a subsection level and place it with section *Gomphidium*.

Transfer of *Phyllanthus oxycarpus* to *Glochidion*:

Glochidion oxycarpum (Müll.Arg.) R.W.Bouman, *comb. nov.*

Phyllanthus oxycarpus Müll.Arg., Prodr. 15, 2 (1866) 1270. — *Diasperus oxycarpus* (Müll.Arg.) Kuntze (1891) 600. — Type: *Teijsmann s.n.* (holo GDC), Indonesia, Sumatra.

Note — In his treatment of the genus *Phyllanthus* for De Candolle, Müller (1866) reduced the genus *Glochidion* to a few sections within *Phyllanthus*. *Phyllanthus oxycarpus* Müll.Arg. was first described by Müller (1866) and placed in section *Euglochidion* Müll.Arg. as it closely resembled *P. subscandens* (Zoll. & Moritz) Müll.Arg. (a synonym of *G. zeylanicum* (Gaertn.) A.Juss.). Other species first published in section *Euglochidion* by Müller were all transferred to the genus by other authors (e.g., Boerlage 1900, Smith 1910), but we were unable to find a transfer for *G. oxycarpum*. The description lists no nectar disc, a 5- or 6-locular ovary with columnar style, which are all typical features for the genus *Glochidion* and therefore this species is transferred here.

KEY TO THE SUBGENERA AND (SUB)SECTIONS OF PHYLLANTHUS

A provisional key is here provided based on characters mentioned in the literature. A key for full identification purposes, using morphology only (not pollen) is difficult due to the absence of recent complete treatments for several groups and the fact that some characters have evolved multiple times within *Phyllanthus*. The key is not completely dichotomous (trichotomous questions are marked with *). Authors of the various subgenera, sections and subsections are listed in Appendix 1 and all species within a particular group are listed in Appendix 2.

1. Branching non-phyllanthoid (laminar leaves and flowers on all axes, branchlets not deciduous) 2
1. Branching phyllanthoid (leaves on main stem reduced to scales, cataphylls, laminar leaves and flowers on lateral axes, lateral branchlets deciduous) or sub-phyllanthoid (leaves at base of branchlets not reduced to scales (often in juveniles), lateral branchlets deciduous) 15
2. Aquatic herbs. — Americas Subgenus *Phyllanthus* section *Salviniaopsis*
2. Herbs, shrubs or trees, but not aquatic 3
3. Palm-like (monocaul) shrubs to trees; stigma petaloid. — South America . . Subgenus *Xylophylla* section *Asterandra*
3. Herbs, shrubs to small trees, rarely climbers; stigmas variously bifid to multifid, not petaloid 4
4. Leaves on all axes spirally arranged 5
4. Leaves on all axes distichous 9
5. Sepals 4 in staminate flowers, 6 in pistillate flowers; staminate disc entire, H-shaped around filaments; stamens 2, filaments free. — North America Subgenus *Swartziani* section *Reverchonina*
5. Sepals 5 or 6 in both sexes; staminate disc segmented; stamens 3 or 5, filaments free or connate 6
6. Sepals 5; stamens 5, filaments free. — Africa Subgenus *Kirganelia* section *Pseudomenarda*
6. Sepals 5 or 6; stamens usually 3, filaments connate (free in *P. rosmarinifolius* Müll.Arg.) 7
7. Inflorescences axillary cymes with 1–4 flowers; pistillate disc consisting of free glands. — Africa and Asia, introduced in North America Subgenus *Isocladius*

7. Inflorescences axillary cymules or thyrses; pistillate disc entire 8
8. Inflorescences axillary glomerules; pollen 3- or 4-colporate, subglobose. — South America and Australia? Section *Antipodanthus* incertae sedis
8. Inflorescences axillary glomerules or thyrses (sometimes paniculate at end of branch); pollen areolate. — Central and South America Subgenus *Xylophylla* section *Elutanthos*
9. Staminate disc segmented, pistillate disc entire or segmented; filaments free 10
9. Staminate disc segmented, or entire and urceolate, pistillate disc often massive and urceolate; filaments connate. Pollen with macroreticulate exine 12 (Subgenus *Ceramanthus*)
10. Anthers dehiscing with horizontal slits; pollen 4-colporate. — Americas Subgenus *Phyllanthus* section *Loxopodium*
10. Anthers often deflexed, but dehiscing with vertical slits; pollen clypeate or perisyncolporate 11
11. Leaves distichous; pollen clypeate; seeds verrucate. — Africa, Asia, Australia and Pacific... Subgenus *Macraea*
11. Leaves spiral at basal nodes, distichous at upper nodes; pollen grains perisyncolporate with median pores, colpi bordered by parallel muri; seeds smooth or striate. — Madagascar Subgenus *Betsileani*
12. Staminate flowers with sepals 4 (6 in pistillate ones); staminate disc consisting of 4 massive segments; stamens 2, filaments connate and thecae on an enlarged connective. Pollen stephanoporate. — Africa Subgenus *Ceramanthus* section *Bivia*
12. Sepals 6 in both sexes; staminate disc entire or 6 segments; stamens 3 with connate filaments, thecae not on an enlarged connective 13
13. Staminate disc entire and cup-shaped. — Asia Subgenus *Ceramanthus* section *Ceramanthus*
13. Staminate disc segmented or only slightly fused into a ring 14
14. Sepals in two dimorphic whorls; staminate disc segmented; pollen peribrevicolporate. — Africa and Asia Subgenus *Ceramanthus* section *Anisolobium*
14. Sepals in two equal whorls; staminate disc segmented to slightly fused into a ring; pollen pantoporate. — Asia... Subgenus *Ceramanthus* section *Cluytopsis*
15. Branching sub-phyllanthoid 16
15. Branching phyllanthoid (sometimes sub-phyllanthoid in very young plants, check mature plants) 20
16. Branchlets short, with only 5–10 leaves (Webster 2001b); staminate disc entire. — South and Central America... Subgenus *Xylophylla* section *Brachycladus*
16. Branchlet length variable, usually bearing more than 10 leaves; staminate disc segmented 17
17. Anther connective not enlarged; fruit an indehiscent capsule; seeds smooth with fleshy sarcotesta. — South America and West Indies Subgenus *Conami* section *Hylaeanthus*
17. Anther connective variable, often enlarged; fruit a dehiscent capsule; seeds ornamented, without a fleshy sarcotesta 18
18. Filaments connate, stamens mostly 3 26 (subgenus *Afroswartziani*)
18. Filaments free (filaments connate in *P. allemii* G.L. Webster and *P. fastigiatus* Mart ex Müll.Arg., but then only 2 stamens) 19
19. Anther connective often enlarged, thecae not appearing as stipitate; seeds scalariform with slight transverse striations or smooth. — Australia and Central America (?) Subgenus *Phyllanthus* section *Lysiandra*
19. Anther connective variable, sometimes deeply emarginate with the two thecae appearing to be stipitate; seeds striate or linearly verrucate. — South America Subgenus *Phyllanthus* section *Phyllanthus* subsection *Clausseniani*
20. Herbs or subshrubs 21
20. Shrubs to trees, rarely climbers 36
21. Herbs; each branchlet bearing just one pair of (sub)opposite leaves and terminating in a raceme; anther connective enlarged. — South America Subgenus *Phyllanthus* section *Almadanses*
21. Herbs or subshrubs; branchlet with more than 2 alternate leaves and flowers in leaf axils; anther connective (not) enlarged 22
22. Flowers 5-merous; stamens 5, filaments free (except 3 stamens in *P. cocumbiensis* Jean F. Brunel). Pollen subglobose, 3- or 4-colporate. — Pantropical, but origin Africa 23 (Subgenus *Tenellanthus*)
22. Flowers 5- or 6-merous; stamens 2 or 3, filaments free or connate 24
- 23*. Shrubs or hemicryptophytes; stamens 5, filaments basally united; pollen 3-colporate, with macroreticulate exine. Seeds with fine punctuation. — Africa Subgenus *Tenellanthus* section *Loandani*
- 23*. Herbs; stamens 5 (3 in *P. cocumbiensis*), filaments connate or free; pollen 3-colporate, with tectate, microperforate exine. — Africa Subgenus *Tenellanthus* section *Pentandra*
- 23*. Herbs or subshrubs; stamens 5, filaments completely free; pollen 4-colporate with sponge-like exine. — Pantropical, but origin Africa Subgenus *Tenellanthus* section *Tenellanthus*
24. Inflorescences unisexual 25
24. Inflorescences bisexual 35
25. Cataphyllary stipules (unilaterally) auriculate 26
25. Cataphyllary stipules not auriculate 32
26. Leaf base symmetric; plagiotropic branches carinate (winged) (Brunel & Roux 1981). Pollen exine tectate; seeds with longitudinal striae or smooth. — Africa Subgenus *Afroswartziani* section *Odontadenii*
26. Leaf base asymmetric; plagiotropic branches not carinate 27
27. Pistillate disc entire with delicate fringes. — Africa Subgenus *Afroswartziani* section *Callidisci*
27. Pistillate disc entire, but not fringed 28
28. Sepals 5 in staminate flowers 29
28. Sepals 6 in staminate flowers 30
29. Cataphyllary stipules usually black and indurate; stamen 2 or 3, filaments partially or wholly connate, anthers sometimes deeply emarginate, dehiscing mostly horizontal; seeds longitudinally striate or banded, possibly with transverse striae. Pollen 3-colporate. — West Indies... Subgenus *Phyllanthus* section *Phyllanthus* subsection *Pentaphyllus*
29. Cataphyllary stipules thin and membranous, not indurate or black; stamen 3, filaments connate, anthers not emarginate, dehiscing horizontally to vertically; seeds longitudinally striate 30

30. Pistillate inflorescences on proximal position and staminate inflorescences on distal position of plagiotropic branchlets; seeds transversely striate. Ovary often covered with tubercles. — Pantropical, but origin Asia Subgenus *Emblica* section *Urinaria*
30. Pistillate inflorescences on distal position and staminate inflorescences on proximal position of plagiotropic branchlets; seeds longitudinally striate 31 (Subgenus *Afroswartziani*)
- 31*. Pollen 3- or 4-colporate, exine bireticulate. — Africa Subgenus *Afroswartziani* section *Praephyllanthus*
- 31*. Pollen 3-sulcate, exine macroreticulate. Often found in water. — Africa Subgenus *Afroswartziani* section *Fluitantoides*
- 31*. Pollen perihexabreviusulcate, exine macro-rugulose (Brunel 1987). Ovary on gynophore. — Africa Subgenus *Afroswartziani* section *Microdendron*
32. Branchlets and flowers not purplish; stamens 3, filaments mostly free or united to 2/3 of length; pollen 4-colporate, exine (hetero-)reticulate; pistillate sepals 5; pistillate disc entire; stigmas free, bifid, tips sometimes subcapitate. 33
32. Branchlets and flowers often purplish; stamens 2 or 3, filaments connate; pollen pantoporate, exine shields elongated or if round with only 1 pila; pistillate sepals 6; pistillate disc dissected or lobed; stigmas free or connate, bifid to emarginate, tips not capitate 34 (Subgenus *Cyclanthera*)
33. Anther connective not enlarged, thecae not stipitate; style branches sub-capitate; seeds verrucate. — South America, pantropically invasive . Subgenus *Phyllanthus* section *Phyllanthus* subsection *Niruri*
33. Anther connective variable, deeply emarginate with the two thecae appearing stipitate; style branches not capitate; seeds striate or linearly verrucate. — South America. Subgenus *Phyllanthus* section *Phyllanthus* subsection *Clausseniani*
34. Branchlets unramified, rooting at nodes; leaves crisply succulent; stamens 2, filaments free; pollen shields elongated (banded) (Webster & Carpenter 2002). — West Indies Subgenus *Cyclanthera* section *Callitrichoides*
34. Branchlets often with 1 or 2 lateral branches (bipinnatifid), not rooting at nodes; leaves not succulent; stamens 3, filaments completely connate into a circular synandrium; pollen shields isodiametric, each with a central pila surrounded by a murus (Webster & Carpenter 2002). — West Indies Subgenus *Cyclanthera* section *Cyclanthera*
35. Stamens 3, filaments free, anthers dehiscing horizontally; pistillate disc dissected; pollen grains brevicolporate and diorate or porate, exine pilate; seeds verruculose. — South America Subgenus *Conami* section *Apolepsis*
35. Stamens 2 or 3, filaments entirely or partially connate (free in *P. warnockii* G.L. Webster), anthers dehiscing oblique to horizontally (vertically in *P. warnockii*); pistillate disc entire; pollen 3-colporate, exine reticulate; seeds smooth or longitudinally striate. — North America, pantropical invasive Subgenus *Swartziani*
36. Leaves reduced and branchlets transformed to phylloclades (at least in older branches) 37
36. Leaves not reduced and branchlets not transformed to phylloclades 39
37. All stems rounded or flat; stipules unilaterally auriculate, stamens free or connate; pollen 3- or 4-colporate, exine reticulate 38 (Subgenus *Phyllanthus* section *Choretropsis*)
37. Lateral stems flattened with wide phylloclades, (bi-)pinnatifid; stipules not auriculate; stamens usually united at base; pollen clypeate, exine areolate. — West Indies Subgenus *Xylophylla* section *Xylophylla*
38. Main axes often flat, branching monopodial, leaves distichous; inflorescences usually bisexual, stamens 3 (rarely 4). — South America Subgenus *Phyllanthus* section *Choretropsis* subsection *Applanata*
38. Main axes rounded, branching monopodial or sympodial, leaves spiral; inflorescences mostly unisexual; stamens 2 or 3. — South America Subgenus *Phyllanthus* section *Choretropsis* subsection *Choretropsis*
39. Fruits indehiscent, berries or drupes 40
39. Fruits dehiscent, capsules (or absent) 48
40. Fruits drupaceous. 41
40. Fruits baccate. 43
41. Sepals 6; stamens 3, filaments connate. — Asia Subgenus *Emblica* section *Emblica*
41. Sepals 4–6; stamens 3 or 4 (rarely 2 or 5), filaments free 42 (Subgenus *Kirganelia* section *Cicca*)
42. Plants dioecious; disc absent in both sexes; staminodes absent; fruits spongy (Webster 1957). — West Indies and South America). Subgenus *Kirganelia* section *Cicca* subsection *Aporosella*
42. Plants monoecious; disc present in both sexes; sometimes staminodes present; fruits hard. — Commonly cultivated, origin possibly African? Subgenus *Kirganelia* section *Cicca* subsection *Cheramella*
43. Stamen 2, filaments connate; ovary 2-locular. — Africa, Madagascar, Mainland Asia Subgenus *Kirganelia* section *Chorisandra*
43. Stamen 3–6, filaments free or connate; ovary 3-locular 44
44. Branchlets subtended by reduced leaves, but not cataphylls, flowers on brachyblasts; stamens 3, filaments free or connate. — South America. Subgenus *Conami* section *Hylaeanthus*
44. Branchlets subtended by (spinescent) cataphylls, stamens 4–6, filaments free 45
45. Branchlets subtended by spinescent cataphylls; stamens 5 in 2 sets, one free and the other basally fused. — Africa and Asia Subgenus *Kirganelia* section *Anisonema*
45. Branchlets subtended by scale or stipule like cataphylls; stamens 4–6, filaments free. 46
46. Staminate inflorescences on separate (leafless) plagiotropic branches, pistillate flowers axillary. Seeds globular, smooth. — Africa Subgenus *Kirganelia* section *Polyanthi*
46. Inflorescences axillary, on all plagiotropic branches. 47
47. Stamens 5. — Asia Subgenus *Kirganelia* section *Hemicicca*
47. Stamens 6. — Africa, Madagascar, Mainland Asia. Subgenus *Kirganelia* section *Chorisandra*
48. Anthers apiculate 49
48. Anthers non-apiculate 56
49. Sepals often caudate-acuminate; filaments connate, staminate disc consisting of linear spatulate segments; pistillate disc entire. Pollen 4-colporate, exine reticulate. — Asia. 50 (Subgenus *Phyllanthodendron*)
49. Sepals often acuminate, but not caudate; filaments free or connate, staminate disc segmented, globular; pistillate disc entire (or absent). 54
50. Shoots not differentiated, all leaves similar in size, flowers on lateral shoots 51
50. Shoots differentiated into sterile leaf bearing shoots with larger leaves and fertile shoots with smaller leaves 53
51. Sepals 4 in staminate flowers; stamens 4. — Asia. Subgenus *Phyllanthodendron* section *Tetrandrum*
51. Sepals 5 or 6 in staminate flowers; stamens 3. 52

52. Shrubs; sepals 5 in staminate flowers. Fruit reminiscent of *Actephila* (Croizat 1942). — Asia Subgenus *Phyllanthodendron* section *Pseudoactephila*
52. Twining shrubs; Sepals 6 sepals in staminate flowers. — Asia Subgenus *Phyllanthodendron* section *Arachnodes*
53. Trunk often succulent and enlarged at base; leaf blades > 6 cm long. — Asia Subgenus *Phyllanthodendron* section *Phyllanthodendron*
53. Trunk not succulent or enlarged at base; leaf blades < 6 cm long. — Asia Subgenus *Phyllanthodendron* section *Calophyllum*
54. Filaments connate. — South America Subgenus *Xylophylla* section *Ciccastrum*
54. Filaments free. 55
55. Leaves with or without laminar glands; sepals in two indistinct whorls; pollen 4–8-colporate or diorate. — South America . . . Subgenus *Emblica* section *Microglochidion*
55. Leaves without laminar glands; sepals in two distinct whorls; pollen 3-syncolporate 67 (Subgenus *Gomphidium*)
56. Leaves opposite or subopposite. 57
56. Leaves alternate. 59
57. Bark lenticellate; filaments connate. — Cuba. Subgenus *Xylophylla* section *Williamia* subsection *Mirifici*
57. Bark smooth; filaments free 58
58. Branchlets sometimes opposite bipinnatifid; staminate sepals 5, not distinctly biseriate; staminate disc consisting of 5 free segments; stamens 5. — Madagascar and Middle East (?) Subgenus *Menarda*
58. Branchlets pinnatifid, not opposite; staminate sepals 5 or 6, in both sexes often distinctly biseriate; staminate disc entire, 3 emarginate segments or 5 or 6 massive segments; stamens mostly 3 or 5 (up to 20) 67 (Subgenus *Gomphidium*)
59. Sepals 4 in staminate flowers; stamen 2, filaments connate. Pollen pantoporate or clypeate 60
59. Sepals 5 or 6 in staminate flowers; stamens 3–15, filaments free or connate. 66
60. Leaf margins very thick, conspicuously revolute; staminate disc massive, entire; pollen clypeate. — Cuba Subgenus *Xylophylla* section *Glyptothamnus*
60. Leaf margins not thickened, sometimes slightly revolute; staminate disc segmented; pollen pantoporate or clypeate 61
61. Anthers dehiscing vertically; sepal margins entire . . . 62
61. Anthers dehiscing horizontally/transversely; sepal margins entire to dentate or lacerate 64
62. Inflorescences usually bisexual, appearing with the expanding leaves (Webster 1958); pollen clypeate; style connate in a tube and stigmas often reduced to acute tips. — West Indies Subgenus *Xylophylla* section *Thamnocharis*
62. Inflorescences mostly unisexual, appearing after the leaves; pollen pantoporate; style connate or free . . . 63
63. Ovary papillose or verruculose, 3-locular. — Asia Subgenus *Eriococcus* section *Eriococcodes*
63. Ovary smooth, 6-locular. — Asia Subgenus *Eriococcus* section *Nymphanthus*
- 64*. Stigmas entire, connate — filaments thickened at top. — Asia to Australia Subgenus *Eriococcus* section *Emblicastrum*
- 64*. Stigmas entire or emarginate. — Asia Subgenus *Eriococcus* section *Scepasma*
- 64*. Stigmas free, bifid. 65 (Subgenus *Eriococcus* section *Eriococcus*)
65. Flowers in all leaf axils. — Asia Subgenus *Eriococcus* section *Eriococcus*
65. Pistillate flowers on leafy panicles at end of branchlets and staminate flowers closer to the base of branchlets without leaves (see Brunel 1987). — Asia Subgenus *Eriococcus* section *Eriococcus* subsection *Spiciferens*
66. Branchlets (bi-)pinnatifid; sepals often biseriate; staminate nectar disc often 3 massive emarginate (or 6 separate) segments to absent, stamens may be inserted on a wide receptaculum. Pollen 3-(syn)colporate. 67 (Subgenus *Gomphidium*)
66. Branchlets pinnatifid; sepal whorls indistinct; staminate nectar disc entire or segmented. 79
67. Branchlets bipinnatifid. 68
67. Branchlets pinnatifid 70
68. Axes incrustate or hirsutulous with red hairs; stamens 2–6; pollen clypeate. — West Indies Subgenus *Xylophylla* section *Hemiphyllanthus*
68. Axes not incrustate or hirsutulous, hairs usually white; stamens mainly 3–5 (up to 20); pollen 3-(syn)colporate 69
69. Inflorescences glomerules; pollen diverse, often 3-colporate or porate with diorate colpi (see Webster & Carpenter 2002), exine vermiculate to pilate; fruit conspicuously veined. — South America Subgenus *Conami* section *Nothoclema*
69. Inflorescences glomerules or panicles; pollen 3- or 4-syncolporate with vermiculate/rugulate exine (Lobreau-Callen et al. 1988); fruit smooth. — Southeast Asia, mostly New Guinea Subgenus *Gomphidium* section *Nymanina*
70. Disc absent or rudimentary in both sexes 71
70. Disc entire or segmented in both sexes 74
71. Sepals 6, biseriate, inner whorl petal-like, pistillate sepals leafy; stamens 3; ovary 3-locular. Calyx in fruit saccate. — New Caledonia. Subgenus *Gomphidium* section *Gomphidium* subsection *Physoglochidion*
71. Sepals 5 or 6, not distinctly biseriate; stamens (3–)5(–15), ovary 3–5-locular 72
72. Sepals 5; stamens 5; ovary 4- or 5-locular. — New Caledonia. Subgenus *Gomphidium* section *Leptonema*
72. Sepals 5 sometimes 6; stamens mostly (3–)5(–15); ovary 3-locular 73
73. Disc rudimentary in both sexes; filaments shorter than anthers, inserted on a wide receptaculum. — Southeast Asia, New Caledonia Subgenus *Gomphidium* section *Adenoglochidion*
73. Disc rudimentary or absent in both sexes; filaments longer than anthers, diverging from centre of receptaculum. — New Caledonia. Subgenus *Gomphidium* section *Adenoglochidion* subsection *Eleutherogynium*
74. Stamens connate 75
74. Stamens free 76
75. Inflorescences glomerules; pollen diverse, often 3-colporate or porate with diorate colpi (see Webster & Carpenter 2002), exine vermiculate to pilate; fruit conspicuously veined. — South America Subgenus *Conami* section *Nothoclema*
75. Inflorescences glomerules or paniculate; pollen 3- or 4-syncolporate, exine vermiculate/rugulate (Lobreau-Callen et al. 1988); fruit smooth. — Southeast Asia, mainly New Guinea Subgenus *Gomphidium* section *Nymanina*
76. Sepals 5, not distinctly biseriate; stamens mostly (3–)5(–15), filaments free; disc consisting of 3 emarginate segments or absent. — Southeast Asia, New Caledonia. Subgenus *Gomphidium* section *Adenoglochidion*

76. Sepals 5 or 6, often biseriate (except in *P. tuerckheimii* G.L.Webster); stamens 3, filaments free or connate; disc consisting of 3 emarginate segments or 6 free segments 77
77. Sepals 5; pollen grains not syncolpate, colpi without distinct borders; exine reticulate. — South America Subgenus *Gomphidium* section *Calodictyon*
77. Sepals 6; pollen grains with marginate colpi, often meeting at poles; exine reticulate or $\pm$ vermiculate 78
- 78*. Inflorescences axillary cymules; pollen 3-syncolporate with fine to coarse reticulate exine. — Southeast Asia, New Caledonia Subgenus *Gomphidium* section *Gomphidium*
- 78*. Inflorescences glomerules or panicles; pollen 3-syncolporate with vermiculate/rugulate exine. — Southeast Asia, mostly New Guinea Subgenus *Gomphidium* section *Nymania*
- 78*. Inflorescences glomerules; pollen diverse, often 3-colporate with diorate colpi (see Webster & Carpenter 2002), exine vermiculate to pilate. Fruit conspicuously veined. — South America ... Subgenus *Conami* section *Nothoclema*
79. Staminate disc entire. — South America Subgenus *Xylophylla* section *Adianthoides*
79. Staminate disc segmented 80
80. Filaments free or only fused at base 81
80. Filaments fused at least partially to completely, sometimes fused in separate sets or whorls 89
81. Leaves often with glands; anthers apiculate. Leaves thick; style entire. — South America Subgenus *Emblia* section *Microglochidion*
81. Leaves without glands; anthers not apiculate. 82
82. Stamens 3 83
82. Stamens 4 or 5 85
83. Brachyblasts often present; inflorescences cauliflorous; sepals 6. — South America Subgenus *Kirganelia* section *Ciccopsis*
83. Brachyblasts absent; inflorescences axillary; sepals 5 84
84. Leaf blades < 8 cm long; anther connective enlarged; pollen 4-colporate. — South America ... Subgenus *Phyllanthus* section *Phyllanthus* subsection *Clausseniani*
84. Leaf blades > 8 cm long; anther connectives not enlarged; pollen perisyncolporate. Pistillate pedicel quite massive (up to 3 cm wide (Brunel 1987)), fruit ornamented. — Africa Subgenus *Ceramanthus* section *Ebolowani*
85. Pistillate sepals 8–10. — South America Subgenus *Xylophylla* section *Diplocicca*
85. Pistillate sepals 5 or 6. 86
86. Brachyblasts present 87
86. Brachyblasts absent 88
87. Inflorescences (stalked) fascicles; stamens 5, filaments completely free; fruits 3-locular, dehiscent; seeds kidney-shaped, smooth with mottled patterns (similar to seeds of *P. juglandifolius* Willd.). — Africa Subgenus *Kirganelia* section *Omphacodopsis*
87. Inflorescences panicles; stamens 4 or 5, filaments free or sometimes basally fused; fruits 3–5-locular, indehiscent; seeds globular, smooth. — Africa Subgenus *Kirganelia* section *Polyanthi*
88. Stamens 3–5, free or slightly fused at base; anthers dehiscing vertically; fruits capsular; seeds smooth or faintly longitudinally striate. — Africa, Madagascar, Asia Subgenus *Anesonemoides*
88. Stamen 2–5(–7); anthers dehiscing horizontally; fruits capsular; seeds smooth. — South America Subgenus *Emblia* section *Pityrocladus*
89. Stamens fused in several whorls or sets 90
89. Stamens fused in a central column 93
90. Brachyblasts present; stamens fused in two sets with one central column and two separate free stamens. 91
90. Brachyblasts absent; stamens in 2 or 3 whorls, fused in various ways. — West Indies 94 (Subgenus *Xylophylla* section *Williamia*)
91. Pollen 3-colporate, exine pilate or reticulate 92
91. Pollen clypeate, exine areolate. — West Indies 94 (Subgenus *Xylophylla* section *Williamia*)
92. Exine pilate. — Africa Subgenus *Kirganelia* section *Brazzeani*
92. Exine reticulate. — Africa and Asia Subgenus *Kirganelia* section *Anisonema*
93. Stems and branchlets incrustate with dark platelets of bark or lenticellate 94 (Subgenus *Xylophylla* section *Williamia*)
93. Stems smooth 95
- 94*. Stems smooth; leaves alternate; stamens 3–15 in 3 whorls, connate in various ways; stigmas erect but not lacerate. Sepals 5 or 6. — West Indies ... Subgenus *Xylophylla* section *Williamia* subsection *Discolores*
- 94*. Stems and branchlets incrustate with small dark platelets on the fissured bark; leaves alternate; stamens (2–)3–6 with filaments connate, usually in 2 whorls; stigmas erect, conspicuously lacerate (see Webster 1958). — West Indies Subgenus *Xylophylla* section *Williamia* subsection *Incrustati*
- 94*. Stems smooth but prominently lenticellate; leaves opposite; stamens 5 with filaments connate, but 2 anthers inserted lower than the other 3; stigmas reflexed and covering the ovary, apex sometimes blunt. — West Indies Subgenus *Xylophylla* section *Williamia* subsection *Mirifici*
95. Pollen 3–5-colporate or 5-brevicolporate (Webster & Carpenter 2008), exine reticulate, microperforate or scabrous. — Africa and Asia 96
95. Pollen clypeate, exine areolate. — Americas 99 (Subgenus *Xylophylla*)
96. Anthers dehiscing obliquely to horizontally; exine microperforate or scabrous. — Pantropical, mostly African ... Subgenus *Afroswartziani*
96. Anthers dehiscing vertically; exine reticulate. 97 (Subgenus *Emblia*)
97. Sepals mostly 5; staminate disc consisting of 5 segments; stamens 2–5(–7); anthers dehiscing horizontally; pollen 3–5-colporate; pistillate disc entire or segmented. — South America Subgenus *Emblia* section *Pityrocladus*
97. Sepals 6; staminate disc consisting of 6 segments; stamens 3; anthers dehiscing vertically; pollen 4- or 5-colporate or 5-breviculcate; pistillate disc entire ... 98
98. Inflorescences at terminal end of branchlet and secondary ramification on more basal end; pollen 5-breviculcate. — Asia Subgenus *Emblia* section *Botryoides*
98. Inflorescences found along entire branchlet; pollen 4- or 5-colporate. — Asia Subgenus *Emblia* section *Emblia*
99. Inflorescences cauliflorous thyrses; stigmas petaloid. — West Indies ... Subgenus *Xylophylla* section *Epistylum*
99. Inflorescences axillary cymules; stigmas tapering, not petaloid, sometimes fused into a tube 100
100. Leaf blades mostly 1–2 cm long, with mesophyllar sclereids; stamens 3–7. — West Indies Subgenus *Xylophylla* section *Orbicularia*
100. Leaf blades > 2 cm long, sometimes with mesophyllar sclereids; stamens 2–7(–8) 101

101. Brachyblasts often present; sepals 5; staminate disc consisting of 5 segments; stamens 3 (rarely 4); fruit a large fleshy capsule (usually > 2 cm diam). — West Indies. Subgenus *Xylophylla* section *Omphacodes*
101. Brachyblasts absent; sepals 4–6; staminate disc usually consisting of 6 segments; stamens 2–7(–8); fruit small dry capsule (< 1 cm diam). 102
102. Staminate sepals 5, pistillate sepals 6; inflorescences mostly unisexual cymules appearing after the leaves, several pistillate flowers per node; stamens 3–7, thecae dehiscing horizontally; style present, elongated and exerted from calyx, stigmas dilated, bifid to multifid. — South America. Subgenus *Xylophylla* section *Oxalistylis*
102. Sepals in both sexes 4–6; inflorescences bisexual cymules appearing with the expanding leaves on new branchlets, usually only 1 or 2 pistillate flowers among several staminate flowers; stamens 2–6 (or 8), thecae dehiscing vertically; style like an erect tube, stigma branches narrowed to acute tips. — West Indies. Subgenus *Xylophylla* section *Thamnocharis*

DISCUSSION AND CONCLUSION

Taxonomic discussions on the circumscription of genus *Phyllanthus* are still ongoing, mainly with the question whether the genera nested within should be subsumed (Hoffmann et al. 2006) or remain separate (Van Welzen et al. 2014). However, a good understanding and clear structure within the genus *Phyllanthus* in its current circumscription is necessary. Here an attempt was made to summarize over 200 years of taxonomic work on this immense group. Several issues that still exist will hopefully be resolved in new systematic studies. The provisional key to the subgenera and (sub)sections provided here works with most typical examples of *Phyllanthus* species. Future research and revision work should focus on treatments of the individual subgenera and/or sections within the genus.

Unfortunately, not all species could be fitted in this subgeneric classification due to exceptional characters or incomplete descriptions (see Appendix 2). These will need further study or more new collections to elucidate their place within the genus. Often these are species of which only the type specimen is known and which were not collected since, and some might be extinct (e.g., *P. aoraiensis* Nadeaud; Wagner & Lorence 2011), or they might be exceptional forms, which should be united with other species. For some we could only assign them to subgenus level and further revision work should place them in their appropriate sections. The placement of some species may change with new research and we welcome these changes as they will lead to a better understanding of the genus *Phyllanthus* and we hope this article inspires discussion.

Several issues are still unresolved and will require further attention. Subgenus *Phyllanthus*, which previously spanned all herbaceous species, remains difficult and more species need to be included in new phylogenetic studies. Several groups in our list have not had formal taxonomic treatment for some time and new revision work may identify new species and better characters to differentiate them within *Phyllanthus*. Another taxonomic problem was created by the discussions on the validity of Brunel's thesis (1987), which has led to many species being published twice under different names (see Radcliffe-Smith 1996). This will require close scrutiny in determining how many should be synonymized. Finally, a decision should be made on how to treat the paraphyly of the genus *Phyllanthus*. Whether the genus will be split or whether the clades will be subsumed within *Phyllanthus*, we hope that this treatment will provide structure to this diverse genus.

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Appendix 1 Synopsis of the infrageneric classification of the genus *Phyllanthus*. Author of type species can be found in Appendix 2. Countries in parentheses indicate unlikely disjunct distributions that require further study.

Genus	Subgenus	Section	Subsection	Author	Type species	Distribution
<i>Phyllanthus</i>				L.	<i>P. niruri</i>	Pantropical
<i>Phyllanthus</i>	<i>Afroschwartzianii</i>			Ralim. & Petra Hoffm.	<i>P. lokohensis</i>	Madagascar, Mainland Asia, Malesia, Tropical Africa
<i>Phyllanthus</i>	<i>Afroschwartzianii</i>	Callidisci		(Jean F.Brunel) R.W.Bouman	<i>P. callidiscus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Afroschwartzianii</i>	<i>Fluitantoides</i>		Jean F.Brunel	<i>P. felcis</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Afroschwartzianii</i>	<i>Microdendron</i>		Jean F.Brunel	<i>P. microdendron</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Afroschwartzianii</i>	<i>Odontadenii</i>		(Jean F.Brunel & Jacq.Roux) R.W.Bouman	<i>P. odontadenensis</i>	Congo
<i>Phyllanthus</i>	<i>Afroschwartzianii</i>	<i>Praephyllanthus</i>		Jean F.Brunel	<i>P. arvensis</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Anisemonoides</i>			(Jean F.Brunel) Ralim. & Petra Hoffm.	<i>P. bojerianus</i>	Madagascar
<i>Phyllanthus</i>	<i>Beisleanii</i>			(Jean F.Brunel) Ralim. & Petra Hoffm.	<i>P. betsileanus</i>	Madagascar
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Anisobolium</i>		(Hassk.) Jean F.Brunel	<i>P. albidiscus</i>	Tropical Africa, Asia
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Bivia</i>		Müll.Arg.	<i>P. welwitschianus</i>	Tropical Africa, Asia
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Ceramanthus</i>		Jean F.Brunel & Jacq.Roux	<i>P. petraeus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Cluytopsis</i>		(Hassk.) Baill.	<i>P. albidiscus</i>	Tropical Africa, Asia
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Ebolowani</i>		Müll.Arg.	<i>P. cochinchinensis</i>	Asia
<i>Phyllanthus</i>	<i>Conami</i>			Jean F.Brunel	<i>P. lebouzeyanus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Conami</i>	<i>Apolepsis</i>		(Aubl.) G.L.Webster	<i>P. brasiliensis</i>	Tropical South America
<i>Phyllanthus</i>	<i>Conami</i>	<i>Hylaeanthus</i>		G.L.Webster	<i>P. orbiculatus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Conami</i>	<i>Nothoclema</i>		G.L.Webster	<i>P. attenuatus</i>	Tropical South America, West Indies
<i>Phyllanthus</i>	<i>Cyclanthera</i>			G.L.Webster	<i>P. acuminatus</i>	Tropical South America, Central America, West Indies
<i>Phyllanthus</i>	<i>Cyclanthera</i>	<i>Callitrichoides</i>		G.L.Webster	<i>P. lindnerianus</i>	West Indies
<i>Phyllanthus</i>	<i>Cyclanthera</i>	<i>Cyclanthera</i>		G.L.Webster	<i>P. carnosulus</i>	West Indies
<i>Phyllanthus</i>	<i>Emblca</i>			G.L.Webster	<i>P. lindnerianus</i>	West Indies
<i>Phyllanthus</i>	<i>Emblca</i>	<i>Botryoides</i>		(Gaertn.) Kurz	<i>P. emblica</i>	Pantropical, origin Asia
<i>Phyllanthus</i>	<i>Emblca</i>	<i>Emblca</i>		Jean F.Brunel	<i>P. baeobotryoides</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Emblca</i>	<i>Microglochidion</i>		(Gaertn.) Baill.	<i>P. emblica</i>	Mainland Asia, Malesia
<i>Phyllanthus</i>	<i>Emblca</i>	<i>Pityrocladus</i>		(Müll.Arg.) Müll.Arg.	<i>P. vacinifolius</i>	Tropical South America
<i>Phyllanthus</i>	<i>Emblca</i>	<i>Urinaria</i>		G.L.Webster	<i>P. ruscifolius</i>	Tropical South America
<i>Phyllanthus</i>	<i>Emblca</i>	<i>Urinaria</i>	<i>Urinaria</i>	(Gaertn.) G.L.Webster	<i>P. urinaria</i>	Pantropical, origin Asia
<i>Phyllanthus</i>	<i>Eriococcus</i>			Haicour & Rossignol	<i>P. urinaria</i>	Pantropical, origin Asia
<i>Phyllanthus</i>	<i>Eriococcus</i>	<i>Emblcastrum</i>		(Hassk.) Croizat & Metcalf	<i>P. gracilipes</i>	Mainland Asia, Malesia, Australia
<i>Phyllanthus</i>	<i>Eriococcus</i>	<i>Eriococcodes</i>		Müll.Arg.	<i>P. lamprophyllus</i>	Mainland Asia, Malesia, Australia
<i>Phyllanthus</i>	<i>Eriococcus</i>	<i>Eriococcus</i>		(Hassk.) Müll.Arg.	<i>P. acutissimus</i>	Mainland Asia, Malesia
<i>Phyllanthus</i>	<i>Eriococcus</i>	<i>Eriococcus</i>		Jean F.Brunel	<i>P. gracilipes</i>	Mainland Asia, Malesia, ?Australia
<i>Phyllanthus</i>	<i>Eriococcus</i>	<i>Nymphanthus</i>	<i>Spiciferens</i>	(Lour.) Müll.Arg.	<i>P. nhatrangensis</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Eriococcus</i>	<i>Scepasma</i>		(Blume) Müll.Arg.	<i>P. ruber</i>	Mainland Asia, Malesia
<i>Phyllanthus</i>	<i>Gomphidium</i>			(Baill.) G.L.Webster	<i>P. buxifolius</i>	Mainland Asia, Malesia, Australia
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Adenoglochidion</i>		(Müll.Arg.) Müll.Arg.	<i>P. chamaecerasus</i>	'Central America', Malesia, Australia, Pacific
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Adenoglochidion</i>	<i>Eleutherogynium</i>	(Müll.Arg.) G.L.Webster ex R.W.Bouman	<i>P. aeneus</i>	Malesia, New Caledonia
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Calodictyon</i>		G.L.Webster	<i>P. loranthoides</i>	New Caledonia
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Gomphidium</i>		Baill.	<i>P. tuerckheimii</i>	Central America
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Gomphidium</i>	<i>Physoglochidion</i>	(Müll.Arg.) R.W.Bouman	<i>P. chamaecerasus</i>	Malesia, Pacific
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Leptonema</i>		Baill.	<i>P. faguetii</i>	New Caledonia
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Nymanla</i>		(K. Schum.) J.J. Sm.	<i>P. kanlensis</i>	New Caledonia
<i>Phyllanthus</i>	<i>Isocladius</i>			G.L.Webster	<i>P. clamboides</i>	Australia, Malesia, Pacific
<i>Phyllanthus</i>	<i>Kirganelia</i>			(A. Juss.) Kurz	<i>P. maderaspatensis</i>	Pantropical (Introduced in North America)
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Anisomena</i>		(A. Juss.) Griseb.	<i>P. casticum</i>	Pantropical
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Brazzeani</i>		Jean F.Brunel & Jacq.Roux	<i>P. reticulatus</i>	Tropical Africa, Mainland Asia, Malesia, Australia
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Chorisandra</i>		(Wight) Müll.Arg.	<i>P. dinklagei</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicca</i>		(L.) Müll.Arg.	<i>P. pinnatus</i>	Tropical Africa, Madagascar, Mainland Asia
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicca</i>	<i>Aporosella</i>	(Chodat) G.L.Webster	<i>P. acidus</i>	Pantropical: origin South America
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicca</i>			<i>P. chacoensis</i>	Tropical South America

Appendix 1 (cont.)

Genus	Subgenus	Section	Subsection	Author	Type species	Distribution
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicca</i>	<i>Cheramelia</i>	Kuntze	<i>P. acidus</i>	Pantropical, origin possibly Africa
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicopsis</i>		G.L.Webster	<i>P. pseudocicca</i>	Tropical South America
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Hemicicca</i>		(Baill.) Müll.Arg.	<i>P. flexuosus</i>	China, Japan
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Omphacodopsis</i>		Jean F.Brunel	<i>P. physocarpus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Polyanthi</i>		Jean F.Brunel	<i>P. polyanthus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Pseudomenarda</i>		Müll.Arg.	<i>P. purpureus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Macraea</i>			(Wight) Jean F.Brunel	<i>P. virgatus</i>	Mainland Asia, Malesia, Pacific, Australia
<i>Phyllanthus</i>	<i>Menarda</i>			(Comm. ex A.Juss.) Ralim. & Petra Hoffm.	<i>P. cryptophilus</i>	Madagascar, Middle East?
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>			(Hems.) G.L.Webster	<i>P. mirabilis</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Arachnodes</i>		(Gagnep.) Airy Shaw	<i>P. arachnodes</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Calophyllum</i>		Croizat	<i>P. anthopotamicus</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Phyllanthodendron</i>		Croizat	<i>P. mirabilis</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Pseudoactephila</i>		Croizat	<i>P. roseus</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Tetrandrum</i>		P.T.Li	<i>P. moi</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthus</i>			–	<i>P. niruri</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Choretropsis</i>		Müll.Arg.	<i>P. choretroides</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Choretropsis</i>	<i>Applanata</i>	L.J.M.Santiago	<i>P. klotzschianus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Choretropsis</i>	<i>Choretropsis</i>	–	<i>P. choretroides</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Loxopodium</i>		G.L.Webster	<i>P. carolinensis</i>	Americas
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Lysandra</i>		(F.Muell.) G.L.Webster	<i>P. subcrenulatus</i>	Australia, 'North America'
<i>Phyllanthus</i>	<i>Phyllanthus</i>			–	<i>P. niruri</i>	Pantropical
<i>Phyllanthus</i>	<i>Phyllanthus</i>		<i>Almadanses</i>	G.L.Webster	<i>P. almadensis</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>		<i>Clausseniani</i>	G.L.Webster	<i>P. clausenii</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>		<i>Niruri</i>	G.L.Webster	<i>P. niruri</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>		<i>Pentaphylli</i>	G.L.Webster	<i>P. pentaphyllus</i>	West Indies
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Salvinopsis</i>		Holm-Nielsen, ex Jean F.Brunel	<i>P. fluitans</i>	Americas
<i>Phyllanthus</i>	<i>Swartziani</i>			(G.L.Webster) Ralim. & Petra Hoffm.	<i>P. amarus</i>	Pantropical, origin North America?
<i>Phyllanthus</i>	<i>Swartziani</i>	<i>Reverchonla</i>		(A.Gray) G.L.Webster	<i>P. warnockii</i>	North America
<i>Phyllanthus</i>	<i>Tenellanthus</i>			Jean F.Brunel	<i>P. tenellus</i>	Pantropical, origin Africa
<i>Phyllanthus</i>	<i>Tenellanthus</i>	<i>Loandani</i>		Jean F.Brunel	<i>P. loandensis</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Tenellanthus</i>	<i>Pentandra</i>		G.L.Webster	<i>P. pentandrus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Tenellanthus</i>	<i>Tenellanthus</i>		Jean F.Brunel	<i>P. tenellus</i>	Pantropical, origin Africa
<i>Phyllanthus</i>	<i>Xylophylla</i>			(L.) Pers.	<i>P. epiphyllanthus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Adiantoides</i>		Jabl. ex Jean F.Brunel	<i>P. adiantoides</i>	Tropical South America
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Asterandra</i>		(Klotzsch) Müll.Arg.	<i>P. juglandifolius</i>	Tropical South America
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Brachycladus</i>		G.L.Webster	<i>P. rupestris</i>	Tropical South and Middle America
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Ciccastrum</i>		Müll.Arg.	<i>P. hedelianus</i>	Tropical South and Middle America
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Diplocicca</i>		Müll.Arg.	<i>P. octomerus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Elutanthos</i>		Croizat	<i>P. glaucescens</i>	Central and South America
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Epistylum</i>		(Sw.) Griseb.	<i>P. axillaris</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Glyptotharmus</i>		G.L.Webster	<i>P. chryseus</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Hemiphyllanthus</i>		(Müll.Arg.) Müll.Arg.	<i>P. ovatus</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Omphacodes</i>		G.L.Webster	<i>P. subcarnosus</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Orbicularia</i>		(Baill.) Griseb	<i>P. orbicularis</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Oxalystylis</i>		Baill.	<i>P. salvifolius</i>	Tropical South America, West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Thamnocharis</i>		G.L.Webster	<i>P. cinctus</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Williamia</i>		(Baill.) Müll.Arg.	<i>P. discolor</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Williamia</i>	<i>Discolores</i>	G.L.Webster	<i>P. discolor</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Williamia</i>	<i>Incrustati</i>	G.L.Webster	<i>P. williamoides</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Williamia</i>	<i>Mirifici</i>	G.L.Webster	<i>P. mirificus</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>			(L.) Baill.	<i>P. epiphyllanthus</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Antipodanthus</i>		G.L.Webster	<i>P. dictyospermus</i>	Tropical South America, 'Australia'

Appendix 2 Species checklist of *Phyllanthus* based on the current infragenetic classification. Each species denotation contains information on whether the classification was based on morphology, literature references or phylogenetic evidence. Unsure placements are noted with 'loc' for location based placements, a question mark and/or a ~ symbol when morphology does not completely comply with the group.

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Afroschwartzian</i>	<i>P. airy-shawii</i> Jean F Brunel & Jacq Roux	India, Myanmar, People's Republic of Bangladesh, Thailand	Mainland Asia		x	x	Brunel & Roux 1984
Subg. <i>Afroschwartzian</i> ?	<i>P. algerianus</i> L.B. Chaudhary & R.R. Rao	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroschwartzian</i>	<i>P. ampandrandavae</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. andranovatsensis</i> Jean F Brunel & Jacq Roux	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. angustatus</i> Hutch.	Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. ankazobensis</i> Ralim. & Petra Hoffm.	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. asperulatus</i> Hutch.	Northern Africa	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. benguelensis</i> Müll Arg.	Angola	Tropical Africa		x	x	Webster 1957
Subg. <i>Afroschwartzian</i>	<i>P. bonnardii</i> Jean F Brunel	Ivory Coast	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i> ?	<i>P. brevipes</i> Hook f.	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroschwartzian</i>	<i>P. brynaerii</i> Jean F Brunel	Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. caesifolius</i> Petra Hoffm. & Cheek	Cameroon	Tropical Africa		x	x	Hoffmann & Cheek 2003
Subg. <i>Afroschwartzian</i>	<i>P. camerunensis</i> Jean F Brunel	Cameroon	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. carunculatus</i> Jean F Brunel	Democratic Republic of the Congo, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. cerastolemon</i> Brenan	Central African Republic	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. chevalieri</i> Beille	Chad, Kenya, Sudan, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. consanguineus</i> Müll Arg.	Mascarenes	Indian Ocean		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzian</i>	<i>P. coursii</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. crassinervius</i> Raddi.-Sm.	Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. debilis</i> J.G. Klein ex Willd.	Africa, Asia, widespread	Tropical Africa, Mainland Asia	x	x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. dekindianus</i> Jean F Brunel	Angola	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. delagoensis</i> Hutch.	Tropical Africa	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. denticulatus</i> Jean F Brunel	Uganda	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. discolacinatus</i> Jean F Brunel	Cameroon	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. ellae</i> (Jean F Brunel & Jacq Roux) Jean F Brunel	Togo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. epiphylliferens</i> Jean F Brunel	Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. folii</i> Jean F Brunel	Cameroon	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. friesii</i> Hutch.	United Republic of Tanzania, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. gabonensis</i> Jean F Brunel	Equatorial Guinea, Gabon	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. geniculatostemon</i> Jean F Brunel	Uganda	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. gillettianus</i> Jean F Brunel	Democratic Republic of the Congo, Kenya, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. gosswelleri</i> Hutch.	Angola, Democratic Republic of the Congo, Zambia	Tropical Africa	x	x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i> ?	<i>P. griffithii</i> Müll Arg.	Butan, India, Nepal	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroschwartzian</i>	<i>P. harrisi</i> Raddi.-Sm.	Kenya, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. heterophyllus</i> E. Mey. ex Müll Arg.	South Africa	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. hildebrandtii</i> Pax	Ethiopia, Somalia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. holostylus</i> Milne-Redh.	Angola, Democratic Republic of the Congo, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. humpatanus</i> Jean F Brunel	Angola	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. hutchinsonianus</i> S. Moore	Mozambique, United Republic of Tanzania, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. irriguus</i> Raddi.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. ivohibensis</i> Leandri	Madagascar	Madagascar		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. kaessneri</i> Hutch.	Kenya, United Republic of Tanzania, Zambia	Tropical Africa		x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. kelleusii</i> Jean F Brunel	Cameroon	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. lanceolatus</i> Poir.	Mascarenes	Indian Ocean		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzian</i>	<i>P. leandrianus</i> Jean F Brunel	Madagascar	Madagascar		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. leonardianus</i> Lisowski	Democratic Republic of the Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i> ?	<i>P. leschenaultii</i> Müll Arg.	Butan, India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroschwartzian</i>	<i>P. letestui</i> Jean F Brunel	Central African Republic	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. leucocalyx</i> Hutch.	Kenya, Mozambique, Somalia, Uganda, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. leucochlamys</i> Raddi.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Radcliffe-Smith & Hoffmann 2006
Subg. <i>Afroschwartzian</i>	<i>P. leucosepalus</i> Jean F Brunel	Kenya	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. lokohensis</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana et al. 2013
Subg. <i>Afroschwartzian</i>	<i>P. macranthus</i> Pax	Angola, Democratic Republic of the Congo, United Republic of Tanzania, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzian</i>	<i>P. madagascariensis</i> Müll Arg.	Madagascar	Madagascar	x	x	x	Ralimanana et al. 2013

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Afrosartziani</i>	<i>P. mafingenis</i> Radcl.-Sm.	Malawi	Tropical Africa		x	x	Radcliffe-Smith 1996
Subg. <i>Afrosartziani</i>	<i>P. magdalenae</i> Jean F. Brunel	Cameroon	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. mahengeensis</i> Jean F. Brunel	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. makitae</i> Jean F. Brunel	Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. mannianus</i> Müll. Arg.	Cameroon, Nigeria	Tropical Africa	x	x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i> ?	<i>P. mckenziei</i> Fosberg	Aldabra, Seychelles	Indian Ocean				
Subg. <i>Afrosartziani</i>	<i>P. melleri</i> Müll. Arg.	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i>	<i>P. micromeris</i> Radcl.-Sm.	Malawi, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. mindouliensis</i> Jean F. Brunel	Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. mukurrae</i> Jean F. Brunel	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. moerensis</i> De Wild.	Democratic Republic of the Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. monovae</i> Jean F. Brunel	Liberia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. moramangicus</i> (Leandri) Leandri	India	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i> ?	<i>P. mukerjeeanus</i> D. Mitra & Bennet	India	Mainland Asia		x	x	Mitra & Bennet 1967
Subg. <i>Afrosartziani</i>	<i>P. myrtaceus</i> Sond.	Zimbabwe	Tropical Africa		x	x	Müller 1863, 1866
Subg. <i>Afrosartziani</i>	<i>P. ndikimiekianus</i> Jean F. Brunel	Cameroon	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. nigericus</i> Brenan	Nigeria	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. niruoides</i> Müll. Arg.	Guinea, Kenya, Uganda, United Republic of Tanzania, Zaire, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. nyale</i> Petra Hoffm. & Cheek	Cameroon	Tropical Africa		x	x	Hoffmann & Cheek 2003
Subg. <i>Afrosartziani</i>	<i>P. nyikae</i> Radcl.-Sm.	Malawi	Tropical Africa		x	x	Radcliffe-Smith 1996
Subg. <i>Afrosartziani</i>	<i>P. omahakensis</i> Dinter & Pax	Angola, Botswana, Namibia, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. oppositifolius</i> Baill. ex Müll. Arg.	Mascarenes	Indian Ocean		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afrosartziani</i> ?	<i>P. parvifolius</i> Buch.-Ham. ex D. Don	Butan, India, Myanmar, Nepal	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afrosartziani</i>	<i>P. parvus</i> Hutch.	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i> ?	<i>P. pendulus</i> Roxb.	India	Mainland Asia				
Subg. <i>Afrosartziani</i>	<i>P. phyllireifolius</i> Poir.	Mascarenes	Indian Ocean		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afrosartziani</i>	<i>P. pierotii</i> Jean F. Brunel	Togo	Indian Ocean		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afrosartziani</i>	<i>P. pileostigma</i> Cooche	Mascarenes	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. prostratus</i> Müll. Arg.	Angola, Zimbabwe	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afrosartziani</i>	<i>P. pseudocarunculatus</i> Radcl.-Sm.	Democratic Republic of the Congo, Zambia	Tropical Africa		x	x	Radcliffe-Smith 1996, but see <i>P. carunculatus</i> Jean F. Brunel
Subg. <i>Afrosartziani</i>	<i>P. rangolokensis</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i>	<i>P. rheedi</i> Wight	India, Sri Lanka, Myanmar	Mainland Asia		x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i>	<i>P. rhizomatous</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. rotundifolius</i> J. G. Klein ex Willd.	India, Sri Lanka, Myanmar	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. rouxi</i> Jean F. Brunel	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. sepialis</i> Müll. Arg.	Tropical Africa to Sri Lanka and India	Tropical Africa	x	x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i>	<i>P. serandii</i> Jean F. Brunel	Ethiopia, Kenya, Sudan, Uganda, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. shabensis</i> Jean F. Brunel	Democratic Republic of the Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. sublanatus</i> Schumacher & Thonn.	Benin, Burkina Faso, Ghana, Guinea, Ivory Coast, Mali, Togo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. suffrutescens</i> Pax	Ethiopia, Kenya, Somalia, Uganda, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. tamphensis</i> Leandri	Madagascar	Madagascar		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. tanaensis</i> Jean F. Brunel	Kenya	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. taylorianus</i> Jean F. Brunel	Cameroon to Ethiopia and Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. tenuis</i> Radcl.-Sm.	Zambia	Tropical Africa		x	x	Radcliffe-Smith 1996
Subg. <i>Afrosartziani</i>	<i>P. thulinii</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. tukuyuanus</i> Jean F. Brunel	Madagascar	Madagascar		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. udoricola</i> Radcl.-Sm.	Malawi, Zambia, Zimbabwe	Tropical Africa		x	x	Radcliffe-Smith 1996
Subg. <i>Afrosartziani</i>	<i>P. ukagurenensis</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. upembaensis</i> Jean F. Brunel	Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. vanderystii</i> Hutch. & De Wild.	Democratic Republic of the Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. vatovavensis</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i>	<i>P. verustulus</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana et al. 2013
Subg. <i>Afrosartziani</i>	<i>P. viquerii</i> Jean F. Brunel	Madagascar	Madagascar		x	x	Brunel 1987
Subg. <i>Afrosartziani</i>	<i>P. xiphophorus</i> Radcl.-Sm.	Zambia	Tropical Africa		x	x	Radcliffe-Smith 1996, but see Brunel 1987 <i>P. xiphophorus</i>
Subg. <i>Afrosartziani</i>	<i>P. zambicus</i> Radcl.-Sm.	Zambia	Tropical Africa		x	x	Jean F. Brunel
Subg. <i>Afrosartziani</i>	<i>P. zornoides</i> Radcl.-Sm.	Malawi, Zambia, Zimbabwe	Tropical Africa		x	x	Radcliffe-Smith 1996
Subg. <i>Afrosartziani</i> sect. <i>Callidisci</i>	<i>P. fischeri</i> Pax	Ethiopia, Kenya, Uganda, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Afroschwartzianus</i> sect. <i>Calidisci</i>	<i>P. limuensis</i> Cufod.	Democratic Republic of the Congo, Ethiopia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Calidisci</i>	<i>P. wingfieldi</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Calidisci</i>	<i>P. yangambiensis</i> Jean F. Brunel	Democratic Republic of the Congo	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Calidisci</i>	<i>P. youngii</i> Jean F. Brunel	Angola	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Fluitantoides</i>	<i>P. felcis</i> Jean F. Brunel	Guinea	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Microdendron</i>	<i>P. microdendron</i> Müll. Arg.	Angola, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. aspersus</i> Jean F. Brunel & Jacq. Roux	Cameroun	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. banchilhonae</i> Jean F. Brunel & Jacq. Roux	West Tropical Africa	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. bequaerti</i> Robyns & Lawalrée	Tropical Africa	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. burundensis</i> Jean F. Brunel	Burundi	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. caligatus</i> Jean F. Brunel & Jacq. Roux	Cameroun	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. dusei</i> Hutch.	Nigeria	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. gnegiolewa</i> Jean F. Brunel & Jacq. Roux	Democratic Republic of the Congo, Ghana, Ivory Coast, Nigeria, Sierra Leone, Togo	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. jaegeri</i> Jean F. Brunel & Jacq. Roux	Sierra Leone	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. kiviensis</i> Jean F. Brunel	Congo	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. lebrunii</i> Robyns & Lawalrée	Democratic Republic of the Congo, Rwanda	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. leucanthus</i> Pax	Ethiopia, Malawi, Mozambique, Zaire, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. magnificens</i> Radcl.-Sm.	Ghana	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. mieschii</i> Jean F. Brunel & Jacq. Roux	Congo, Democratic Republic of the Congo	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. nozerianianus</i> Jean F. Brunel & Jacq. Roux	Ivory Coast	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. odontadenioides</i> Jean F. Brunel	United Republic of Tanzania	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. odontadenius</i> Müll. Arg.	Angola, Burundi, Kenya, Rwanda, Sierra Leone, Uganda, United Republic of Tanzania, Zaire	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. pseudonituri</i> Müll. Arg.	Botswana, Burundi, Cameroun, Ethiopia, Kenya, Rwanda, Sudan, Uganda, United Republic of Tanzania, Zaire, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. raynali</i> Jean F. Brunel & Jacq. Roux	Cameroun, Gabon	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. trichotepalus</i> Brenan	Congo, Rwanda	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. volkensii</i> Engl.	Kenya, Tanzania	Tropical Africa		x	x	Brunel & Roux 1981
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. wittei</i> Robyns & Lawalrée	Democratic Republic of the Congo	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Odontadenii</i>	<i>P. xiphophorus</i> Jean F. Brunel	Zambia	Tropical Africa		x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. arvensis</i> Müll. Arg.	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. boehmii</i> Pax	Uganda, United Republic of Tanzania, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. confusus</i> Brenan	Malawi	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. fluminis-athi</i> Radcl.-Sm.	Kenya	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. meyerianus</i> Müll. Arg.	South Africa	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. microphyllinus</i> Müll. Arg.	Angola	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. miftenianus</i> Hutch.	Kenya, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. oblongigilans</i> M. G. Gilbert	Ethiopia, Kenya, Zaire	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. oxycoctifolius</i> Hutch.	Angola, United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. paxii</i> Hutch.	Angola, Burundi, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Mozambique, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. schaulsi</i> Jean F. Brunel	Cameroun	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. tanzanianus</i> Jean F. Brunel	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> sect. <i>Praephyllanthus</i>	<i>P. virgulatus</i> Müll. Arg.	Angola, Democratic Republic of the Congo, Malawi, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Afroschwartzianus</i> loc	<i>P. austroparensis</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Radcliffe-Smith 1992
Subg. <i>Afroschwartzianus</i> loc	<i>P. borenensis</i> M. G. Gilbert	Ethiopia	Tropical Africa		x	x	Gilbert 1987
Subg. <i>Afroschwartzianus</i> loc	<i>P. caespitosus</i> Brenan	Malawi, Zambia	Tropical Africa		x	x	Brenan 1967
Subg. <i>Afroschwartzianus</i> loc	<i>P. dewildeorum</i> M. G. Gilbert	Ethiopia	Tropical Africa		x	x	Gilbert 1987
Subg. <i>Afroschwartzianus</i> loc	<i>P. dictyophlebsis</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Radcliffe-Smith 1992
Subg. <i>Afroschwartzianus</i> loc	<i>P. mooneyi</i> M. G. Gilbert	Ethiopia	Tropical Africa		x	x	Gilbert 1987
Subg. <i>Afroschwartzianus</i> loc	<i>P. rethervisi</i> Hutch.	Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa		x	x	Radcliffe-Smith 1992
Subg. <i>Anisemonoides</i>	<i>P. ambatovolana</i> Leandri	Madagascar	Madagascar		x	x	Raimanana & Hoffmann 2014
Subg. <i>Anisemonoides</i>	<i>P. analameræ</i> Leandri	Madagascar	Madagascar		x	x	Raimanana & Hoffmann 2014
Subg. <i>Anisemonoides</i>	<i>P. ankarana</i> Leandri	Madagascar	Madagascar		x	x	Raimanana & Hoffmann 2014
Subg. <i>Anisemonoides</i>	<i>P. bernangidiensis</i> Raim.	Madagascar	Madagascar		x	x	Raimanana & Hoffmann 2014

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Anisnemoides</i>	<i>P. bernierianus</i> Baill.	Madagascar, Mozambique	Tropical Africa		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. bojerianus</i> (Baill.) Müll.Arg.	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. gordonii</i> Ralim. & Petra Hoffm.	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. goudotianus</i> (Baill.) Müll.Arg.	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. humbertianus</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. iratsiensis</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. isomonensis</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. mananensis</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. mantadiensis</i> Ralim. & Petra Hoffm.	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. multiflorus</i> Poir.	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. obdeltophyllus</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisnemoides</i>	<i>P. vakinanankatrae</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2011
Subg. <i>Betsileani</i>	<i>P. bathianus</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2011
Subg. <i>Betsileani</i>	<i>P. betsileanus</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2011
Subg. <i>Betsileani</i>	<i>P. philippoides</i> Leandri	Madagascar	Madagascar		x	x	Ralimanana & Hoffmann 2011
Subg. <i>Ceramanthus</i> ?	<i>P. binhi</i> Thin	Vietnam	Mainland Asia			~	Thin 2007
Subg. <i>Ceramanthus</i> sect. <i>Anislobium</i>	<i>P. kerstingii</i> Jean F.Brunel	Benin, Ghana, Guinea, Ivory Coast, Sierra Leone, Togo	Tropical Africa		x	x	Brunel & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Anislobium</i>	<i>P. welwitschianus</i> Müll.Arg.	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brunel & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Bivia</i>	<i>P. petraeus</i> A. Chev. & Belle ex Belle	Sierra Leone, Liberia, Guinea	Tropical Africa		x	x	Brunel & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Ceramanthus</i>	<i>P. albidiscus</i> (Ridl.) Aity Shaw	Indonesia (Java), Thailand	Mainland Asia		x	x	Brunel & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Clytopsis</i>	<i>P. cochinchinensis</i> Spreng.	Cambodia, China, India, Lao People's Democratic Republic, Vietnam	Mainland Asia	x	x	x	Punt 1972, Brunel & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Ebolowani</i>	<i>P. letouzeyanus</i> Jean F.Brunel	Cameroon	Tropical Africa		x	x	Brunel & Roux 1985, Brunel 1987
Subg. <i>Conami</i> ?	<i>P. albidiscus</i> Paul G. Wilson	Mexico	North America				Wilson 1962
Subg. <i>Conami</i> sect. <i>Apolepsis</i>	<i>P. orbiculatus</i> Rich.	Bolivia, Brazil, Colombia, French Guiana, Paraguay, Peru, Surinam, Trinidad, Venezuela	Tropical South America		x	x	Punt 1987, Webster & Carpenter 2002
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. attenuatus</i> Miq.	Brazil, Colombia, Ecuador, French Guiana, Peru, Venezuela	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. aweensis</i> G.L. Webster	Ecuador	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. bernardii</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. callejasii</i> G.L. Webster	Colombia	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. maderiensis</i> Croizat	Brazil, Colombia	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. manausensis</i> W.A. Rodrigues	Brazil	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. puniti</i> G.L. Webster	Brazil	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. skutchii</i> Standl.	Costa Rica	West Indies		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaleanthus</i>	<i>P. valleanus</i> Croizat	Colombia	Tropical South America		x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. acuminatus</i> Vahl	Argentina, Brazil, Caribbean, French Guiana, Mexico, Venezuela	Central America	x	x	x	Webster 2001b
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. anisobolus</i> Müll.Arg.	Colombia, Costa Rica, Ecuador, Nicaragua, Panama, Peru	Tropical South America		x	x	Webster 2003
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. brasiliensis</i> (Aubl.) Poir	Brazil, Guyanas, Peru, Surinam, Venezuela, Cayman Islands	Tropical South America		x	x	Webster 2003
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. caymanensis</i> G.L. Webster & Proctor	Brazil, Colombia, Costa Rica, Ecuador, Mexico, Peru, Venezuela	West Indies		x	x	Webster 2003
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. graveolens</i> Kunth	Venezuela	Tropical South America	x	x	x	Webster 2003
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. liesneri</i> G.L. Webster	Costa Rica, Mexico	Tropical South America		x	x	Webster 2001b
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. mcvaughii</i> G.L. Webster	Venezuela	Central America		x	x	Webster 2003
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. meridensis</i> G.L. Webster	Costa Rica, El Salvador, Mexico	Tropical South America		x	x	Webster 2001b
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. mocinianus</i> Baill.	Peru	Central America		x	x	Webster 2003
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. pavonius</i> Baill.	Cuba	Tropical South America		x	x	Webster 2003
Subg. <i>Cyclanthera</i> sect. <i>Callitrichoides</i>	<i>P. abditus</i> Müll.Arg.	Haiti	West Indies		x	x	Webster 1957
Subg. <i>Cyclanthera</i> sect. <i>Cyclanthera</i>	<i>P. abditus</i> G.L. Webster	Dominican Republic, Haiti	West Indies		x	x	Webster 1957
Subg. <i>Cyclanthera</i> sect. <i>Cyclanthera</i>	<i>P. berterianus</i> Müll.Arg.	Cuba, Dominican Republic, Haiti	West Indies		x	x	Webster 2002b
Subg. <i>Cyclanthera</i> sect. <i>Cyclanthera</i>	<i>P. lindenianus</i> Baill.	Cuba, Haiti	West Indies		x	x	Webster 1957
Subg. <i>Cyclanthera</i> sect. <i>Cyclanthera</i>	<i>P. tenuicaulis</i> Müll.Arg.	India	West Indies		x	x	Webster 1957
Subg. <i>Embliba</i>	<i>P. anamalyanus</i> (P. Balakr. & N.G. Nair	India	Mainland Asia	x	x	x	Pagare et al. 2016
Subg. <i>Embliba</i>	<i>P. andamanicus</i> N.P. Balakr.	Cambodia	Mainland Asia		x	x	Balakrishnan & Nair 1982
Subg. <i>Embliba</i>	<i>P. bokorensis</i> Tagane	India	Mainland Asia		x	x	
Subg. <i>Embliba</i>	<i>P. collinsae</i> Craib	Lao People's Democratic Republic, Thailand, Vietnam	Mainland Asia		x	x	Aity Shaw 1974
Subg. <i>Embliba</i>	<i>P. dealbatus</i> Alston	Sri Lanka	Indian Ocean		x	x	Alston 1931
Subg. <i>Embliba</i>	<i>P. hasskarianus</i> Müll.Arg.	Indonesia (Java)	Malaysia		x	x	Webster & Carpenter 2008
Subg. <i>Embliba</i>	<i>P. kerrii</i> Aity Shaw	Thailand	Mainland Asia				Aity Shaw 1969
Subg. <i>Embliba</i>	<i>P. pacoensis</i> Thin	Vietnam	Mainland Asia			x	Thin 2007

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Emblica</i> ?	<i>P. praetervivus</i> Müll.Arg.	Bhutan, China, India, Myanmar	Mainland Asia				
Subg. <i>Emblica</i> ?	<i>P. prainianus</i> Collett & Hems.	Myanmar	Mainland Asia		~		Collett & Hemsley 1890
Subg. <i>Emblica</i>	<i>P. rheophyticus</i> M.G. Gilbert & P.T.Li	China	Mainland Asia		~		
Subg. <i>Emblica</i> ?	<i>P. scabrifolius</i> Hook.f.	India	Mainland Asia			x	Hooker 1890
Subg. <i>Emblica</i> sect. <i>Botryoides</i>	<i>P. baebobotryoides</i> Wall.	India, Myanmar, People's Republic of Bangladesh	Mainland Asia		x	x	Brunel 1987
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. albizzoides</i> (Kurz) Hook.	India, Myanmar	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. angkorensis</i> Belle	Cambodia	Tropical Africa		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. columnaris</i> Müll.Arg.	Myanmar, Thailand	Mainland Asia	x	x	x	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. emblica</i> L.	Mainland Asia, Malaysia	Mainland Asia	x	x	x	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. gedrayi</i> Belle	Lao People's Democratic Republic, Thailand, Vietnam	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. harmandi</i> Belle	Cambodia	Tropical Africa		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. indofischeri</i> Bennet	India	Mainland Asia		x	x	Ganesan 2003
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. lawii</i> J. Graham	Taiwan	Mainland Asia		x	x	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. nilinani</i> Hayata	Peninsular Malaysia, Indonesia (Sumatra), Thailand	Mainland Asia		x	x	Hayata 1904
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. oxyphyllus</i> Miq.	China (Hainan), Indonesia (Borneo), Lao People's Democratic Republic, Myanmar, Peninsular Malaysia, Thailand, Vietnam	Mainland Asia	x	x	x	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. pachyphyllus</i> Müll.Arg.	Peninsular Malaysia	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. pectinatus</i> Hook.f.	Vietnam	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. phuquocensis</i> Belle	India, Sri Lanka, Thailand	Mainland Asia		x	x	Belle 1927
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. polyphyllus</i> Willd.	Myanmar	Mainland Asia	x	x	x	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. pomiferus</i> Hook.f.	Brazil	Tropical South America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. aracaensis</i> G.L. Webster ex Secco & A. Rosário	Venezuela	Tropical South America		x	x	Secco & De Rosário 2015
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. carrenol</i> Steyerem.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. chimantae</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. dulidae</i> Gleason	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. jablonskianus</i> Steyerem. & Luteyn	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. juaensis</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. lediformis</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. longistylus</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. maguirei</i> Jabl.	Venezuela	Tropical South America		x	x	Webster & Carpenter 2008
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. majus</i> Steyerem.	Venezuela	Tropical South America		x	x	Webster 1957, sometimes referenced as <i>P. major</i> Steyerem.
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. miruifolius</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. mysinites</i> Kunth	Colombia, Guyana, Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. neblinae</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. obfalcatus</i> Lasser & Maguire	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. paraquensis</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. pycnophyllus</i> Müll.Arg.	Guyana, Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. strabilaceus</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. subapicalis</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. tepicola</i> Steyerem.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. vaccinifolius</i> (Müll.Arg.) Müll.Arg.	Guyana, Venezuela	Tropical South America		x	x	Webster & Carpenter 2008
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. vertuani</i> Jabl.	Venezuela	Tropical South America		x	x	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglochidion</i>	<i>P. websterianus</i> Steyerem.	Brazil	Tropical South America		x	x	Webster & Carpenter 2002
Subg. <i>Emblica</i> sect. <i>Phytocladus</i>	<i>P. cuatrecasasianus</i> G.L. Webster	Colombia to Peru	Tropical South America		x	x	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Phytocladus</i>	<i>P. popayanensis</i> Pax	Colombia	Tropical South America		x	x	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Phytocladus</i>	<i>P. ruscifolius</i> Müll.Arg.	Colombia	Tropical South America		x	x	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Phytocladus</i>	<i>P. sponifolius</i> Müll.Arg.	Colombia, Ecuador	Tropical South America		x	x	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Phytocladus</i>	<i>P. symphoricarpos</i> Kunth	Colombia	Tropical South America		x	x	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Phytocladus</i>	<i>P. valerii</i> Standl.	Costa Rica	Central America		x	x	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Urnaria</i>	<i>P. arenarius</i> Belle	Vietnam	Mainland Asia		x	x	Raimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urnaria</i>	<i>P. benguetensis</i> C.B. Rob.	Philippines	Malasia		x	x	Raimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urnaria</i>	<i>P. chamaepeuce</i> Ridl.	Indonesia (Borneo incl. Sabah), Peninsular Malaysia, Thailand, Vietnam	Mainland Asia		x	x	subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urnaria</i>	<i>P. chayamaritiae</i> Chantar. & Kantachot	Thailand	Mainland Asia		x	x	Raimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urnaria</i>	<i>P. erythrorichus</i> C.B. Rob.	Philippines	Malasia		x	x	Raimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urnaria</i>	<i>P. marianus</i> Müll.Arg.	Marianas	Malasia		x	x	Robinson 1911, Chen et al. 2009
							Raimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Embllica</i> sect. <i>Urnaria</i>	<i>P. petelotii</i> Croizat	Vietnam	Mainland Asia		x	x	Thin 2007
Subg. <i>Embllica</i> sect. <i>Urnaria</i>	<i>P. societatis</i> Müll.Arg.	Cook Islands, French Polynesia	Pacific		x	x	Ralimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Embllica</i> sect. <i>Urnaria</i>	<i>P. submarginalis</i> Airy Shaw	Indonesia, Flores	Malasia		x	x	Ralimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Embllica</i> sect. <i>Urnaria</i>	<i>P. sulcatus</i> J.T.Hunter & J.J.Bruhl	Australia (Queensland)	Australia		x	x	Ralimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Embllica</i> sect. <i>Urnaria</i>	<i>P. thali</i> Thin	Vietnam	Mainland Asia		x	x	Thin 2007
Subg. <i>Embllica</i> sect. <i>Urnaria</i>	<i>P. trunghi</i> Thin	Vietnam	Mainland Asia		x	x	Thin 2007
Subg. <i>Embllica</i> sect. <i>Urnaria</i>	<i>P. tsarongensis</i> W.W.Sm.	China	Mainland Asia		~		Smith 1921
Subg. <i>Embllica</i> sect. <i>Urnaria</i> subsect. <i>Benguetensis</i>	<i>P. coi</i> M.J.Wu, Ferreras & Y.J.Chen	Philippines	Malasia		x	x	Wu et al. 2017
Subg. <i>Embllica</i> sect. <i>Urnaria</i> subsect. <i>Urnaria</i>	<i>P. embergeri</i> Halcour & Rossignol	China to Vietnam and Taiwan	Mainland Asia		x	x	Ralimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Embllica</i> sect. <i>Urnaria</i> subsect. <i>Urnaria</i>	<i>P. urnaria</i> L.	Pantropical: origin Asia	Pantropical	x	x	x	Ralimanana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Eriococcus</i>	<i>P. anabaptizatus</i> Müll.Arg.				x	x	Müller 1866
Subg. <i>Eriococcus</i>	<i>P. balakrishnanii</i> Sunil, K.M.P.Kumar & Naveen Kum.	Sri Lanka India	Malasia Mainland Asia		x	x	Sunil et al. 2016
Subg. <i>Eriococcus</i>	<i>P. chandrabosei</i> Govaerts & Radcl.-Sm.	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i>	<i>P. chantrieri</i> André	Vietnam	Mainland Asia		x	x	
Subg. <i>Eriococcus</i>	<i>P. fimbriatylx</i> P.T.Li	China	Mainland Asia		x	x	Li 1987a
Subg. <i>Eriococcus</i>	<i>P. franchetianus</i> H.Lév.	China	Mainland Asia		x	x	Li 1987a
Subg. <i>Eriococcus</i>	<i>P. gageanus</i> (Gamble) M.Mohanani	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i> ?	<i>P. macgregorii</i> C.B.Rob.	Philippines	Malasia		x	x	Robinson 1911
Subg. <i>Eriococcus</i>	<i>P. muscosus</i> Ridl.	Peninsular Malaysia	Mainland Asia		x	x	Ridley 1909
Subg. <i>Eriococcus</i>	<i>P. rangachariarii</i> Murugan, Kabeer & G.V.S.Murthy	India	Mainland Asia		x	x	
Subg. <i>Eriococcus</i>	<i>P. singampattianus</i> (Sebast. & A.N.Henry) Kumari & Chandrab.	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i>	<i>P. talbotii</i> Sedgw.	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i>	<i>P. tetrandrus</i> Roxb.	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i> sect. <i>Embllicastrum</i>	<i>P. balgooyi</i> Petra Hoffm. & A.J.M.Baker	India, People's Republic of Bangladesh	Mainland Asia		x	x	Hoffmann et al. 2003
Subg. <i>Eriococcus</i> sect. <i>Embllicastrum</i>	<i>P. eriococcus</i> sect. <i>Embllicastrum</i>	Malaysia (Borneo), Philippines	Malasia		x	x	
Subg. <i>Eriococcus</i> sect. <i>Embllicastrum</i>	<i>P. curranii</i> C.B.Rob.	Philippines	Malasia		x	x	Robinson 1909
Subg. <i>Eriococcus</i> sect. <i>Embllicastrum</i>	<i>P. lamprophyllus</i> Müll.Arg.	Australia, Indonesia (Java)	Australia, Malasia		x	x	Müller 1866
Subg. <i>Eriococcus</i> sect. <i>Embllicastrum</i>	<i>P. robinsonii</i> Merr.	Philippines	Malasia		x	x	Merrill 1912
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. watsonii</i> Airy Shaw	Peninsular Malaysia	Mainland Asia		x	x	Airy Shaw 1971
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. acutissimus</i> Miq.	Indonesia (Java, Sumatra), Thailand	Mainland Asia		x	x	Airy Shaw 1969
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. fangchengensis</i> P.T.Li	China	Mainland Asia		x	x	Li 1987a
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. guangdongensis</i> P.T.Li	China	Mainland Asia		x	x	Li 1987a
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. kamptensis</i> Belle	Cambodia, Vietnam	Tropical Africa		x	x	Thin 2007
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. nanellus</i> P.T.Li	Hainan	Mainland Asia		x	x	Li 1987a
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. spirrei</i> Belle	Lao People's Democratic Republic	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. acutus</i> Wall. ex Müll.Arg.	Malaysia	Mainland Asia		x	x	Müller 1866
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. armstrongii</i> Benth.	Australia (Northern Territory)	?Australia		~		
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. baillonianus</i> Müll.Arg.	Sri Lanka	Malasia		x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. balansae</i> Belle	Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. beddomei</i> (Gamble) M.Mohanani	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. birmanicus</i> Müll.Arg.	Myanmar	Mainland Asia		x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. blancoanus</i> Müll.Arg.	Philippines	Malasia		x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. bodinieri</i> (H.Lév.) Rehder	China	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. chekiangensis</i> M.Schmid	China	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. chereus</i> Müll.Arg.	Sri Lanka	Malasia	x	x	x	Müller 1866
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. elegans</i> Wall.	Myanmar, Thailand, Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. evrardii</i> Belle	Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. filicifolius</i> Gage	Peninsular Malaysia	Mainland Asia		x	x	Gage 1914
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. fimbriatus</i> (Wight) Müll.Arg.	India	Mainland Asia		x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. forrestii</i> W.W.Sm.	China	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcodes</i>	<i>P. glabrescens</i> (Miq.) Müll.Arg.	Lesser Sunda Islands	Malasia		x	x	Müller 1863

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. gomphocarpus</i> Hook. f.	India, Myanmar, Peninsular Malaysia	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. gracilipes</i> (Miq.) Müll.Arg.	China, Indonesia, Lao People's Democratic Republic, Malaysia, Thailand, Vietnam	Mainland Asia		x	x	Airy Shaw 1975
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. greenii</i> Elmer	Philippines	Malesia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. hainanensis</i> Merr.	China	Mainland Asia		x	x	Merrill 1935
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. heyneanus</i> Müll.Arg.	India	Mainland Asia		x	x	Müller 1963
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. insulensis</i> Belle	Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. kinabaluensis</i> Airy Shaw	Borneo	Malesia		x	x	Airy Shaw 1974, 1975
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. lechiiatus</i> C.B.Rob.	Philippines	Malesia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. leptoclados</i> Benth.	China	Mainland Asia		x	x	Müller 1963
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. leyensis</i> Elmer	Philippines	Malesia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. macrocalyx</i> Müll.Arg.	India	Mainland Asia		x	x	Müller 1963
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. megacarpus</i> (Gamble) Kumari & Chandrab.	Philippines	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. megalanthus</i> C.B.Rob.	Philippines	Malesia		x	x	Chen et al. 2009
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. mindorensis</i> C.B.Rob.	Philippines	Malesia		x	x	Chen et al. 2009
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. muriculatus</i> J.J. Sm.	Indonesia (Java)	Malesia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. oreophilus</i> Müll.Arg.	Sri Lanka	Malesia		x	x	Müller 1963
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. pileyi</i> Belle	Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. pulcher</i> Wall. ex Müll.Arg.	China, Indonesia, Lao People's Democratic Republic, Malaysia, Thailand	Mainland Asia	x	x	x	Airy Shaw 1975
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. pulchroides</i> Belle	Malaysia, Thailand	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. rubescens</i> Belle	Cambodia, Vietnam	Mainland Asia	x	x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. rubristipulus</i> Govaerts & Radcl.-Sm.	Vietnam	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. sibuyanensis</i> Elmer	Philippines	Malesia		x	x	Chen et al. 2009
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. sikkimensis</i> Müll.Arg.	People's Republic of Bangladesh	Mainland Asia		x	x	Müller 1966
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. singalensis</i> (Miq.) Müll.Arg.	Indonesia (Sumatra)	Malesia		x	x	Müller 1963
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. sootepensis</i> Craib	China	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. stipularis</i> Merr.	Philippines	Malesia		x	x	Robinson 1909
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. taxodifolius</i> Belle	Cambodia, China, Thailand, Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. trichosporus</i> Adelb.	Indonesia (Celebes, Java)	Malesia		x	x	Backer 1945
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. triplolobus</i> C.B.Rob.	Philippines	Malesia		x	x	Robinson 1909
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. wightianus</i> Müll.Arg.	India	Mainland Asia		x	x	Müller 1963
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. rhatrangensis</i> Belle	Vietnam	Mainland Asia		x	x	Brunel 1987
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. ruber</i> (Lour.) Spreng.	China, Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Nymphanthus</i>	<i>P. touranensis</i> Belle	Vietnam	Mainland Asia		x	x	Belle 1927
Subg. <i>Eriococcus</i> sect. <i>Scepasma</i>	<i>P. buxifolius</i> (Blume) Müll.Arg.	Indonesia (Borneo, Java)	Malesia		x	x	Airy Shaw 1975
Subg. <i>Eriococcus</i> sect. <i>Scepasma</i>	<i>P. palauensis</i> Hosok.	Caroline Islands	Malesia		x	x	
Subg. <i>Gomphidium</i>	<i>P. ankaratrae</i> (Leandri) Petra Hoffm. & McPherson	Madagascar	Madagascar		x	x	Raimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. aouprieensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. apiculatus</i> Merr.	Philippines	Malesia		x	x	Merrill 1920
Subg. <i>Gomphidium</i>	<i>P. baracuanensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. boguensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. carlotae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. cherrieri</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. ciliaris</i> Baill.	New Caledonia	New Caledonia		x	x	Guillaumin 1927
Subg. <i>Gomphidium</i>	<i>P. cordatus</i> C.B.Rob.	Philippines	Malesia		x	x	Robinson 1909
Subg. <i>Gomphidium</i>	<i>P. dorofheae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. dumbearensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. favieri</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. fractiflexus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. golonensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. humbertii</i> (Leandri) Petra Hoffm. & McPherson	Madagascar	Madagascar	x	x	x	Raimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. koumacensis</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. lichenisilvae</i> (Leandri ex Humbert) Petra Hoffm. & McPherson	Madagascar	Madagascar		x	x	Raimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. longerramosus</i> Guillaumin ex M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. lucilae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Gomphidium</i>	<i>P. mandjelaensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. marojei</i> (Leandri) Petra Hoffm. & McPherson	Madagascar	Madagascar	x	x	x	Rallimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. memoayaensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. meuiensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. riteris</i> M. Schmid	Madagascar	Madagascar		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. oreichitius</i> Leandri	Madagascar	Madagascar		x	x	Rallimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. ovatifolius</i> J.J. Sm.	Moluccas	Malesia		x	x	Smith 1920
Subg. <i>Gomphidium</i>	<i>P. parainduratus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. parangoyensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. peltatus</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. perrieri</i> (Leandri) Petra Hoffm. & McPherson	Madagascar	Madagascar		x	x	Rallimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. pronyensis</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. pseudoirichopodus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. rozenae</i> M. Schmid	New Caledonia	Pacific		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. sambiranensis</i> Leandri	Madagascar	Madagascar		x	x	Rallimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. sessilis</i> Warb.	New Guinea	Malesia		~	x	Warburg 1991
Subg. <i>Gomphidium</i>	<i>P. stultitiae</i> Airy Shaw	Irian Jaya	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i>	<i>P. tabularis</i> Airy Shaw	Papua New Guinea	Malesia		x	x	Webster 2001 Synopsis of <i>Gomphidium</i>
Subg. <i>Gomphidium</i>	<i>P. tixieri</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. trichopodus</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. umbrocola</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. unifoliolatus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. valeriae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. virgulitramus</i> Däniker	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. vulcani</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. yvettae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. baladensis</i> Baill.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. aeneus</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. artensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. brassii</i> C.T. White	Australia (Queensland)	Australia		x	x	Webster 2001 Synopsis of <i>Gomphidium</i>
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. deciduiramus</i> Däniker	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. franci</i> Guillaumin	New Caledonia	New Caledonia		x	x	Guillaumin 1927
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. guillauminii</i> Däniker	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. hypospodius</i> F. Muell.	Australia (Queensland)	Australia		x	x	Webster 2001 Synopsis of <i>Gomphidium</i>
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. ligustifolius</i> S. Moore	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. maritimus</i> J.J. Sm.	Irian Jaya	Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. ramosii</i> Quisumb. & Merr.	Philippines	Malesia		x	x	Chen et al. 2009 pollen
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. serpentinus</i> S. Moore	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. sylvicola</i> S. Moore	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. tireliae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. verrucicaulis</i> Airy Shaw	Bismarck Archipel, Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. bupleuroides</i> Baill.	New Caledonia	New Caledonia		x	x	Müller 1866, McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. casearoides</i> S. Moore	New Caledonia	New Caledonia		x	x	Rendle et al. 1921, McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. comptonii</i> S. Moore	New Caledonia	New Caledonia		x	x	Rendle et al. 1921, McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. conjugatus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. dracunculoides</i> Baill.	New Caledonia	New Caledonia		x	x	Rendle et al. 1921, McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. gneissicus</i> S. Moore	New Caledonia	New Caledonia		x	x	Rendle et al. 1921, McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. loranthoides</i> Baill.	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. macrochorion</i> Baill.	New Caledonia	New Caledonia	x	x	x	Lobreau-Callen et al. 1988
subsect. <i>Eleutherogynium</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>		New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. margaretae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. montrouzieri</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. moratii</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. ouveanus</i> Däniker	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. rhodocladus</i> S. Moore	New Caledonia	New Caledonia		x	x	Rendle et al. 1921
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. salicifolius</i> Baill.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. sarasinii</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. torrentium</i> Müll. Arg.	New Caledonia	New Caledonia		x	x	Müller 1866, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. vesperillo</i> Baill.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i> subsect. <i>Eleutherogynium</i>	<i>P. yaouensis</i> Schltr.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Calodictyon</i>	<i>P. tuerkheimii</i> G.L. Webster	Guatemala	Central America		x	x	Webster 1967a, Webster & Carpenter 2008
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. achiracifolius</i> Aity Shaw & G.L. Webster	Papua New Guinea	Malaysia		x	x	Aity Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. amieuensis</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. ardisianthus</i> Aity Shaw & G.L. Webster	Irian Jaya	Malaysia		x	x	Aity Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. balansaeanus</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. bourgeadsi</i> Baill.	Irian Jaya	Malaysia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. buxoides</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. calicula</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. castus</i> S. Moore	New Caledonia	New Caledonia		x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. caudatus</i> Müll. Arg.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. charmaecerasus</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. cornutus</i> Baill.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. dzumacensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. frodinii</i> Aity Shaw	Papua New Guinea	Malaysia		x	x	Aity Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. gladioloides</i> Elmer	Philippines	Malaysia		x	x	Chen et al. 2009 pollen
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. helenae</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. heterodoxus</i> Müll. Arg.	Fiji	Pacific		x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. houalouensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. jaffrei</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. koralamboensis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. kostermansii</i> Aity Shaw	Irian Jaya	Malaysia		x	x	Aity Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. kouaouensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. macphersonii</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. manganotii</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. montis-fontium</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. moorei</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. mouensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. ringaensis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	Müller 1866
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. pancherianus</i> Baill.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. paucitapalus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. petchikaraensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. pinjenensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. polygynus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. poueboensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. poumensis</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. pterocladus</i> S. Moore	New Caledonia	New Caledonia		x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. quintuplinervis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. rupi-insularis</i> Hosok.	Caroline Isl.	Malaysia		x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. sauropodoides</i> Aity Shaw	Australia (Queensland)	Australia		x	x	McPherson & Schmid 1991

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. securinegoides</i> Merr.	Philippines	Malesia		x	x	Chen et al. 2009 pollen
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. smithianus</i> G.L. Webster	Fiji	Malesia		x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. stenophyllum</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. tangensis</i> M.Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. tenuipedicellatus</i> M.Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. tielaghierensis</i> M.Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. triepalus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. uricensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. veillonii</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. avanguierensis</i> M.Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
subsect. <i>Physoglochidion</i>	<i>P. faguetti</i> Baill.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. joubertii</i> Vieill. ex Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
subsect. <i>Physoglochidion</i>	<i>P. koghiensis</i> Guillaumin	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. natoensis</i> M.Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
subsect. <i>Physoglochidion</i>	<i>P. nothii</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. pilifer</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
subsect. <i>Physoglochidion</i>	<i>P. pindalensis</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. platycalyx</i> Müll. Arg.	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
subsect. <i>Physoglochidion</i>	<i>P. stipitatus</i> M. Schmid	New Caledonia	New Caledonia		x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. fimbriatipetalus</i> Guillaumin	Vanuatu	Pacific		x	x	Guillaumin 1937, but see Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Leptonema</i>	<i>P. karalensis</i> Baill.	New Caledonia	New Caledonia		x	x	Webster & Carpenter 2008
Subg. <i>Gomphidium</i> sect. <i>Leptonema</i>	<i>P. actephilifolius</i> J.J. Sm.	Irian Jaya	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. amicum</i> G.L. Webster	Tonga	Pacific		x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. apranostylus</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. clamboides</i> (F. Muell.) Diels	Australia (Queensland), Papua New Guinea	Australia, Malesia	x	x	x	Smith 1912
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. cuscufflorus</i> S. Moore	Australia (Queensland), Papua New Guinea	Australia, Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. effusus</i> S. Moore	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. finschii</i> K. Schum.	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. flaviflorus</i> Airy Shaw	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. gellerupii</i> J.J. Sm.	Papua New Guinea	Malesia		x	x	Smith 1912
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. insulae-japen</i> Airy Shaw	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. merinthopodus</i> Diels	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. papuanus</i> Gage	Irian Jaya	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. pergracilis</i> Gillespie	Fiji	Malesia		x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. polio-borealis</i> Airy Shaw	Irian Jaya	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. praelongipes</i> Airy Shaw & G.L. Webster	Australia (Queensland), Papua New Guinea	Australia, Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. pullenii</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. rheophilus</i> Airy Shaw	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. rosseensis</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. rubriflorus</i> J.J. Sm.	Papua New Guinea	Malesia		x	x	Smith 1912
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. rufuschaneyi</i> Welzen, R.W. Bouman & Ent	Malaysia (Borneo)	Malesia		x	x	Bouman et al. 2018
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. salomonis</i> Airy Shaw	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. tagulae</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. tenuiflorus</i> J.J. Sm.	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. utricularis</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. warburgii</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymania</i>	<i>P. wilkesianus</i> Müll. Arg.	Fiji	Malesia		x	x	Webster 1986
Subg. <i>Isocladus</i>	<i>P. maderaspatensis</i> L.	Palaeotropics	Tropical Africa, Asia	x	x	x	Rallimanana & Hoffmann 2011
Subg. <i>Kirganelia</i> ?	<i>P. caudatifolius</i> Merr.	Philippines	Malesia		x	x	Merrill 1926

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Kirganella</i> ?	<i>P. dumetosus</i> Poir.	Philippines	Malesia				
Subg. <i>Kirganella</i>	<i>P. keyensis</i> Warb.	Papua New Guinea	Malesia		x	x	Warburg 1891
Subg. <i>Kirganella</i>	<i>P. martinii</i> Radcl.-Sm.	Zambia	Tropical Africa	x	x	x	Radcliffe-Smith 1996
Subg. <i>Kirganella</i>	<i>P. oligospermus</i> Hayata	Taiwan	Malesia		x	x	Li 1987
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. angavensis</i> Leandri	Madagascar	Madagascar		x	x	Brunel 1987a
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. archboldianus</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. baccatus</i> F. Muell. ex Benth.	Australia	Australia		x	x	Barrett & Telford 2015
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. caesiatus</i> Airy Shaw & G.L. Webster	Papua New Guinea	Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. casticum</i> P. Willenmet	Madagascar	Madagascar	x	x	x	Müller 1866
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. ciccoides</i> Müll. Arg.	Australia, Papua New Guinea	Australia, Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. deplanchei</i> Müll. Arg.	New Caledonia	New Caledonia		x	x	Müller 1863
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. fuscoluridus</i> Müll. Arg.	Madagascar	Madagascar	x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. glaucinus</i> (Miq.) Müll. Arg.	Indonesia (Sumatra)	Malesia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. malianensis</i> Leandri	Madagascar	Madagascar	x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. microcarpus</i> (Benth.) Müll. Arg.	India, Indonesia, Myanmar, Thailand	Mainland Asia, Malesia	x	x	x	Luo et al. 2011
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. muellerianus</i> (Kuntze) Exell	Angola, Benin, Cameroon, Democratic Republic of the Congo, Gabon, Guinea, Ivory Coast, Liberia, Nigeria, South Africa, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. novae-hollandiae</i> Müll. Arg.	Australia (Queensland), Papua New Guinea	Australia, Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. ovalifolius</i> Forssk.	Angola, Cameroon, Democratic Republic of the Congo, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Uganda, United Republic of Tanzania, Yemen	Tropical Africa		x	x	Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. pervilleanus</i> (Baill.) Müll. Arg.	Comoros, Madagascar	Madagascar	x	x	x	Rallmanana & Hoffmann 2011: subg. <i>Kirganella</i> , probably sect. <i>Anisoneuma</i>
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. polyspermus</i> Schumacher.	Cameroon, Congo, Gabon, Togo	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. reticulatus</i> Poir.	Bhutan, China, India, Indonesia, Myanmar, Papua New Guinea, Peninsular Malaysia, People's Republic of Bangladesh, Philippines, Thailand	Mainland Asia, Malesia	x	x	x	Airy Shaw 1975, see Luo et al. 2011
Subg. <i>Kirganella</i> sect. <i>Anisoneuma</i>	<i>P. seyrigii</i> Leandri	Madagascar	Madagascar		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Brazzeani</i>	<i>P. dinklagei</i> Pax	Cameroon, Democratic Republic of the Congo, Gabon, Republic of Equatorial Guinea	Tropical Africa		x	x	Meeuwis & Punt 1983
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. colutsoides</i> Baill.	Madagascar	Madagascar		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. kidna</i> Challen & Petra Hoffm.	Cameroon	Madagascar		x	x	Challen et al. 2011
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. orientalis</i> (Craib) Airy Shaw	Thailand	Tropical Africa		x	x	Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. pinnatus</i> (Wight) G.L. Webster	Kenya, Malawi, Mozambique, United Republic of Tanzania, Zimbabwe	Tropical Africa	x	x	x	Webster 1957
Subg. <i>Kirganella</i> sect. <i>Cicca</i>	<i>P. ibonenensis</i> Rusby	Bolivia	Tropical South America		x	x	Rusby 1927
Subg. <i>Kirganella</i> sect. <i>Cicca</i>	<i>P. pseudonobilis</i> Rusby	Bolivia	Tropical South America		x	x	Rusby 1927
Subg. <i>Kirganella</i> sect. <i>Cicca</i> subsect. <i>Aporosella</i>	<i>P. chacoensis</i> Morong	Argentina, Brazil, Paraguay, Bolivia	Tropical South America	x	x	x	Webster 2001b
Subg. <i>Kirganella</i> sect. <i>Cicca</i> subsect. <i>Aporosella</i>	<i>P. elisae</i> Urb.	Colombia, Mexico, Guyana, Trinidad & Tobago	North America, Tropical South America, West Indies		x	x	Webster 2001b
Subg. <i>Kirganella</i> sect. <i>Cicca</i> subsect. <i>Cheramela</i>	<i>P. acidus</i> Skeels	Pantropical	Pantropical	x	x	x	Webster 2001b
Subg. <i>Kirganella</i> sect. <i>Ciccopsis</i>	<i>P. pseudocicca</i> Griseb.	Cuba	West Indies		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i> , but see Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Hemicicca</i>	<i>P. flexuosus</i> (Siebold & Zucc.) Müll. Arg.	China, Japan	Mainland Asia	x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i> , but see Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Omphacodopsis</i>	<i>P. inflatus</i> Hutch.	Ghana, Kenya, Mozambique, South Africa, Uganda, United Republic of Tanzania, Zambia, Zimbabwe	Tropical Africa		x	x	<i>Flueggeopsis</i> Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Omphacodopsis</i>	<i>P. physocarpus</i> Müll. Arg.	Benin, Cameroon, Congo, Democratic Republic of the Congo, Gabon, United Republic of Tanzania, Zambia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. cedrelifolius</i> Verdc.	South Africa	Tropical Africa		x	x	Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. engleri</i> Pax	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. polyanthus</i> Pax	Cameroon, Central African Republic, Congo, Democratic Republic of the Congo, South Africa, Zambia	Tropical Africa		x	x	Brunel 1987, but see Breteleir 2012
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. profusus</i> N.E. Br.	Cameroon, Ghana, Ivory Coast, Liberia	Tropical Africa		x	x	Brunel 1987, but check <i>P. wildemanni</i>
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. schliebenii</i> Mansf. ex Radcl.-Sm.	United Republic of Tanzania	Tropical Africa		x	x	Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Pseudomenarda</i>	<i>P. purpureus</i> Müll. Arg.	Angola, Namibia	Tropical Africa		x	x	Müller 1866

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Kirganelia</i> sect. <i>Pseudomenarda</i>	<i>P. somaliensis</i> Hutch.	Kenya, Somalia	Tropical Africa		x	x	Brunel 1987
Subg. <i>Macraea</i>	<i>P. alpestris</i> Beille	Benin, Ivory Coast, Liberia, Republic of Equatorial Guinea, Sierra Leone	Tropical Africa		x	x	Brunel 1987
Subg. <i>Macraea</i>	<i>P. aoraiensis</i> Nadeaud	Tahiti	Pacific		x		Wagner & Lorence 2011
Subg. <i>Macraea</i>	<i>P. chrysanthus</i> Bail.	New Caledonia	New Caledonia	x	x	x	Lobreau-Callen et al. 1988
Subg. <i>Macraea</i>	<i>P. clarkii</i> Hook.f.	China, India, Myanmar, Nepal, Thailand, Vietnam	Mainland Asia	x	x	x	Luo et al. 2011
Subg. <i>Macraea</i>	<i>P. distichus</i> Hook. & Arn.	Hawaii	Pacific		x	x	Webster 1986
Subg. <i>Macraea</i>	<i>P. dumosus</i> C.B.Rob.	Philippines	Malesia		x	x	Robinson 1909
Subg. <i>Macraea</i>	<i>P. everettii</i> C.B.Rob.	Philippines	Malesia		x	x	Robinson 1909
Subg. <i>Macraea</i>	<i>P. exilis</i> S.Moore	Australia (Northern Territory)	Australia		x		
Subg. <i>Macraea</i>	<i>P. lanceifolius</i> Merr.	Philippines	Malesia		x	x	Chen et al. 2009
Subg. <i>Macraea</i>	<i>P. macraei</i> Müll.Arg.	India	Mainland Asia		x	x	Müller 1866
Subg. <i>Macraea</i>	<i>P. minutiflorus</i> F.Muell. ex Müll.Arg.	Australia	Australia		x	x	Barrett & Telford 2015
Subg. <i>Macraea</i>	<i>P. myrtilloides</i> (Wight) Müll.Arg.	Sri Lanka	Malesia		x	x	Brunel 1987
Subg. <i>Macraea</i>	<i>P. narayanswami</i> Gamble	India	Mainland Asia		x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Macraea</i>	<i>P. pacificus</i> Müll.Arg.	Marquesas	Pacific		x	x	Punt 1980
Subg. <i>Macraea</i>	<i>P. parayensis</i> Merr.	Philippines	Malesia		x	x	Merrill 1920, Wu et al. 2016
Subg. <i>Macraea</i>	<i>P. prominulatus</i> J.T.Hunter & J.J.Bruhl	Australia	Australia		x	x	Hunter & Bruhl 1997a
Subg. <i>Macraea</i>	<i>P. samarensis</i> Müll.Arg.	Philippines	Malesia		x	x	Chen et al. 2009
Subg. <i>Macraea</i> ?	<i>P. sarigapae</i> Chakrab. & M. Gangop.	India	Mainland Asia		x	x	Chakrabarty & Gangopadhyay 1993
Subg. <i>Macraea</i>	<i>P. tenuipes</i> C.B.Rob.	Philippines	Malesia		x	x	Robinson 1909, Wu et al. 2016
Subg. <i>Macraea</i>	<i>P. urceolatus</i> Bail.	Moorea, Raiatea, Tahiti	West Indies		x	x	Brunel 1987
Subg. <i>Macraea</i>	<i>P. ussuriensis</i> Rupr. & Maxim.	China, Japan, Korea, Russia	Mainland Asia	x	x	x	Brunel 1987
Subg. <i>Macraea</i>	<i>P. virgatus</i> G.Forst.	Australia, China, Fiji, India, Indonesia (Borneo), Lao People's Democratic Republic, Myanmar, New Caledonia, Papua New Guinea, Thailand, Vietnam	Australia, Mainland Asia, Pacific	x	x	x	Lobreau-Callen et al. 1988
Subg. <i>Macraea</i>	<i>P. wheeleri</i> G.L.Webster	Sri Lanka	Malesia	x	x	x	Webster 1995
Subg. <i>Macraea</i>	<i>P. womersleyi</i> Airy Shaw & G.L.Webster	Papua New Guinea	Malesia		x	x	Webster & Airy Shaw 1971
Subg. <i>Menarda</i>	<i>P. coodei</i> Ralim. & Petra Hoffm.	Madagascar	Madagascar		x	x	Ralimanana et al. 2014
Subg. <i>Menarda</i>	<i>P. cryptophilus</i> (Comm. ex A.Juss.) Müll.Arg.	Madagascar	Madagascar		x	x	Ralimanana et al. 2014
Subg. <i>Menarda</i> ?	<i>P. hodgkinsii</i> Schweinf.	Yemen	Middle east		x	x	Schweinfurth 1899
Subg. <i>Menarda</i> ?	<i>P. zygophylloides</i> Müll.Arg.	Madagascar	Madagascar		x	x	Müller 1866
Subg. <i>Phyllanthodendron</i>	<i>P. breynioides</i> (P.T.Li) Govaerts & Raddcl.-Sm.	China	Mainland Asia		x	x	Li 1987b
Subg. <i>Phyllanthodendron</i>	<i>P. guangxiensis</i> Govaerts & Raddcl.-Sm.	China	Mainland Asia		x	x	Li 1987b
Subg. <i>Phyllanthodendron</i>	<i>P. lilii</i> Govaerts & Raddcl.-Sm.	China	Mainland Asia		x	x	Li 1987b
Subg. <i>Phyllanthodendron</i>	<i>P. orbicularifolius</i> (P.T.Li) Govaerts & Raddcl.-Sm.	China	Mainland Asia		x	x	Li 1987b
Subg. <i>Phyllanthodendron</i>	<i>P. rubicundus</i> Beille	Vietnam	Mainland Asia		x	x	Beille 1927
Subg. <i>Phyllanthodendron</i> sect. <i>Arachnodes</i>	<i>P. arachnodes</i> Govaerts & Raddcl.-Sm.	Cambodia	Tropical Africa		x	x	Airy Shaw 1960
Subg. <i>Phyllanthodendron</i> sect. <i>Arachnodes</i>	<i>P. lingulatus</i> Beille	Lao People's Democratic Republic, Thailand, Vietnam	Mainland Asia		x	x	Croizat 1942
Subg. <i>Phyllanthodendron</i> sect. <i>Arachnodes</i>	<i>P. pollanetii</i> Beille	Vietnam	Mainland Asia		x	x	Croizat 1942
Subg. <i>Phyllanthodendron</i> sect. <i>Arachnodes</i>	<i>P. ridleyanus</i> Airy Shaw	Peninsular Malaysia, Thailand	Mainland Asia		x	x	Croizat 1942
Subg. <i>Phyllanthodendron</i> sect. <i>Calophyllum</i>	<i>P. anthopotamicus</i> Hand.-Mazz.	South China	Mainland Asia		x	x	Croizat 1942, but see Webster & Carpenter 2008
Subg. <i>Phyllanthodendron</i> sect. <i>Calophyllum</i>	<i>P. dongrhoensis</i> Thun	Vietnam	Mainland Asia		x	x	Thun 2007
Subg. <i>Phyllanthodendron</i> sect. <i>Calophyllum</i>	<i>P. dunalianus</i> (H.Lév.) Hand.-Mazz. ex Rehder	China	Mainland Asia		x	x	Croizat 1942
Subg. <i>Phyllanthodendron</i> sect. <i>Phyllanthodendron</i>	<i>P. kaweerasakii</i> Pornp., Chantir. & J.Parn.	Thailand	Mainland Asia		x	x	Pornpongpruegrueng et al. 2017
Subg. <i>Phyllanthodendron</i> sect. <i>Phyllanthodendron</i>	<i>P. mirabilis</i> Müll.Arg.	China, Lao People's Democratic Republic, Thailand	Mainland Asia	x	x	x	Hemsley 1898
Subg. <i>Phyllanthodendron</i> sect. <i>Pseudoactephila</i>	<i>P. carinatus</i> Beille	Vietnam	Mainland Asia		x	x	Croizat 1942
Subg. <i>Phyllanthodendron</i> sect. <i>Pseudoactephila</i>	<i>P. latvianus</i> (Croizat) Govaerts & Raddcl.-Sm.	China	Mainland Asia		x	x	Croizat 1942
Subg. <i>Phyllanthodendron</i> sect. <i>Pseudoactephila</i>	<i>P. roseus</i> (Craib & Hutch.) Beille	China, Lao People's Democratic Republic, Thailand, Vietnam	Mainland Asia		x	x	Croizat 1942, but see Webster & Carpenter 2008
Subg. <i>Phyllanthodendron</i> sect. <i>Pseudoactephila</i>	<i>P. yunnanensis</i> (Croizat) Govaerts & Raddcl.-Sm.	China	Mainland Asia		x	x	Croizat 1942
Subg. <i>Phyllanthodendron</i> sect. <i>Tetrandrum</i>	<i>P. mol</i> P.T.Li	China	Mainland Asia		x	x	Li 1987b
Subg. <i>Phyllanthus</i>	<i>P. bicolor</i> Vis.	Venezuela	Tropical South America		x		Visiani 1858
Subg. <i>Phyllanthus</i>	<i>P. cassioides</i> Rusby	Bolivia	Tropical South America		x		Rusby 1912

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Phyllanthus</i>	<i>P. compressus</i> Kunth	Brazil, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Venezuela	Central to North America		x		
Subg. <i>Phyllanthus</i>	<i>P. leptocaulis</i> Müll. Arg.	Brazil	Tropical South America		x		Müller 1873
Subg. <i>Phyllanthus</i>	<i>P. paraguayensis</i> Parodi	Paraguay	Tropical South America		x		Parodi 1881
Subg. <i>Phyllanthus</i>	<i>P. pothianus</i> Müll. Arg.	Brazil	Tropical South America		x		Müller 1873
Subg. <i>Phyllanthus</i>	<i>P. simplicicaulis</i> Müll. Arg.	Brazil	Tropical South America		~		Müller 1863, 1866
Subg. <i>Phyllanthus</i>	<i>P. subcuneatus</i> Greenm.	Mexico	North America		~	x	Greenman 1898
Subg. <i>Phyllanthus</i> sect. <i>Choretropsis</i>	<i>P. angustissimus</i> Müll. Arg.	Brazil	Tropical South America		x		Santiago et al. 2006
subsect. <i>Applanata</i>	<i>P. edmundoi</i> L. J. M. Santiago	Brazil	Tropical South America		x	x	Santiago et al. 2006
subsect. <i>Applanata</i>	<i>P. flagelliformis</i> Müll. Arg.	Brazil	Tropical South America		x	x	Santiago et al. 2006
subsect. <i>Applanata</i>	<i>P. gladiatus</i> Müll. Arg.	Brazil	Tropical South America		x	x	Santiago et al. 2006
Subg. <i>Phyllanthus</i> sect. <i>Choretropsis</i>	<i>P. klotzschianus</i> Müll. Arg.	Brazil, Guyana	Tropical South America	x	x	x	Santiago et al. 2006
subsect. <i>Applanata</i>	<i>P. scoparius</i> Müll. Arg.	Brazil	Tropical South America		x	x	Santiago et al. 2006
Subg. <i>Phyllanthus</i> sect. <i>Choretropsis</i>	<i>P. choretroides</i> Müll. Arg.	Brazil	Tropical South America		x	x	Santiago et al. 2006
subsect. <i>Choretropsis</i>	<i>P. goianensis</i> L. J. M. Santiago	Brazil	Tropical South America		x	x	Santiago et al. 2006
Subg. <i>Phyllanthus</i> sect. <i>Choretropsis</i>	<i>P. sarothamoides</i> Govaerts & Radcl.-Sm.	Brazil	Tropical South America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
subsect. <i>Choretropsis</i>	<i>P. spartioides</i> Pax & K. Hoffm.	Brazil	Tropical South America		x	x	Santiago et al. 2006
Subg. <i>Phyllanthus</i> sect. <i>Loxopodium</i>	<i>P. avicularis</i> Müll. Arg.	Brazil	Tropical South America		x	x	Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Subg. <i>Phyllanthus</i> sect. <i>Loxopodium</i>	<i>P. brandegei</i> Millsp.	Mexico	North America		x	x	Webster 1955
Subg. <i>Phyllanthus</i> sect. <i>Loxopodium</i>	<i>P. carolinensis</i> Walter	Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Surinam, United States, Venezuela	North, Central and North, Central and Tropical South America	x	x	x	Webster 1955
Subg. <i>Phyllanthus</i> sect. <i>Loxopodium</i>	<i>P. evanescens</i> Brandegee	Mexico	North America		x	x	Webster 1970
Subg. <i>Phyllanthus</i> sect. <i>Loxopodium</i>	<i>P. heliotropus</i> C. Wright ex Griseb.	Cuba	West Indies		x	x	Webster 1956
Subg. <i>Phyllanthus</i> sect. <i>Loxopodium</i>	<i>P. hyssopifoloides</i> Kunth.	Colombia, Costa Rica, Dominican Republic, Surinam, Venezuela	West Indies		x	x	Webster 1956
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. baeckeoides</i> J. T. Hunter & J. J. Bruhl	Australia (Western Australia)	Australia		x		<i>Lysandra</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. carpenteriae</i> Müll. Arg.	Australia (Northern Territory, Queensland)	Australia		x	x	Webster 2002b
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. caudicola</i> J. T. Hunter & J. J. Bruhl	Australia (Northern Territory)	Australia		x		<i>Lysandra</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. collinus</i> Domin	Australia (Queensland)	Australia		x	x	Webster Outline of Australian <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. dallachyanus</i> Benth.	Australia (Queensland)	Australia		x	x	Webster 1978
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. eremicus</i> R. L. Barrett & I. Telford	Australia (Western Australia)	Australia		x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. eutaxioides</i> S. Moore	Australia (Northern Territory)	Australia		x	x	Moore 1920
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. flagellaris</i> Benth.	Australia (Northern Territory)	Australia		x	x	Webster Outline of Australian <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. fuernrohril</i> F. Muell.	Australia	Australia		x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. gunni</i> Hook f.	Australia (East and Southeast)	Australia		x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. hamelinii</i> R. L. Barrett & I. Telford	Australia (coastal areas of the Camarvon bioregion)	Australia		x	x	Webster Outline of Australian <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i> ?	<i>P. harrimanii</i> G. L. Webster	Mexico	North America		x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. indigiferoides</i> Benth.	Australia (Western Australia)	Australia		x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. involutus</i> J. T. Hunter & J. J. Bruhl	Australia (Queensland)	Australia		x	x	<i>Lysandra</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i> ?	<i>P. laceratus</i> Ait. Shaw	Australia	Australia		x	x	Ait. Shaw 1980b
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i> ?	<i>P. lacunellus</i> Ait. Shaw	Australia	Australia		x	x	Ait. Shaw 1980b
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i> ?	<i>P. mitchellii</i> Benth.	Australia (Queensland)	Australia		x	x	Bentham 1873
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. microcladus</i> Müll. Arg.	Australia (Southeast Queensland and East New South Wales)	Australia		x	x	Webster Manuscript enumeration Australian taxa: <i>Lysandra</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. occidentalis</i> J. T. Hunter & J. J. Bruhl	Australia (Queensland)	Australia		x	x	Hunter & Bruhl 1997b
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. savanicola</i> Domin	Australia	Australia		x	x	
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. saxosus</i> F. Muell.	Australia	Australia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. similis</i> Müll. Arg.	Australia (Queensland, New South Wales)	Australia		x	x	Webster 2002b

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Phyllanthus</i> sect. <i>Lysandra</i>	<i>P. subcrenulatus</i> F.Muell.	Australia (Queensland, New South Wales)	Australia		x	x	Von Mueller 1859
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i>	<i>P. carmenlucae</i> R.T.M.Ribeiro & Loliola	Brazil	Tropical South America		x	x	Ribeiro et al. 2017
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i>	<i>P. eremitus</i> Funez & Hassemer	Brazil	Tropical South America		~		Funez & Hassemer 2017
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i>	<i>P. timboensis</i> Funez, J.P.R. Ferreira & Hassemer	Brazil	Tropical South America			x	Funez et al. 2018
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Almadenses</i>	<i>P. almadensis</i> Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. acutifolius</i> Poir. ex Spreng.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. allemii</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. arenicola</i> Casar.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. atalaensis</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. blanchetianus</i> Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. bradeanus</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. caparaensis</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. carvalhoi</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. clausenii</i> Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. fastigiatus</i> Mart. ex Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. glaziovii</i> Wall. ex Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. gorgyloides</i> Cordeiro & Cam.-Torres	Brazil	Tropical South America		x	x	Cordeiro & Carneiro-Torres 2004
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. heteradenius</i> Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. hypoleucus</i> Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. itatiaensis</i> Brade	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. legoensis</i> Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. mocotensis</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. piranii</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. retroflexus</i> Brade	Brazil	Tropical South America		x	x	Silva & Sales 2008
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. sincorensis</i> G.L.Webster	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Clausseniani</i>	<i>P. submarginatus</i> Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. augustini</i> Baill.	Southeast Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. bolivianus</i> Pax & K.Hoffm.	Bolivia	Tropical South America		x	x	Webster 2002 outline neotropical taxa
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. longipedicellatus</i> M.J.Silva	Brazil	Tropical South America		x	x	Silva 2009
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. mimicus</i> G.L.Webster	Trinidad & Tobago	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. niruri</i> L.	North and South America	North, Central and Tropical South America	x	x	x	Webster 2002a

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. perpusillus</i> Baill.	Brazil	Tropical South America		x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. amnicola</i> G.L. Webster	Dominican Republic	West Indies		x	x	Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. brachyphyllus</i> Urb.	Haiti	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. buchii</i> Urb.	Dominican Republic, Haiti	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. dimorphus</i> Britton & P. Wilson	Cuba	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. echinospermus</i> C. Wright	Cuba	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. fuertesii</i> Urb.	Dominican Republic, Haiti	West Indies		x	x	Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. imbricatus</i> G.L. Webster	Cuba	West Indies		x	x	Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. junceus</i> Müll. Arg.	Cuba	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. leptoneurus</i> Urb.	Dominican Republic, Haiti	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. maestrensis</i> Urb.	Cuba	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. micranthus</i> A. Rich.	Cuba	West Indies		x	x	Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. pertaphyllus</i> C. Wright ex Griseb.	Caribbean, Florida, Venezuela	North, Central and Tropical South America		x	x	Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. pulverulentus</i> Urb.	Cuba	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Pentaphylli</i>	<i>P. selbyi</i> Britton & P. Wilson	Cuba	West Indies		x	x	Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Salvinopsis</i>	<i>P. fluitans</i> Benth. ex Müll. Arg.	Argentina, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru, United States, Venezuela	Tropical South to North America		x	x	Brunel 1987
Subg. <i>Swartziani</i>	<i>P. abnormis</i> Baill.	United States	North America	x	x	x	Ralimanana et al. 2013
Subg. <i>Swartziani</i>	<i>P. amarus</i> Schumacher & Thonn.	Pan tropical	North America	x	x	x	Ralimanana et al. 2013
Subg. <i>Swartziani</i>	<i>P. caribaeus</i> Urb.	Brazil, Colombia, Mexico, Trinidad & Tobago, Venezuela	West Indies		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. fadyenii</i> Urb.	Jamaica	West Indies		x	x	Webster 1957
Subg. <i>Swartziani</i>	<i>P. fraterus</i> G.L. Webster	Widespread in Tropical Africa to Asia, naturalised elsewhere	West Indies		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. hexadactylus</i> McVaugh	Mexico	Mainland Asia		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. leptophyllus</i> Müll. Arg.	Brazil	North America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. lindbergii</i> Müll. Arg.	Brazil, Colombia, Surinam, Venezuela	Tropical South America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. microphyllus</i> Kunth	Bolivia, Brazil, Colombia, Venezuela	Tropical South America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. minutulus</i> Müll. Arg.	Brazil, Colombia, Venezuela	Tropical South America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. procerus</i> C. Wright	Cuba	West Indies		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. standleyi</i> McVaugh	Mexico	North America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i>	<i>P. stipulatus</i> (Raf.) G.L. Webster	Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guyana, Nicaragua, Venezuela	Tropical South America		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartziani</i> ?	<i>P. vichadensis</i> Croizat	Colombia	Tropical South America		x	x	Croizat 1945
Subg. <i>Swartziani</i> sect. <i>Reverchonia</i>	<i>P. warnockii</i> G.L. Webster	United States	North America	x	x	x	Webster 2007
Subg. <i>Tenellanthus</i> ?	<i>P. frazieri</i> Radcl. - Sm.	United Republic of Tanzania	Tropical Africa		x		Radcliffe-Smith 1982
Subg. <i>Tenellanthus</i> ?	<i>P. manicaensis</i> Jean F. Brunel ex Radcl. - Sm.	Mozambique	Tropical Africa		x		Radcliffe-Smith 1996
Subg. <i>Tenellanthus</i> ?	<i>P. mozambicensis</i> Gand.	Mozambique	Tropical Africa		x		Gandoger 1919
Subg. <i>Tenellanthus</i> sect. <i>Loandani</i>	<i>P. angolensis</i> Müll. Arg.	Angola, Botswana, Malawi, Mozambique, South Africa, United Republic of Tanzania, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Tenellanthus</i> sect. <i>Loandani</i>	<i>P. graminicola</i> Hutch.	Mozambique, Zimbabwe	Tropical Africa		x	x	Brunel 1987
Subg. <i>Tenellanthus</i> sect. <i>Loandani</i>	<i>P. loandensis</i> Welw.	Angola, Mozambique, South Africa	Tropical Africa		x	x	Brunel 1987
Subg. <i>Tenellanthus</i> sect. <i>Loandani</i>	<i>P. tsetsierae</i> Jean F. Brunel	Mozambique	Tropical Africa		x	x	Brunel 1987
Subg. <i>Tenellanthus</i> sect. <i>Pentandra</i>	<i>P. tenellanthus</i> sect. <i>Pentandra</i>	Angola	Tropical Africa		~	x	Brunel 1987
Subg. <i>Tenellanthus</i> sect. <i>Pentandra</i>	<i>P. geayi</i> Leandri ex Humbert	Madagascar	Madagascar		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Tenellanthus</i> sect. <i>Pentandra</i>	<i>P. mendesii</i> Jean F. Brunel	Angola, Botswana, Namibia, Zambia, Zimbabwe	Tropical Africa		x	x	Brunel 1987

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Tenellanthus</i> sect. <i>Pentandra</i>	<i>P. parvulus</i> Sond.	Botswana, Democratic Republic of the Congo, Namibia, South Africa	Tropical Africa		x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Tenellanthus</i> sect. <i>Pentandra</i>	<i>P. pentandrus</i> Schumacher & Thonn.	Benin, Botswana, Burkina Faso, Namibia, Nigeria, South Africa, United Republic of Tanzania	Tropical Africa	x	x	x	Raimanana & Hoffmann 2011
Subg. <i>Tenellanthus</i> sect. <i>Tenellanthus</i>	<i>P. comorensis</i> Leandri	Comoros	Indian Ocean		x	x	Brunel 1987
Subg. <i>Tenellanthus</i> sect. <i>Tenellanthus</i>	<i>P. nummularifolius</i> Poir.	Gabon, Ghana, Guinea, Liberia, Madagascar, Mozambique, Republic of Equatorial Guinea, United Republic of Tanzania	Tropical Africa	x	x	x	Raimanana & Hoffmann 2011
Subg. <i>Tenellanthus</i> sect. <i>Tenellanthus</i>	<i>P. tenellus</i> Roxb.	Panotropical	Panotropical	x	x	x	Raimanana & Hoffmann 2011
Subg. <i>Xylophylla</i> ?	<i>P. euriadro</i> Mart. ex Colla	Brazil	Tropical South America				
Subg. <i>Xylophylla</i> ?	<i>P. laevis</i> Steyerl.	Venezuela	Tropical South America				
Subg. <i>Xylophylla</i> ?	<i>P. minarum</i> Standl. & Steyerl.	Guatemala	Central America		x		
Subg. <i>Xylophylla</i> ?	<i>P. petenensis</i> Lundell	Guatemala	Central America		~		
Subg. <i>Xylophylla</i> ?	<i>P. sellowianus</i> (Klotzsch) Müll. Arg.	Argentina, Brazil, Paraguay, Uruguay	Tropical South America			x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Adiantoides</i>	<i>P. adiantoides</i> Klotzsch	Guyana, Surinam	Tropical South America		x	x	Brunel 1987
Subg. <i>Xylophylla</i> sect. <i>Adiantoides</i>	<i>P. borjaensis</i> Jabi.	Colombia, Venezuela	Tropical South America		~		Jablonski 1967
Subg. <i>Xylophylla</i> sect. <i>Asterandra</i>	<i>P. gentryi</i> G.L. Webster	Panama	Tropical South America			x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Asterandra</i>	<i>P. juglandifolius</i> Willd.	Tropical America	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. atabapoensis</i> Jabi.	Brazil, Colombia, Guyana, Venezuela	Tropical South America		x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. mickelii</i> McVaugh	Mexico	North America		x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. paezensis</i> Jabi.	Venezuela	Tropical South America		x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. rupestris</i> Kunth	Brazil, Colombia, Venezuela	Tropical South America		x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Ciccastrum</i>	<i>P. spruceanus</i> Müll. Arg.	Brazil	Tropical South America		x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Ciccastrum</i>	<i>P. purpusii</i> Brandegee	Mexico	North America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Diplocicca</i>	<i>P. riedelianus</i> Müll. Arg.	Brazil	Tropical South America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. octomerus</i> Müll. Arg.	Brazil	North America		x	x	Müller 1873
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. adenosodus</i> Müll. Arg.	Mexico; Veracruz	Tropical South America		x	x	
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. anderssonii</i> Müll. Arg.	Windward Islands	North America		x	x	
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. blanchetii</i> Croizat	Brazil	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. botryanthus</i> Müll. Arg.	Colombia, Mexico, Peru, Venezuela	Tropical South America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. chiapensis</i> Sprague	Mexico	Tropical South America		x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. coalcomanensis</i> Croizat	Mexico	North America		x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. gradyl</i> M.J. Silva & M.F. Sales	Brazil	Tropical South America		x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. grandifolia</i> L.	Mexico	North America		x	x	Silva & Sales 2006
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. hualagensis</i> Standl. ex Croizat	Peru	Tropical South America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. laxiflorus</i> Benth.	Guatemala, Mexico	Tropical South America		x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. mulisianus</i> G.L. Webster	Colombia	Tropical South America		x	x	Webster 2001a
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. nutans</i> Sw.	Cuba, Jamaica	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. oaxacanus</i> Brandegee	Mexico	North America		x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. pachystylus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. poeppigianus</i> (Müll. Arg.) Müll. Arg.	Brazil, Peru	Tropical South America		x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. prunifolius</i> Rusby	Bolivia	Tropical South America		~		
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. racemigerus</i> Müll. Arg.	Peru, Venezuela	Tropical South America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. ramosus</i> Vell.	Brazil	Tropical South America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. tequilensis</i> B.L. Rob. & Greenm.	Mexico	North America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. umbratus</i> Müll. Arg.	Brazil	Tropical South America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. urbanianus</i> Mansf.	Haiti	Tropical South America		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. ventricosus</i> G.L. Webster	Peru	West Indies		x	x	Webster 1967b
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. vincentiae</i> J.F. Macbr.	Peru	Tropical South America		x	x	Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (Euphorbiaceae)
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. zanthoxylodes</i> Steyerl.	Venezuela	Tropical South America				Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (Euphorbiaceae)
Subg. <i>Xylophylla</i> sect. <i>Epistylum</i>	<i>P. axillaris</i> Müll. Arg.	Jamaica	West Indies		x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Epistylum</i>	<i>P. cauliflorus</i> (Sw.) Griseb.	Jamaica	West Indies		x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Epistylum</i>	<i>P. cladanthus</i> Müll. Arg.	Jamaica	West Indies		x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Glyptohammus</i>	<i>P. chrysus</i> R.A. Howard	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. accioides</i> Urb.	Tobago	West Indies		x	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. maleolens</i> Urb. & Ekman	Dominican Republic, Haiti	West Indies		x	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. martii</i> Müll. Arg.	Brazil	Tropical South America		x	x	Müller 1873
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. megapodus</i> G.L. Webster	Dominica, Jamaica, Martinique	West Indies		x	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. mimosoides</i> Sw.	Leeuward Isles, Trinidad	West Indies		x	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. myriophyllus</i> Urb.	Haiti	West Indies		x	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. ovatus</i> Poir.	Martinique	Malaysia		x	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Onphacodes</i>	<i>P. subcarneus</i> C. Wright ex Griseb.	Cuba, Haiti	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. chamaecristioides</i> Urb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. comosus</i> Urb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. cuneifolius</i> (Britton) Croizat	Puerto Rico	Central America		x	x	Voronisova et al. 2007
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. formosus</i> Urb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. myrtillifolius</i> Griseb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. nummularioides</i> Müll. Arg.	Dominican Republic	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. orbicularis</i> Kunth	Cuba to Puerto Rico, Surinam	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. phialanthoides</i> Falcón & J.L. Gómez	Cuba	West Indies		x	x	Hidalgo et al. 2017
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. phlebocarpus</i> Urb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Obicularia</i>	<i>P. scopulorum</i> (Britton) Urb.	Cuba	West Indies		x	x	Britton 1920, Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Oxalistsylis</i>	<i>P. salvifolius</i> Kunth	Colombia, Costa Rica, Peru, Venezuela	Central America		x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. cinctus</i> Urb.	Cuba	West Indies		x	x	Webster 1955, 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. comptus</i> G.L. Webster	Cuba	West Indies		x	x	Webster 1955, 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. ekmanii</i> G.L. Webster	Cuba	West Indies		x	x	Webster 1955, 1958
Subg. <i>Xylophylla</i> sect. <i>Williamia</i> subsect. <i>Discolores</i>	<i>P. cristalisensis</i> Urb.	Cuba	West Indies		~	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Williamia</i> subsect. <i>Discolores</i>	<i>P. discolor</i> Poepp.	Cuba	West Indies	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Williamia</i> subsect. <i>Discolores</i>	<i>P. microdictyus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Williamia</i> subsect. <i>Incrustati</i>	<i>P. excisus</i> Urb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Williamia</i> subsect. <i>Incrustati</i>	<i>P. incurtatus</i> Urb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Williamia</i> subsect. <i>Incrustati</i>	<i>P. williamiioides</i> Griseb.	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Williamia</i> subsect. <i>Miriflci</i>	<i>P. mirificus</i> G.L. Webster	Cuba	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. angustifolius</i> (Sw.) Sw.	Cuba, Jamaica, Nicaragua	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. arbuscula</i> (Sw.) J.F. Gmel.	Jamaica	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. epiphyllanthus</i> L.	Anguilla, Bahamas, Cuba, Dominican Republic, Guadeloupe, Haiti, Puerto Rico, Trinidad & Tobago	West Indies	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. eximius</i> G.L. Webster & Proctor	Jamaica	West Indies		x	x	Webster 1960
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. latifolius</i> (L.) Sw.	Jamaica	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. montanius</i> (Sw.) Sw.	Jamaica	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. obtusatus</i> (Blill.) Müll. Arg.	Brazil	Tropical South America		x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. proctoris</i> G.L. Webster	Jamaica	West Indies		x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Xylophylla</i>	<i>P. robustus</i> Mart. ex Colla	Brazil	Tropical South America		x	x	Colla 1831
Former <i>Isociadus</i>	<i>P. fallax</i> Müll. Arg.	Brazil	Tropical South America			x	Müller 1865
Former <i>Isociadus</i>	<i>P. incurvus</i> Thunb.	Tropical Africa	Tropical Africa	x	x	x	Brunel 1987
Former <i>Isociadus</i>	<i>P. serpentinicola</i> Radcl.-Sm.	Zimbabwe	Tropical Africa			x	Radcliffe-Smith 1996
Former <i>Isociadus</i>	<i>P. tener</i> Radcl.-Sm.	Zambia	Tropical Africa			x	Radcliffe-Smith 1996
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. aridus</i> Benth.	Australia	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. australis</i> Hook. f.	Australia (Tasmania)	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. calycinus</i> Labill.	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. cordobensis</i> (Kuntze) K. Schum.	Argentina	Tropical South America		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. dawsonii</i> Steyererm.	Brazil	Tropical South America		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. diclyospermus</i> Müll. Arg.	Brazil	Tropical South America		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. erwinii</i> J.T. Hunter & J.J. Bruhl	Australia	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. hirtellus</i> F. Muell. ex Müll. Arg.	Australia	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. lacunarius</i> F. Muell.	Australia	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. oblanceolatus</i> J.T. Hunter & J.J. Bruhl	Australia	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. pinifolius</i> Baill.	Brazil	Tropical South America		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. ramulosus</i> Müll. Arg.	Argentina, Brazil	Tropical South America		x	x	Webster 2002b

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. rosmarinifolius</i> Müll.Arg.	Brazil	Tropical South America		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. salesiae</i> M.J.Silva	Brazil	Tropical South America		x	x	Silva 2009
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. scaber</i> Klotzsch	Australia	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Antipodanthus</i>	<i>P. striatocaulis</i> J.T.Hunter & J.J.Bruhl	Australia	Australia		x	x	Webster 2002b
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. caraculensis</i> Jean F.Brunel	Angola	Tropical Africa		x	x	Brunel 1987
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. curenensis</i> Jean F.Brunel	Angola	Tropical Africa		x	x	Brunel 1987
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. karibibensis</i> Jean F.Brunel	Namibia, South Africa	Tropical Africa		x	x	Brunel 1987
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. liebmännianus</i> Müll.Arg.	Mexico, United States: Florida	North, Central and Tropical South America		x	x	Webster 2001b
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. mendoncae</i> Jean F.Brunel	Ethiopia, Mozambique	Tropical Africa		x	x	Brunel 1987
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. paxianus</i> Dinter	Angola, Democratic Republic of the Congo, Namibia	Tropical Africa		x	x	Brunel 1987
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. polygonoides</i> Nutt. ex Spreng.	Mexico, United States	North America		x	x	Webster 2001b
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. revaughanii</i> Coode	Mascarenes, Mozambique	Tropical Africa		x	x	Brunel 1987
Former <i>Isociadus</i> sect. <i>Isociadus</i> sensu Brunel 1987	<i>P. spinosus</i> Chiov.	Somalia	Tropical Africa		x	x	Brunel 1987
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. bahiensis</i> Müll.Arg.	Brazil	Tropical South America		x	x	Müller 1863, 1866, 1873
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. barbarae</i> M.C.Johnst.	Mexico	North America		x	x	Johnston 1986
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. ericoides</i> Torr.	Mexico	North America		x	x	Webster 2001b
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. fraguensis</i> M.C.Johnst.	Mexico	North America		x	x	Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. galeotianus</i> Baill.	Mexico	North America		x	x	Webster 2001b
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. gypsicola</i> McVaugh	Mexico	North America		x	x	Webster 2001b
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. hakglensis</i> Thwaites ex Trimen	Sri Lanka	Malasia				Webster 1997
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. lasiogyne</i> Müll.Arg.	Paraguay	Tropical South America		x	x	Müller 1866, 1873
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. neoleonensis</i> Croizat	Mexico	North America				Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. peninsularis</i> Brandegee	Mexico	North America		x	x	Webster 2001b
Former <i>Isociadus</i> sect. <i>Paraphyllanthus</i>	<i>P. saffordii</i> Merr.	Guam	Malasia		x	x	Merrill 1914
Incertae sedis	<i>P. anisophylloides</i> Merr.	Philippines	Tropical South America				See Webster Manuscript outline neotropical <i>Phyllanthus</i>
Incertae sedis	<i>P. bolivariensis</i> Steyer.	Venezuela	Malasia				Possible <i>Eriococcus</i> , but species not seen
Incertae sedis	<i>P. celebicus</i> Koord.	Celebes					Specimen not seen or described
Incertae sedis	<i>P. hortensis</i> Govaerts & Radcl.-Sm.	Unknown					Male flowers not known
Incertae sedis	<i>P. lunifolius</i> M.G.Gilbert & Thulin	Somalia	Tropical Africa				Possible <i>Eriococcus</i> , but species not seen
Incertae sedis	<i>P. minahassae</i> Koord.	Celebes	Malasia				Sterile
Incertae sedis	<i>P. orinocensis</i> Steyer.	Venezuela	Tropical South America				
Incertae sedis	<i>P. petibaris</i> Roxb.	India	Mainland Asia				
Incertae sedis	<i>P. pseudoguyanensis</i> Herter & Mansf.	Uruguay	Tropical South America				
Incertae sedis	<i>P. pseudoparvifolius</i> R.L.Mitra & Sanjappa	Bhutan, India, Myanmar, Nepal	Mainland Asia				
Incertae sedis	<i>P. rotundata</i> Poir.	India	Mainland Asia				
Incertae sedis	<i>P. rupicola</i> Elmer	Philippines	Malasia				Male flowers not known
Incertae sedis	<i>P. squamifolius</i> (Lour.) Stokes	Vietnam	Mainland Asia				
Incertae sedis	<i>P. vergens</i> Baill.	Madagascar	Madagascar				See Ralimanana & Hoffmann 2011
Incertae sedis	<i>P. villosus</i> Poir.	China	Mainland Asia				Possible <i>Eriococcus</i> , but species not seen
Incertae sedis	<i>P. xylorrhizus</i> Thulin	Somalia	Tropical Africa				Thulin 2003
Incertae sedis	<i>P. zippelianus</i> Müll.Arg.	Lesser Sunda Isl.	Malasia				Thin 2007, possible <i>Eriococcus</i> , but species not seen
sect. <i>Hedycarpidium</i> ¹	<i>P. dactylacensis</i> Thin	Vietnam	Mainland Asia				Thin 2007, possible <i>Eriococcus</i> , but species not seen
sect. <i>Hedycarpidium</i> ¹	<i>P. songbolensis</i> Thin	Vietnam	Mainland Asia				Thin 2007, possible <i>Eriococcus</i> , but species not seen
sect. <i>Hedycarpidium</i> ¹	<i>P. tui</i> Thin	Vietnam	Mainland Asia				Thin 2007, possible <i>Eriococcus</i> , but species not seen

¹ Placement based on DNA.² Placement based on morphology.³ Placement based on a literature reference.⁴ Section *Hedycarpidium* is currently placed in the genus *Baccaurea* and its use by Thin (2007) for *Phyllanthus* is invalid.