



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

R.W. Bouman^{1,2,4}, P.J.A. Keßler^{1,4}, I.R.H. Telford³, J.J. Bruhl³, P.C. van Welzen^{2,4}

Key words

infrageneric taxonomy
pantropical
paraphyletic
Phyllanthaceae
Phyllanthus

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.

Published on 21 November 2018

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., Bancilhon 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, Chantananothai 2005, Silva & Sales 2006, 2008) and morphological studies (Punt 1967, 1972, 1980, 1986, Punt & Rentrop 1973, Lobreaux-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 *Sauropolis* 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 *Sauropolis*), *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

¹ Hortus botanicus Leiden, Leiden University, P.O. Box 9500, 2300 RA Leiden, The Netherlands;
corresponding author e-mail: roderick.bouman@naturalis.nl.

² Naturalis Biodiversity Center, P.O. Box 9517, 2300 RA Leiden, The Netherlands.

³ Botany and N.C.W. Beadle Herbarium, School of Environmental and Rural Science, University of New England, Armidale, NSW 2351, Australia.

⁴ Institute of Biology Leiden, Leiden University, P.O. Box 9505, 2300 RA Leiden, The Netherlands.

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.uc-davis.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, *Anisolobium* 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 *Anisolobium* 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 *Salvinopsis* 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 (Kathriarachchi 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* (Kathriarachchi 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 Kathriarachchi 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).

Kathriarachchi 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 *Meiandroglochidion* S.Moore and *Polyandroglochidion* 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 (Kathriarachchi 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, Wildenowia 11 (1981) 70; Jean F.Brunel, Gen. **Phyllanthus** Afr. Intertrop. Madag. (1987) 339. — Type: **Phyllanthus odontadensis** 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 plagioprotropic 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 macrochirion** 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 **Eleuterogynium** 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. & Moritzi) 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.

- Branching non-phyllanthoid (laminate leaves and flowers on all axes, branchlets not deciduous) 2
- Branching phyllanthoid (leaves on main stem reduced to scales, cataphylls, laminate 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
- Aquatic herbs. — Americas
..... Subgenus **Phyllanthus** section **Salvinia**opsis 3
- Herbs, shrubs or trees, but not aquatic 3
- Palm-like (monocaul) shrubs to trees; stigma petaloid. — South America .. Subgenus **Xylophyllea** section **Asterandra**
- Herbs, shrubs to small trees, rarely climbers; stigmas variously bifid to multifid, not petaloid 4
- Leaves on all axes spirally arranged 5
- Leaves on all axes distichous 9
- 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 **Reverchonia**
- Sepals 5 or 6 in both sexes; staminate disc segmented; stamens 3 or 5, filaments free or connate 6
- Sepals 5; stamens 5, filaments free. — Africa
..... Subgenus **Kirganelia** section **Pseudomenarda**
- Sepals 5 or 6; stamens usually 3, filaments connate (free in **P. rosmarinifolius** Müll.Arg.) 7
- Inflorescences axillary cymules with 1–4 flowers; pistillate disc consisting of free glands. — Africa and Asia, introduced in North America Subgenus **Isocladus**

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 *Claussenianoi*
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 sub-globose, 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 *Afroswartzianii*)
- 31*. Pollen 3- or 4-colporate, exine bireticulate. — Africa Subgenus *Afroswartzianii* section *Praephyllanthus*
- 31*. Pollen 3-sulcate, exine macroreticulate. Often found in water. — Africa Subgenus *Afroswartzianii* section *Fluitantoides*
- 31*. Pollen perihexabrevisulcate, exine macro-rugulose (Brunel 1987). Ovary on gynophore. — Africa Subgenus *Afroswartzianii* 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* 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 *Swartzianii*
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*
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 incrusted or hirsutulous with red hairs; stamens 2–6; pollen clypeate. — West Indies
Subgenus *Xylophylla* section *Hemiphyllanthus*
68. Axes not incrusted 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 *Nymmania*
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-locula. Calyx in fruit saccate. — New Caledonia Subgenus *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 *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 *Nymmania*
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 ± 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 *Embla* 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 *Embla* 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 *Willamia*)
91. Pollen 3-colporate, exine pilate or reticulate 92
91. Pollen clypeate, exine areolate. — West Indies 94 (Subgenus *Xylophylla* section *Willamia*)
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 *Willamia*)
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 *Willamia* 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 *Willamia* subsection *Incrustata*
- 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 *Willamia* 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 *Afroswartziana*
96. Anthers dehiscing vertically; exine reticulate. 97 (Subgenus *Embla*)
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 *Embla* section *Pityrocladus*
97. Sepals 6; staminate disc consisting of 6 segments; stamens 3; anthers dehiscing vertically; pollen 4- or 5-colporate or 5-brevisulcate; pistillate disc entire .. 98
98. Inflorescences at terminal end of branchlet and secondary ramification on more basal end; pollen 5-brevisulcate. — Asia Subgenus *Embla* section *Botryoides*
98. Inflorescences found along entire branchlet; pollen 4- or 5-colporate. — Asia Subgenus *Embla* section *Embla*
99. Inflorescences cauliflorous thyrses; stigmas petaloid. — West Indies ... Subgenus *Xylophylla* section *Epistylium*
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.

Acknowledgements This work was done as part of the PhD research of the main author, funded by the Hortus botanicus Leiden and Leiden University. Help with preparing the list for the manuscript by Peter Hovenkamp is gratefully acknowledged. The second author thanks the Leiden University Fund (LUF) for their support of the chair Botanical Gardens and Botany of Southeast Asia. The last author thanks the Treub Maatschappij, the Society for the Advancement of Research in the Tropics, for their support of the Ornstein chair in Tropical Plant Biogeography.

REFERENCES

- Airy Shaw HK. 1960. Notes on Malaysian Euphorbiaceae. Kew Bulletin 14: 469–471.
- Airy Shaw HK. 1963. Notes on Malaysian and other Asiatic Euphorbiaceae. Kew Bulletin 16: 341–372.
- Airy Shaw HK. 1969. New or noteworthy species of *Phyllanthus* L. Kew Bulletin 23: 26–40.
- Airy Shaw HK. 1971. CXXV. New or Noteworthy species of *Phyllanthus* L. Kew Bulletin 25: 493–495.
- Airy Shaw HK. 1972. The Euphorbiaceae of Siam. Kew Bulletin 26: 191–363.
- Airy Shaw HK. 1974. Notes on Malesian and other Asiatic Euphorbiaceae. Kew Bulletin 29: 281–331.
- Airy Shaw HK. 1975. The Euphorbiaceae of Borneo. Kew Bulletin, Additional Series 4: 1–224.
- Airy Shaw HK. 1976. New or noteworthy Australian Euphorbiaceae. Kew Bulletin 31: 341–398.
- Airy Shaw HK. 1977. Additions and corrections to the Euphorbiaceae of Siam. Kew Bulletin 32: 69–83.
- Airy Shaw HK. 1980a. The Euphorbiaceae of New Guinea. Kew Bulletin, Additional Series 8: 3–230.
- Airy Shaw HK. 1980b. Notes on Euphorbiaceae from Indomalesia, Australia and the Pacific. Kew Bulletin 35: 383–399.
- Airy Shaw HK. 1981. The Euphorbiaceae of Sumatra. Kew Bulletin 36: 239–374.
- Airy Shaw HK. 1982. The Euphorbiaceae of Central Malesia (Celebes, Moluccas. Lesser Sunda Is.). Kew Bulletin 37: 1–40.
- Alston AHG. 1931. Part VI. Supplement. In: Trimen H, A hand-book to the flora of Ceylon: 1–350. Dulae & Co., London.
- Backer CA. 1945. Notes on the Flora of Java, II. *Blumea* 5: 490–524.
- Baillon HE. 1858. Etude générale du groupe des Euphorbiacées. Librairie De Victor Masson, Paris.
- Baillon HE. 1862. Euphorbiaceae Neo-Caledonicae. *Adansonia* 2: 211–242.
- Balakrishnan NP, Chakrabarty T. 2007. *Phyllanthus*. In: Gangopadhyay M, Chakrabarty T, Balakrishnan NP (eds), The family Euphorbiaceae in India: a synopsis of its profile, taxonomy and bibliography: 361–391. Bishen Singh Mahendra Pal Singh, Dehradun, Uttarakhand.
- Balakrishnan NP, Nair N. 1982. New taxa and record from Saddle Peak, Andaman Islands. *Nelumbo* 24: 28–36.
- Bancilhon L. 1971. Contribution à l'étude taxonomique du genre *Phyllanthus* (Euphorbiacées). *Boissiera* 18: 9–81.
- Barrett RL, Telford IRH. 2015. Two new species of *Phyllanthus* from northern Australia and notes on *Phyllanthus*, *Sauvopis* and *Synostemon* (*Phyllanthaceae*) in Western Australia. *Nuytsia* 26: 149–166.
- Beille L. 1925. Sur quelques Euphorbiacées nouvelles de la flore indo-chinoise. *Bulletin de la Société Botanique de France* 72: 156–163.
- Beille L. 1927. *Phyllanthus*. In: Lecomte MH (ed), Flore Générale de l'Indochine 5: 571–608. Masson & Cie, Éditeurs, Paris.
- Bentham G. 1873. *Flora Australiensis* 6. Reeve & Co., London.
- Boerlage JG. 1900. Handleiding tot de kennis der flora van Nederlands Indië 3: 185–296. Brill, Leiden.
- Bouman RW, Van Welzen PC, Sumail S, et al. 2018. *Phyllanthus rufuschaneyi*: a new nickel hyperaccumulator from Sabah (Borneo Island) with potential for tropical agromining. *Botanical studies* 59 (9): 1–12.
- Brenan JPM. 1967. Tropical African Plants: XXVIII. Kew Bulletin 21: 241–262.
- Breteler FJ. 2012. Flore du Gabon 43: 1–107. Muséum National d'Histoire Naturelle, Paris.
- Britton NL. 1920. Description of Cuban plants new to science. *Memoirs of the Torrey Botanical Club* 16: 57–118.
- Brunel JF. 1987. Sur le genre *Phyllanthus* L. et quelques genres voisins de la tribu des *Phyllanthae* Dumort. (Euphorbiaceae, Phyllanthae) en Afrique intertropicale et à Madagascar. Institut de Botanique, Strasbourg, France.
- Brunel JF, Roux J. 1975. Notes sur les *Phyllanthoideae* (Euphorbiaceae) ouest-africaines. I. *Phyllanthus niruri* L., une espèce à exclure des flores de l'Afrique occidentale. *Bulletin de la Société Botanique de France* 122: 153–162.

- Brunel JF, Roux J. 1976. Notes sur les Phyllanthoideae (Euphorbiaceae) ouest-africaines: II. A propos du polymorphisme du *Phyllanthus sublanatus* Schum. et Thonn. Bulletin de la Société Botanique de France 123: 365–376.
- Brunel JF, Roux J. 1977. Notes sur les Phyllanthoideae (Euphorbiaceae) ouest-africaines III. A propos de la position systématique du *Phyllanthus dinklagei* Pax. Bulletin de la Société Botanique de France 124: 217–225.
- Brunel JF, Roux J. 1981. *Phyllanthus* subsect. *Odontadenii* (Euphorbiaceae) au nord du fleuve Congo (Afrique de l'Ouest). *Wildenowia* 11: 69–90.
- Brunel JF, Roux J. 1984. South-east Asian Phyllanthaeae. II. Some *Phyllanthus* of subsect. *Swartziani*. *Nordic Journal of Botany* 4: 469–473.
- Brunel JF, Roux J. 1985. Les *Phyllanthus* (Euphorbiaceae) affines de la section *Anisoliobum* en Afrique intertropicale. *Beiträge zur Flora von West-Afrika* 18: 235–254.
- Chakrabarty T, Balakrishnan NP. 2009. Transfer of Indian species of *Breynia*, *Glochidion* and *Sauvagea* to *Phyllanthus* (Phyllanthaceae) – new combinations and new names. *Journal of Economic and Taxonomic Botany* 33: 712–716.
- Chakrabarty T, Balakrishnan NP. 2012. Nineteen new combinations and a new name in *Breynia* J.R. Forst. & G. Forst. (Phyllanthaceae) from Indian subcontinent. *Bangladesh Journal of Plant Taxonomy* 19: 119–122.
- Chakrabarty T, Gangopadhyay M. 1993. A new *Phyllanthus* L. (Euphorbiaceae) from North Andaman island. *The Journal of the Bombay Natural History Society* 90: 69–70.
- Challen G, Vorontsova MS, Schneider H, et al. 2011. Phylogenetically distinct and critically endangered new tree species of *Phyllanthus* from Cameroon (Phyllanthaceae, Euphorbiaceae s.l.). *Systematic Botany* 36: 933–938.
- Chantaranothai P. 2005. Taxonomic notes on the genus *Phyllanthus* L. (Euphorbiaceae) in Thailand. *Thai Forest Bulletin (Botany)* 33: 16–20.
- Chen Y, Chen S, Huang T, et al. 2009. Pollen morphology of Philippine species of *Phyllanthus* (Phyllanthaceae, Euphorbiaceae s.l.). *Blumea* 54: 47–58.
- Colla L. 1831. Herbarium pedemontanum 5. *Augustae Taurinorum, ex Typis Regis, Piedmont.*
- Collett H, Hemsley WB. 1890. On a collection of plants from Upper Burma and the Shan States. *Botanical Journal of the Linnean Society* 28: 1–150.
- Cordeiro I, Carneiro-Torres DS. 2004. A new species of *Phyllanthus* (Phyllanthaceae) from Chapada Diamantina, Bahia, Brazil. *Botanical Journal of the Linnean Society* 146: 247–250.
- Croizat L. 1942. On certain Euphorbiaceae from the tropical Far East. *Journal of the Arnold Arboretum* 23: 29–54.
- Croizat L. 1943. Notes on American Euphorbiaceae, with descriptions of eleven new species. *Journal of the Washington Academy of Sciences* 33: 11–20.
- Croizat LCM. 1945. New or critical Euphorbiaceae from the Americas. *Journal of the Arnold Arboretum* 26 (2): 181–196.
- De Jussieu AL (ed). 1824. *De Euphorbiacearum generibus medicisque earumdem viribus tentamen*. Didot, Paris.
- Funez LA, Ferreira JPR, Hassemer G. 2018. *Phyllanthus timboensis* (Phyllanthaceae), a new species from Santa Catarina, southern Brazil. *Webbia* 73 (1): 63–69. doi: <https://doi.org/10.1080/00837792.2018.1452370>.
- Funez LA, Hassemer G. 2017. *Phyllanthus eremita* (Phyllanthaceae), a narrowly endemic new species from Santa Catarina, southern Brazil, and lectotypification and range extension of *P. hyssopifoloides*. *Phytotaxa* 319: 149–158.
- Gage AT. 1914. New Euphorbiaceae from India and Malaya. *Bulletin of Miscellaneous Information Kew*: 236–241.
- Gandoger MM. 1919. *Sertum plantarum novarum. Pars secunda (Suite).* *Bulletin de la Société Botanique de France* 66: 286–307.
- Ganesan R. 2003. Identification, distribution and conservation of *Phyllanthus* indofischeri, another source of Indian gooseberry. *Current Science* 84: 1515–1518.
- Gilbert MG. 1987. New and interesting species of Euphorbiaceae from Ethiopia. *Kew Bulletin* 42: 351–368.
- Gilbert MG, Thulin M. 1993. A new species of *Phyllanthus* (Euphorbiaceae) from Somalia. *Nordic Journal of Botany* 13: 171–173.
- Govaerts R, Frodin DG, Radcliffe-Smith A. 2000. World checklist and bibliography of Euphorbiaceae 1–4. Royal Botanic Gardens, Kew.
- Greenman JM. 1898. Diagnosis of new and critical phanerograms. *Proceedings of the American Academy of Arts and Sciences* 33: 453–490.
- Guillaumin A. 1927. Contributions à la flore de la Nouvelle Calédonie. *Bulletin du Muséum National d'Histoire Naturelle* 33: 272–276.
- Guillaumin A. 1937. Matériaux pour la flore de la Nouvelle-Calédonie. XL, XLI et XLII. *Bulletin de la Société Botanique de France* 2: 294–315.
- Haegens RMAP. 2000. Taxonomy, phylogeny and biogeography of *Baccaurea*, *Distichirhops*, and *Nothobaccaurea* (Euphorbiaceae). *Blumea Supplement* 12: 1–218.
- Hayata B. 1904. *Revisio Euphorbiacearum et Buxacearum Japonicarum.* The Journal of the College of Science, Imperial University Tokyo, Japan 20: 1–92.
- Hemsley W. 1898. *Phyllanthodendron mirabilis* Hemsl. *Hooker's Icones Plantarum* 26: 2563–2564.
- Hidalgo BF, Hechavarria JLG, Bazan SF. 2017. *Phyllanthus phialanthoides* (Phyllanthaceae), a new species from northeastern Cuba. *Revista del Jardín Botánico Nacional* 38: 1–6.
- Hoffmann P, Baker AJ, Madulid DA, et al. 2003. *Phyllanthus balgooyi* (Euphorbiaceae s.l.), a new nickel-hyperaccumulating species from Palawan and Sabah. *Blumea* 48: 193–199.
- Hoffmann P, Cheek M. 2003. Two new species of *Phyllanthus* (Euphorbiaceae) from Southwest Cameroon. *Kew Bulletin* 58: 347–446.
- Hoffmann P, Kathriarachchi H, Wurdack KJ. 2006. A phylogenetic classification of Phyllanthaceae (Malpighiales; Euphorbiaceae sensu lato). *Kew Bulletin* 61: 37–53.
- Hooker JD. 1890. *The Flora of British India* 5. Reeve, London.
- Hunter JT, Bruhl JJ. 1997a. Three new species of *Phyllanthus* (Euphorbiaceae: Phyllanthae) for the Northern Territory, one new species for Western Australia, and notes on other *Phyllanthus* species occurring in these regions. *Nuytsia* 11: 147–163.
- Hunter JT, Bruhl JJ. 1997b. Two new species of *Phyllanthus* and notes on *Phyllanthus* and *Sauvagea* (Euphorbiaceae: Phyllanthae) in New South Wales. *Telopea* 7 (2): 149–165.
- Jablonski E. 1967. Euphorbiaceae. In: Maguire B and collaborators (eds), *The botany of the Guiana Highland – part VII. Memoirs of the New York Botanical Garden* 17: 80–190.
- Jangid PP, Gupta S. 2016. Systematic wood anatomy of the tribe Phyllanthae (Phyllanthaceae, Euphorbiaceae s.l.) from India: implication in reinstatement of *Phyllanthus*, *Glochidion* and allies. *Nordic Journal of Botany* 34: 496–512.
- Johnston MC. 1986. *Phyllanthus barbareae* (Euphorbiaceae), new species from southwestern Tamaulipas, Mexico. *Systematic Botany* 11: 35–38.
- Kathriarachchi H, Samuel R, Hoffmann P, et al. 2006. Phylogenetics of tribe Phyllanthae (Phyllanthaceae; Euphorbiaceae sensu lato) based on nrITS and plastid matK DNA sequence data. *American Journal of Botany* 93 (4): 637–655. doi: <https://doi.org/10.3732/ajb.93.4.637>.
- Kurosawa T. 2016. Transfer of Japanese *Breynia* and *Glochidion* to *Phyllanthus* (Phyllanthaceae). *Journal of Japanese Botany* 91: 118–121.
- Kurz S. 1873. New Burmese plants, part III. *The Journal of the Asiatic Society of Bengal* 42: 227–254.
- Leandri J. 1958. Euphorbiacées. In: Humbert H (ed), *Flore de Madagascar et des Comores, famille 111, part I*. Didot, Paris.
- Li PT. 1987a. A revision of Chinese *Phyllanthus* (Euphorbiaceae). *Acta Phytotaxonomica Sinica* 25: 371–383.
- Li PT. 1987b. A revision of the Chinese *Phyllanthodendron* (Euphorbiaceae). *Bulletin of Botanical Research* 7: 1–9.
- Lobreaux-Callen D, Punt W, Schmid M. 1988. Pollen morphology and taxonomy of the *Phyllanthus* species (Euphorbiaceae) native to New Caledonia. *Review of Palaeobotany and Palynology* 53: 283–304.
- Luo S, Esser H-J, Zhang D, et al. 2011. Nuclear ITS sequences help disentangle *Phyllanthus reticulatus* (Phyllanthaceae), an Asian species not occurring in Africa, but introduced to Jamaica. *Systematic Botany* 36: 99–104.
- Manissorn J, Sukrong S, Ruangrungsri N, et al. 2010. Molecular phylogenetic analysis of *Phyllanthus* species in Thailand and the application of polymerase chain reaction-restriction fragment length polymorphism for *Phyllanthus amarus* identification. *Biological and Pharmaceutical Bulletin* 33: 1723–1727.
- McNeill J, Barrie FR, Buck WR, et al. 2012. International Code of Nomenclature for algae, fungi and plants (Melbourne Code). Koeltz Scientific Books, Oberreifenberg.
- McPherson G, Schmid M. 1991. *Flore de la Nouvelle Calédonie et Dépendances* 17: Euphorbiaceae. Muséum National d'Histoire Naturelle, Paris.
- Meeuwis B, Punt W. 1983. Pollen morphology and taxonomy of the subgenus *Kirganelia* (Jussieu) Webster (genus *Phyllanthus*, Euphorbiaceae) from Africa. *Review of Palaeobotany and Palynology* 39: 131–160.
- Merrill ED. 1912. Notes on Philippine Euphorbiaceae. *Philippine Journal of Science* 7: 379–410.
- Merrill ED. 1914. An enumeration of the plants of Guam. *The Philippine Journal of Science* ser. C, 9: 97–155.
- Merrill ED. 1920. Notes on Philippine Euphorbiaceae, III. *Philippine Journal of Science* 16: 539–580.
- Merrill ED. 1926. Additions to our knowledge of the Philippine flora III. *Philippine Journal of Science* 30: 389–430.
- Merrill ED. 1935. A sixth supplementary list of Hainan plants. *Lingnan Science Journal* 14: 1–62.
- Mitra D, Bennet SSR. 1967. *Phyllanthus mukerjeeanus* (fam. Euphorbiaceae) – A new species from west Bengal. *Bulletin of the Botanical Society of Bengal* 19: 145–146.
- Moore S. 1920. A contribution to the flora of Australia. *Journal of the Linnean Society of London, Botany* 45: 159–220.

- Müller J. 1863. Euphorbiaceae. Vorläufige Mittheilungen aus dem für De Candolle's Prodromus bestimmten Manuscript über diese Familie. *Linnaea* 32: 1–126.
- Müller J. 1865. Euphorbiaceae. Vorläufige Mittheilungen aus dem für De Candolle's Prodromus bestimmten Manuscript über diese Familie. *Prodromus Systematis Naturalis Regni Vegetabilis* 34: 1–224.
- Müller J. 1866. Euphorbiaceae. In: De Candolle AP (ed), *Prodromus systematis naturalis regni vegetabilis*: 15, 2: 189–1286. Masson, Paris.
- Müller J. 1873. Euphorbiaceae, *Phyllantheae*. In: Von Martius CFP (ed), *Flora Brasiliensis* 11: 7–80. Oldenbourg, Munich & Leipzig.
- Pagare RS, Naik SS, Krishnan S, et al. 2016. Lectotypification of *Pseudoglochidion anamalayanum* Gamble and its taxonomic position under the genus *Phyllanthus* (*Phyllanthaceae*). *Phytotaxa* 286: 61–74.
- Parodi D. 1881. Duez nuevas especies pertenecientes á la Familias de las Euphorbiáceas. *Anales de la Sociedad Científica Argentina* 11: 49–56.
- Pax F, Hoffmann K. 1922. Euphorbiaceae - *Phyllanthoideae* - *Phyllantheae*. In: Engler A (ed), *Das Pflanzenreich IV.147.xv*: 1–349. Engelmann, Berlin.
- Pornpongongrueng P, Parnell JA, Hodgkinson TR, et al. 2017. *Phyllanthus kaweesakii* (*Phyllanthaceae*), a new species from Thailand. *Botany* 95: 567–577.
- Pruesapan K, Telford IRH, Bruhl JJ, et al. 2008. Delimitation of *Sauropus* (*Phyllanthaceae*) based on plastid matK and nuclear ribosomal ITS DNA sequence data. *Annals of Botany* 102: 1007–1018.
- Pruesapan K, Telford IRH, Bruhl JJ, et al. 2012. Phylogeny and proposed circumscription of *Breynia*, *Sauropus* and *Synostemon* (*Phyllanthaceae*), based on chloroplast and nuclear DNA sequences. *Australian Systematic Botany* 25: 313–330.
- Punt W. 1967. Pollen morphology of the genus *Phyllanthus* (Euphorbiaceae). *Review of Palaeobotany and Palynology* 3: 141–150.
- Punt W. 1972. Pollen morphology and taxonomy of section *Ceramanthus* Baillon s.l. of the genus *Phyllanthus* (Euphorbiaceae). *Review of Palaeobotany and Palynology* 13: 213–228.
- Punt W. 1980. Pollen morphology of the *Phyllanthus* species (Euphorbiaceae) occurring in New Guinea. *Review of Palaeobotany and Palynology* 31: 155–177.
- Punt W. 1986. Convergence in some interesting pollen types of *Phyllanthus* (Euphorbiaceae). *Canadian Journal of Botany* 64: 3127–3129.
- Punt W. 1987. A survey of pollen morphology in Euphorbiaceae with special reference to *Phyllanthus*. *Botanical Journal of the Linnean Society* 94: 127–142.
- Punt W, Rentrop J. 1973. Pollen morphology of the *Phyllanthus* species occurring in the continental United States. *Review of Palaeobotany and Palynology* 16: 243–261.
- Radcliffe-Smith A. 1974. Notes on African Euphorbiaceae: V. *Kew Bulletin* 29: 435–441.
- Radcliffe-Smith A. 1982. Notes on African Euphorbiaceae: XII. *Kew Bulletin* 37: 421–428.
- Radcliffe-Smith A. 1992. Notes on African Euphorbiaceae XXVIII. *Kew Bulletin* 47: 677–683.
- Radcliffe-Smith A. 1996. Notes on African Euphorbiaceae XXX: *Phyllanthus* (V) & c. *Kew Bulletin* 51: 301–331.
- Radcliffe-Smith A, Hoffmann P. 2006. New records, names and combinations in African Euphorbiaceae sensu lato. *Kew Bulletin* 61: 609–611.
- Ralimanana H, Hoffmann P. 2011. Taxonomic revision of *Phyllanthus* (*Phyllanthaceae*) in Madagascar and the Comoro Islands I: Synopsis and subgenera *Isocladius*, *Betsileani*, *Kirganelia* and *Tenellanthus*. *Kew Bulletin* 66: 331–365.
- Ralimanana H, Hoffmann P. 2014. Taxonomic revision of *Phyllanthus* L. (*Phyllanthaceae*) in Madagascar and the Comoro Islands II: subgenera *Anisonemoides* (Jean F. Brunel) Ralim. & Petra Hoffm., stat. nov. and *Menarda* (Müll.Arg.) Ralim. & Petra Hoffm., stat. nov. *Adansonia* 36: 265–301.
- Ralimanana H, Hoffmann P, Rajeriarison C. 2013. Taxonomic revision of *Phyllanthus* (*Phyllanthaceae*) in Madagascar and the Comoro Islands III: subgenera *Swartziana*, *Afroswartziana* and *Emblica*. *Kew Bulletin* 68: 535–558.
- Rendle AB, Baker EG, Moore S. 1921. A systematic account of the plants collected in New Caledonia and the Isle of Pines by Prof. RH Compton, MA, in 1914. – Part I. Flowering Plants (Angiosperms). *Journal of the Linnean Society of London, Botany* 45: 245–417.
- Ribeiro RTM, Neto RLS, Loiola MIB. 2017. *Phyllanthus carmenluciae*, a supreme species of *Phyllanthus* (*Phyllanthaceae*) from Brazil. *Phytotaxa* 305: 35–40.
- Ridley HN. 1909. The Flora of the Telom and Batang Padang Valleys. *Journal of the Federated Malay States Museums* 4: 1–98.
- Robinson CB. 1909. Philippine *Phyllanthinae*. *Philippine Journal of Science* 4: 71–106.
- Robinson CB. 1911. *Alabastra Philippensis*, III. *Philippine Journal of Science, C, Botany* 6: 319–358.
- Rossignol L, Rossignol M, Haicour R. 1987. A systematic revision of *Phyllanthus* subsection *Urinaria* (Euphorbiaceae). *American Journal of Botany* 74: 1853–1862.
- Rusby HH. 1912. New species from Bolivia, collected by R.S. William – II. *Bulletin of the New York Botanical Garden* 8: 89–136.
- Rusby HH. 1927. Description of new genera and species of plants collected on the Mulford Biological Exploration of the Amazon Valley. *Memoires of the New York Botanical Garden* 7: 205–387.
- Samuel R, Kathriarachchi H, Hoffmann P, et al. 2005. Molecular phylogenetics of *Phyllanthaceae*: evidence from plastid *matK* and nuclear *PHYC* sequences. *American Journal of Botany* 92: 132–141.
- Santiago LJM, Louro RP, Emmerich M. 2006. *Phyllanthus* section *Choretropsis* (Euphorbiaceae) in Brazil. *Botanical Journal of the Linnean Society* 150: 131–164.
- Schweinfurth G. 1899. Sammlung arabisch-aethiopischer Pflanzen. Ergebnisse von Reisen in den Jahren 1881, 88, 91 und 92. *Bulletin de l'Herbier Boissier* 7 (Appendix 2): 299–340.
- Secco RD, De Rosário AS. 2015. A new species of *Phyllanthus* (*Phyllanthaceae*) endemic to Amazonas State, Brazil. *Novon* 24: 209–211.
- Silva MJD. 2009. Two new Brazilian Species of *Phyllanthus* (*Phyllanthaceae*). *Novon* 19 (2): 229–233.
- Silva MJD, Sales MFD. 2006. *Phyllanthus* L. (*Phyllanthaceae*) em Pernambuco, Brasil. *Acta Botanica Brasiliensis* 21 (1): 79–98.
- Silva MJD, Sales MFD. 2008. Sinopse do gênero *Phyllanthus* (*Phyllanthaceae*) no nordeste do Brasil. *Rodriguésia* 59: 407–422.
- Small JK. 1913. Family 70. Euphorbiaceae. In: Britton NL, Brown A (eds), *An illustrated flora of the northern United States, Canada and the British possessions, from Newfoundland to the parallel of the southern boundary of Virginia, and from the Atlantic Ocean westward to the 102d meridian* 2: 452–476. Charles Scribner's Sons, New York.
- Smith JJ. 1910. Euphorbiaceae. In: Koorders SH, Valeton T (eds), *Bijdrage no. 12 tot de kennis der boomsoorten op Java*. Mededeelingen uitgaande van het Departement van Landbouw 10: 9–638. Kolff & Co., Batavia.
- Smith JJ. 1912. Euphorbiaceae. In: Lorentz MHA (ed), *Nova Guinea: résultats de l'expédition scientifique néerlandaise à la Nouvelle-Guinée*: 8 (2): 779–796. Brill, Leiden.
- Smith JJ. 1920. Plantae novae vel criticae ex Herbario et Horto Bogoriensi: I. *Bulletin du Jardin Botanique de Buitenzorg* ser. 3, 1: 390–410.
- Smith WW. 1921. Diagnosem specierum novarum in herbario Horti Regii Botanici Edinburgensis cognitarum. Notes from the Royal Botanic Garden, Edinburgh 13: 149–187.
- Stuppy W. 1995. Systematische Morphologie und Anatomie der Samen der biovulativen Euphorbiaceen. PhD Thesis Fachbereich Biologie, Universität Kaiserslautern, Kaiserslautern, Germany.
- Sunil CN, Prabhukumar KM, Kumar VVN, et al. 2016. *Phyllanthus balakrishnanii* sp. nov. (*Phyllanthaceae*), an interesting discovery from the southern Western Ghats, India. *Phytotaxa* 273: 65–71.
- Telford IR, Pruesapan K, Van Welzen PC, et al. 2016. Morphological and molecular data show *Synostemon trachyspermus* (*Phyllanthaceae*, *Phyllantheae*) to be a heterogeneous species assemblage. *Australian Systematic Botany* 29: 218–234.
- Thin NN. 2007. Taxonomy of Euphorbiaceae in Vietnam. National University Publishers, Hanoi.
- Thulin M. 2003. *Phyllanthus xylorrhizus* (*Phyllanthaceae*), a new species from Somalia. *Nordic Journal of Botany* 23: 385–387.
- Van Welzen PC, Pruesapan K, Telford IRH, et al. 2014. Phylogenetic reconstruction prompts taxonomic changes in *Sauropus*, *Synostemon* and *Breynia* (*Phyllanthaceae* tribe *Phyllantheae*). *Blumea* 59: 77–94.
- Visiani RD. 1858. Recensio Altera Plantarum Minus Cognitarum quas Hortus Patavinus colit. *Atti Del Reale Istituto Veneto di Scienze, Lettere ed Arti*. 3: 133–142.
- Von Mueller FJH. 1859. *Fragmenta Phytographiae Australiae* 1. Joannis Ferris, Melbourne.
- Volontsova MS, Hoffmann P, Kathriarachchi H, et al. 2007. *Andrachne cu-neifolia* (*Phyllanthaceae*; *Euphorbiaceae* s.l.) is a *Phyllanthus*. *Botanical Journal of the Linnean Society* 155: 519–525.
- Wagner WL, Lorence DH. 2011. A nomenclator of Pacific oceanic island *Phyllanthus* (*Phyllanthaceae*), including *Glochidion*. *Phytokeys* 4: 67–94.
- Warburg O. 1891. Beiträge zur Kenntnis der papuanischen Flora (Schluss). *Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie* 13: 273–455.
- Webster GL. 1955. Studies of the Euphorbiaceae, *Phyllanthoideae* I. Taxonomic notes on the West Indian species of *Phyllanthus*. Contributions from the Gray Herbarium of Harvard University 176: 45–63.
- Webster GL. 1956. A monographic study of the West Indian species of *Phyllanthus*. *Journal of the Arnold Arboretum* 37: 91–122, 217–268, 340–359.
- Webster GL. 1957. A monographic study of the West Indian species of *Phyllanthus*. *Journal of the Arnold Arboretum* 38: 51–80, 170–198, 295–373.

- Webster GL. 1958. A monographic study of the West Indian species of *Phyllanthus*. *Journal of the Arnold Arboretum* 39: 49–100, 111–212.
- Webster GL. 1960. Supplement to a monographic study of the West Indian species of *Phyllanthus*. *Journal of the Arnold Arboretum* 41: 279–286.
- Webster GL. 1967a. A remarkable new *Phyllanthus* (Euphorbiaceae) from Central America. *Annals of the Missouri Botanical Garden* 54: 194–198.
- Webster GL. 1967b. The genera of Euphorbiaceae in the southeastern United States. *Journal of the Arnold Arboretum* 48: 363–430.
- Webster GL. 1970. A revision of *Phyllanthus* (Euphorbiaceae) in the continental United States. *Brittonia* 22: 44–76.
- Webster GL. 1978. A new Mexican species of *Phyllanthus* (Euphorbiaceae) with Southern Hemisphere affinities. *Rhodora* 80: 570–574.
- Webster GL. 1979. A revision of *Margaritaria* (Euphorbiaceae). *Journal of the Arnold Arboretum* 60: 403–444.
- Webster GL. 1986. A revision of *Phyllanthus* (Euphorbiaceae) in eastern Melanesia. *Pacific Science* 40: 88–105.
- Webster GL. 1995. A new species of *Phyllanthus* (Euphorbiaceae) from Ceylon. *Kew Bulletin* 50: 266.
- Webster GL. 1997. *Phyllanthus*. In: Dassanayake MD, Clayton WD (eds), *A revised handbook to the Flora of Ceylon* 11: 206–235. Balkema, Rotterdam.
- Webster GL. 2001a. An unusual new species of *Phyllanthus* (Euphorbiaceae) from Colombia. *Lundellia* 4: 64–68.
- Webster GL. 2001b. Synopsis of *Croton* and *Phyllanthus* (Euphorbiaceae) in western tropical Mexico. *Contributions from the University of Michigan Herbarium* 23: 353–388.
- Webster GL. 2002a. A synopsis of the Brazilian taxa of *Phyllanthus* section *Phyllanthus* (Euphorbiaceae). *Lundellia* 5: 1–26.
- Webster GL. 2002b. Three new sections and a new subgenus of *Phyllanthus* (Euphorbiaceae). *Novon* 12: 290–298.
- Webster GL. 2003. A synopsis of *Phyllanthus* section *Nothoclema* (Euphorbiaceae). *Lundellia* 6: 19–36.
- Webster GL. 2004. A revision of *Phyllanthus* section *Hylaeanthus* (Euphorbiaceae). *Lundellia* 7: 11–27.
- Webster GL. 2007. Taxonomic and nomenclatural changes in American Euphorbiaceae sensu lato. *Contributions from the University of Michigan Herbarium* 25: 235–239.
- Webster GL, Airy Shaw HK. 1971. A provisional synopsis of the New Guinea taxa of *Phyllanthus* (Euphorbiaceae). *Kew Bulletin* 26: 85–109.
- Webster GL, Carpenter KJ. 2002. Pollen morphology and phylogenetic relationships in neotropical *Phyllanthus* (Euphorbiaceae). *Botanical Journal of the Linnean Society* 138: 325–338.
- Webster GL, Carpenter KJ. 2008. Pollen morphology and systematics of palaeotropical *Phyllanthus* and related genera of subtribe *Phyllanthinae* (Euphorbiaceae). *Botanical Journal of the Linnean Society* 157: 591–608.
- Wilson PG. 1962. Tabula 3589. *Phyllanthus petaloideus*. Hooker's *Icones Plantarum*, ser. 5: 1–3.
- Wu M-J, Ferreras U, Chen Y-J. 2017. *Phyllanthus coi* (Phyllanthaceae), a new herbaceous species from the Philippines. *Taiwania* 62: 375–380.
- Wu M-J, Huang T-C, Liu C-C, et al. 2016. Pollen morphology and taxonomy in Malesian *Phyllanthus* (Phyllanthaceae). *The Journal of Japanese Botany* 91, Supplement: 257–292.

Manuscripts

- Available online at the website of the University of California:
http://herbarium.ucdavis.edu/webster_manuscripts.html (last accessed March 2017).
- Webster GL. 2001 Synopsis of *Gomphidium*
<http://herbarium.ucdavis.edu/manuscripts/webster/New%20World/2001%20Synopsis%20of%20Gomphidium.pdf>.
- Webster GL. 2002 Outline of the Neotropical infrageneric taxa of *Phyllanthus* (Euphorbiaceae)
<http://herbarium.ucdavis.edu/manuscripts/webster/New%20World/2002%20Outline%20neotropical%20Phyllanthus%202.pdf>.
- Webster GL. 2002 Synopsis of *Phyllanthus* subgenus *Emblica*
<http://herbarium.ucdavis.edu/manuscripts/webster/New%20World/2002%20Synopsis%20of%20Phyllanthus%20subgenus%20Emblica.pdf>.
- Webster GL. 2002 Synopsis of *Phyllanthus* subgenus *Eriococcus*
<http://herbarium.ucdavis.edu/manuscripts/webster/New%20World/2002%20Synopsis%20of%20Phyllanthus%20subgenus%20Eriococcus.pdf>.
- Webster GL. 2002 Synopsis of *Phyllanthus* subgenus *Kirganelia*
<http://herbarium.ucdavis.edu/manuscripts/webster/New%20World/2002%20Synopsis%20of%20Phyllanthus%20subgenus%20Kirganelia.pdf>.
- Webster GL. 2002 Synopsis of *Phyllanthus* subgenus *Phyllanthus*
<http://herbarium.ucdavis.edu/manuscripts/webster/New%20World/2002%20Synopsis%20of%20Phyllanthus%20subgenus%20Phyllanthus.pdf>.
- Webster GL. 2002 Synopsis of *Phyllanthus* subgenus *Xylophylla*
<http://herbarium.ucdavis.edu/manuscripts/webster/New%20World/2002%20Synopsis%20of%20Phyllanthus%20subgenus%20Xylophylla.pdf>.
- Webster GL. Outline of Australian *Phyllanthus* (No date)
<http://herbarium.ucdavis.edu/manuscripts/webster/Austral%20and%20the%20Pacific/Outline%20of%20Australian%20Phyllanthus.pdf>.

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. miruri</i>	Pantropical
<i>Phyllanthus</i>	<i>Afroswartzianii</i>	<i>Callidisci</i>		Ralim. & Petra Hoffm. (Jean F.Brunel) R.W.Bouman	<i>P. lokohensis</i>	Madagascar, Mainland Asia, Malesia, Tropical Africa
<i>Phyllanthus</i>	<i>Afroswartzianii</i>	<i>Fluitantoides</i>		Jean F.Brunel	<i>P. callidiscus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Afroswartzianii</i>	<i>Microdendron</i>		Jean F.Brunel	<i>P. felicis</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Afroswartzianii</i>	<i>Odontadenii</i>		(Jean F.Brunel & Jacq.Roux) R.W.Bouman	<i>P. microdendron</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Afroswartzianii</i>	<i>Praeophyllum</i>		Jean F.Brunel	<i>P. odontadenii</i>	Congo
<i>Phyllanthus</i>	<i>Anisoneimoidea</i>			(Jean F.Brunel) Ralim. & Petra Hoffm. (Jean F.Brunel) Ralim. & Petra Hoffm.	<i>P. anensis</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Betsileanae</i>			(Hassk.) Jean F.Brunel	<i>P. bojerianus</i>	Madagascar
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Anisobium</i>		Müll.Arg.	<i>P. betsiéanu</i>	Madagascar
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Bivia</i>		Jean F.Brunel & Jacq.Roux	<i>P. albidisces</i>	Tropical Africa, Asia
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Ceramanthus</i>		(Hassk.) Baill.	<i>P. velwitschianus</i>	Tropical Africa, Asia
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Clytopsis</i>		Müll.Arg.	<i>P. petreus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Ebolowari</i>		Jean F.Brunel	<i>P. albidiscus</i>	Tropical Africa, Asia
<i>Phyllanthus</i>	<i>Ceramanthus</i>	<i>Conami</i>		(Aubl.) G.L.Webster	<i>P. cochinchinensis</i>	Asia
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Apolepsis</i>		G.L.Webster	<i>P. tetouzeanus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Hylaeanthus</i>		G.L.Webster	<i>P. brasiliensis</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Nothoclema</i>		G.L.Webster	<i>P. orbiculatus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Cyclanthera</i>		G.L.Webster	<i>P. attenuatus</i>	Tropical South America, West Indies
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Cyclanthera</i>		G.L.Webster	<i>P. acuminateus</i>	Tropical South America, Central America, West Indies
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Cyclanthera</i>		G.L.Webster	<i>P. lindenianus</i>	West Indies
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Cyclanthera</i>		G.L.Webster	<i>P. carnosulus</i>	West Indies
<i>Phyllanthus</i>	<i>Embleca</i>			G.L.Webster	<i>P. lindenianus</i>	West Indies
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Botryoides</i>		(Gaertn.) Kurz	<i>P. emblica</i>	Pantropical, origin Asia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Embleca</i>		Jean F.Brunel	<i>P. baedobutyoides</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Microglodion</i>		(Gaertn.) Baill.	<i>P. emblica</i>	Mainland Asia, Malesia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Pityrocladius</i>		(Müll.Arg.) Müll.Arg.	<i>P. vacinifolius</i>	Tropical South America
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Urnaria</i>		G.L.Webster	<i>P. ruscifolius</i>	Tropical South America
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Urnaria</i>		(Gaertn.) G.L.Webster	<i>P. urinaria</i>	Pantropical, origin Asia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		Haiour & Rossignol	<i>P. gracilipes</i>	Pantropical, origin Asia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Hassk.) Croizat & Metcalf	<i>P. lamprophyllus</i>	Mainland Asia, Malesia, Australia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		Müll.Arg.	<i>P. acutissimum</i>	Mainland Asia, Malesia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Hassk.) Müll.Arg.	<i>P. gracilipes</i>	Mainland Asia, Malesia, ?Australia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		Jean F.Brunel	<i>P. nhatrangensis</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Lour.) Müll.Arg.	<i>P. ruber</i>	Mainland Asia, Malesia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Blume) Müll.Arg.	<i>P. buxifolius</i>	Mainland Asia, Malesia, Australia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Baill.) G.L.Webster	<i>P. chamaecerasus</i>	'Central America', Malesia, Australia, Pacific
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		Müll.Arg.	<i>P. aeneus</i>	Malesia, New Caledonia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Hassk.) Müll.Arg.	<i>P. loranthoides</i>	New Caledonia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Lour.) Müll.Arg.	<i>P. tuerckheimii</i>	Central America
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Blume) Müll.Arg.	<i>P. chamaecerasus</i>	Malesia, Pacific
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(Baill.) G.L.Webster	<i>P. gracilipes</i>	Pantropical
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		G.L.Webster	<i>P. ruguetii</i>	Tropical Africa, Mainland Asia, Malesia, Australia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		Baill.	<i>P. kanalensis</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		(K.Schum.) J.J.Sm.	<i>P. clambroides</i>	Tropical Africa, Madagascar, Mainland Asia
<i>Phyllanthus</i>	<i>Embleca</i>	<i>Eriococcus</i>		G.L.Webster	<i>P. maderaspatensis</i>	Pantropical (Introduced in North America)
<i>Phyllanthus</i>	<i>Adenoglachidion</i>	<i>Eleutherogygium</i>		(Müll.Arg.) R.W.Bouman	<i>P. casticum</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Adenoglachidion</i>	<i>Physogochidion</i>		Baill.	<i>P. reticulatus</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Calodictyon</i>	<i>Leptonema</i>		(A.Juss.) Griseb.	<i>P. dinklagei</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Gomphidium</i>		Jean F.Brunel & Jacq.Roux	<i>P. pinnatum</i>	Tropical Africa, Madagascar, Mainland Asia
<i>Phyllanthus</i>	<i>Gomphidium</i>	<i>Gomphidium</i>		(Wight) Müll.Arg.	<i>P. acidus</i>	Pantropical: origin South America
<i>Phyllanthus</i>	<i>Isocladus</i>	<i>Kirganelia</i>		(L.) Müll.Arg.	<i>P. chacoensis</i>	Tropical South America
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Kirganelia</i>		(Chodat) G.L.Webster	<i>Aporosella</i>	
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Brazzeani</i>				
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Chorisandra</i>				
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicca</i>				
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicca</i>				

Appendix 1 (cont.)

Genus	Subgenus	Section	Subsection	Author	Type species	Distribution
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Cicca</i>	<i>Cheramela</i>	Kuntze	<i>P. acidus</i>	Pantropical, origin possibly Africa
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Ciccosis</i>		G.L.Webster	<i>P. pseudocicca</i>	Tropical South America
<i>Phyllanthus</i>	<i>Kirganelia</i>	<i>Hemiccia</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>	Tropical Asia, Malesia, Pacific, Australia
<i>Phyllanthus</i>	<i>Menara</i>			(Comm. ex A.Juss.) Ralim. & Petra Hoffm.	<i>P. cryptophyllum</i>	Madagascar, Middle East?
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Arachnodes</i>		(Hemsl.) G.L.Webster	<i>P. mirabilis</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Calophyllum</i>		(Gagnep.) Airy Shaw	<i>P. arachnoides</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Phyllanthodendron</i>		Croizat	<i>P. anthropotamicus</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Pseudoactephila</i>		Croizat	<i>P. mirabilis</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthodendron</i>	<i>Tetrandrum</i>		Croizat	<i>P. roseus</i>	Mainland Asia
<i>Phyllanthus</i>	<i>Phyllanthus</i>			P.T.Li	<i>P. moi</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Choretropsis</i>		–	<i>P. miruri</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Applanata</i>		Müll.Arg.	<i>P. choretroides</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Choretropsis</i>		L.J.M.Santiago	<i>P. klotzschianus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</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>Phyllanthus</i>		–	<i>P. miruri</i>	Pantropical
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Phyllanthus</i>		G.L.Webster	<i>P. almadensis</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Phyllanthus</i>		G.L.Webster	<i>P. clausenii</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Phyllanthus</i>		G.L.Webster	<i>P. miruri</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Phyllanthus</i>		G.L.Webster	<i>P. pentaphyllum</i>	West Indies
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Salvinopsis</i>		G.L.Webster	<i>P. fluitans</i>	Americas
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Swartziani</i>		Holm-Niels. ex Jean F.Brunel	<i>P. amarus</i>	Pantropical, origin North America?
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Reverchonia</i>		(G.L.Webster) Ralim. & Petra Hoffm.	<i>P. warnockii</i>	North America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Tenellanthus</i>		(A.Gray) G.L.Webster	<i>P. tenellus</i>	Pantropical, origin Africa
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Tenellanthus</i>		Jean F.Brunel	<i>P. ioandensis</i>	Tropical Africa
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Tenellanthus</i>		G.L.Webster	<i>P. pentandrus</i>	Pantropical, origin Africa
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Tenellanthus</i>		Jean F.Brunel	<i>P. tenellus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Phyllanthus</i>	<i>Xylophylla</i>		(L.) Pers.	<i>P. epiphyllanthus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Adianthodes</i>	<i>Xylophylla</i>		Jabl. ex Jean F.Brunel	<i>P. adianthoides</i>	Tropical South America
<i>Phyllanthus</i>	<i>Asterandra</i>	<i>Xylophylla</i>		(Klotzsch) Müll.Arg.	<i>P. juglandifolius</i>	Tropical South America
<i>Phyllanthus</i>	<i>Brachycladus</i>	<i>Xylophylla</i>		G.L.Webster	<i>P. rupestris</i>	Tropical South and Middle America
<i>Phyllanthus</i>	<i>Ciccastrum</i>	<i>Xylophylla</i>		Müll.Arg.	<i>P. riedelianus</i>	Tropical South and Middle America
<i>Phyllanthus</i>	<i>Diplocica</i>	<i>Xylophylla</i>		Müll.Arg.	<i>P. octomerus</i>	Tropical South America
<i>Phyllanthus</i>	<i>Elatanthodes</i>	<i>Xylophylla</i>		Croizat	<i>P. glaucescens</i>	Central and South America
<i>Phyllanthus</i>	<i>Epistylum</i>	<i>Xylophylla</i>		(Sw.) Griseb.	<i>P. axillaris</i>	West Indies
<i>Phyllanthus</i>	<i>Glyptothamnus</i>	<i>Xylophylla</i>		G.L.Webster	<i>P. chrysanthus</i>	West Indies
<i>Phyllanthus</i>	<i>Hemiphyllanthus</i>	<i>Xylophylla</i>		(Müll.Arg.) Müll.Arg.	<i>P. ovatus</i>	West Indies
<i>Phyllanthus</i>	<i>Omphacodes</i>	<i>Xylophylla</i>		G.L.Webster	<i>P. subcarnosus</i>	West Indies
<i>Phyllanthus</i>	<i>Orcibularia</i>	<i>Xylophylla</i>		(Baill.) Griseb	<i>P. orbicularis</i>	West Indies
<i>Phyllanthus</i>	<i>Oxalisstylos</i>	<i>Xylophylla</i>		Baill.	<i>P. salvifolius</i>	Tropical South America, West Indies
<i>Phyllanthus</i>	<i>Thamnocharris</i>	<i>Xylophylla</i>		G.L.Webster	<i>P. cinctus</i>	West Indies
<i>Phyllanthus</i>	<i>Williamia</i>	<i>Xylophylla</i>		(Baill.) Müll.Arg.	<i>P. discolor</i>	West Indies
<i>Phyllanthus</i>	<i>Discolores</i>	<i>Xylophylla</i>		G.L.Webster	<i>P. williamoides</i>	West Indies
<i>Phyllanthus</i>	<i>Incrustati</i>	<i>Xylophylla</i>		G.L.Webster	<i>P. mirificus</i>	West Indies
<i>Phyllanthus</i>	<i>Mirifici</i>	<i>Xylophylla</i>		(L.) Baill.	<i>P. epiphyllanthus</i>	West Indies
<i>Phyllanthus</i>	<i>Xylophylla</i>	<i>Xylophylla</i>		G.L.Webster	<i>P. dictyospermus</i>	Tropical South America, Australia
<i>Phyllanthus</i>	<i>Antipodanthus</i>					

Appendix 2 Species checklist of *Phyllanthus* based on the current infrageneric 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>Afroswartziani</i>	<i>P. airy-shawii</i> Jean F.Brunel & Jacq.Roux	India, Myanmar, People's Republic of Bangladesh, Thailand	Mainland Asia	x	x	x	Brunel & Roux 1984
Subg. <i>Afroswartziani</i> ?	<i>P. amherstianus</i> L.B.Chaudhury & R.R.Rao	India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroswartziani</i>	<i>P. ampandrandavae</i> Leandri	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. andrianovatenensis</i> Jean F.Brunel & Jacq.Roux	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. angustatus</i> Hutch.	Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. antakarbenensis</i> Ralim. & Petra Hoffm.	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. esperulatus</i> Hutch.	Northern Africa	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. pengueiensis</i> Müll.Arg.	Angola	Tropical Africa	x	x	x	Webster 1957
Subg. <i>Afroswartziani</i>	<i>P. bombardei</i> Jean F.Brunel	Ivory Coast	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i> ?	<i>P. brevipes</i> Hook.f.	India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroswartziani</i>	<i>P. brynei</i> Jean F.Brunel	Congo	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. caesiliifolius</i> Petra Hoffm. & Cheek	Cameroon	Tropical Africa	x	x	x	Hoffmann & Cheek 2003
Subg. <i>Afroswartziani</i>	<i>P. camerunensis</i> Jean F.Brunel	Democratic Republic of the Congo, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. carunculatus</i> Jean F.Brunel	Central African Republic	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. ceratostemon</i> Benth.	Chad, Kenya, Sudan, United Republic of Tanzania	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. chevalieri</i> Beille	Mascarenes	Indian Ocean	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartziani</i>	<i>P. consanguineus</i> Müll.Arg.	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. coursei</i> Leandri	United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. crassirivervus</i> Radcl.-Sm.	Africa, Asia, widespread	Tropical Africa, Mainland Asia	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. debilis</i> J.G.Klein ex Willd.		Tropical Africa, Mainland Asia	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. dekindtianus</i> Jean F.Brunel	Angola	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. delagoensis</i> Hutch.	Tropical Africa	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. denticulatus</i> Jean F.Brunel	Uganda	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. discolorinatus</i> Jean F.Brunel	Cameroon	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. eliae</i> (Jean F.Brunel & Jacq.Roux)	Togo	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. eliae</i> (Jean F.Brunel)	Congo	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. epiphyllumferens</i> Jean F.Brunel	Cameroon	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. fottii</i> Jean F.Brunel	Equatorial Guinea, Gabon	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. fressii</i> Hutch.	Uganda	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. grabonensis</i> Jean F.Brunel	Democratic Republic of the Congo, Kenya, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. geniculata</i> Stevnon Jean F.Brunel	Angola, Democratic Republic of the Congo, Zambia	Tropical Africa	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroswartziani</i>	<i>P. gilletianus</i> Jean F.Brunel	Bhutan, India, Nepal	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroswartziani</i>	<i>P. grossweinii</i> Hutch.	Kenya, United Republic of Tanzania	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. griffithii</i> Müll.Arg.	South Africa	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. harrisi</i> Radcl.-Sm.	Ethiopia, Somalia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. heterophyllum</i> E.Mey. ex Müll.Arg.	Angola, Democratic Republic of the Congo, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. hillibrandtii</i> Pax	Mozambique, United Republic of Tanzania	Tropical Africa	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. holosteum</i> Mill.-Redh.	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. humprathianus</i> Jean F.Brunel	Kenya, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. hutchinsonianus</i> S.Moore	Cameroon	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartziani</i>	<i>P. irregius</i> Radcl.-Sm.	Mascrenes	Indian Ocean	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. iwhihibus</i> Leandri	Democratic Republic of the Congo	Tropical Africa	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroswartziani</i>	<i>P. kaessneri</i> Hutch.	Bhutan, India	Mainland Asia	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. kelleanus</i> Jean F.Brunel	Central African Republic	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. lanceolatus</i> Poit.	Kenya, Mozambique, Somalia, Uganda,	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. leandrianus</i> Jean F.Brunel	United Republic of Tanzania	Tropical Africa	x	x	x	Radicke-Smith & Hoffmann 2006
Subg. <i>Afroswartziani</i>	<i>P. leonardianus</i> Lisowski	Kenya	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i> ?	<i>P. leschenaultii</i> Müll.Arg.	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. lejeustii</i> Jean F.Brunel	Angola, Democratic Republic of the Congo, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. leucocalyx</i> Hutch.	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. leucochlamys</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa	x	x	x	Radicke-Smith & Hoffmann 2006
Subg. <i>Afroswartziani</i>	<i>P. leucosperalus</i> Jean F.Brunel	Kenya	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. lokonensis</i> Leandri	Angola, Democratic Republic of the Congo, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. macranthus</i> Pax	Madagascar	Madagascar	x	x	x	Brunel 1987
Subg. <i>Afroswartziani</i>	<i>P. madagascariensis</i> Müll.Arg.		Madagascar	x	x	x	Raimanana et al. 2013

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Afroswartziani</i>	<i>P. mafingensis</i> Raddi-Sm.	Malawi	Tropical Africa	x	x	x	Radcliffe-Smith 1996
Subg. <i>Afroswartziani</i>	<i>P. magdalenensis</i> Jean F.Brunel	Cameroun	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. mahengeensis</i> Jean F.Brunel	United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. maktae</i> Jean F.Brunel	Congo	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. manianus</i> Müll.Arg.	Cameroun, Nigeria	Tropical Africa	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i> ?	<i>P. mckenziei</i> Fosberg	Aldabra, Seychelles	Indian Ocean				
Subg. <i>Afroswartziani</i>	<i>P. melieri</i> Müll.Arg.	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. micromeriae</i> Raddi-Sm.	Malawi, United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. mindoulieris</i> Jean F.Brunel	Congo	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. mikuniae</i> Jean F.Brunel	United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. moeroensis</i> De Wild.	Democratic Republic of the Congo	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. monovora</i> Jean F.Brunel	Liberia	Tropical Africa	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. moramangicus</i> (Leandri) Leandri	Madagascar	Madagascar	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i> ?	<i>P. mukeyenseanus</i> D.Mitra & Bennet	India	Mainland Asia	x	x	x	Mitra & Bennet 1967
Subg. <i>Afroswartziani</i>	<i>P. myrtaceus</i> Sond.	Zimbabwe	Tropical Africa	x	x	x	Müller 1863, 1866
Subg. <i>Afroswartziani</i>	<i>P. nolikhimikianus</i> Jean F.Brunel	Cameroon	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. nigericus</i> Brenan	Nigeria	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. nituroides</i> Müll.Arg.	Guinea, Kenya, Uganda, United Republic of Tanzania, Zaire, Zimbabwe	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. nyale</i> Petra Hoffm. & Cheek	Cameroon	Tropical Africa	x	x	x	Hoffmann & Cheek 2003
Subg. <i>Afroswartziani</i>	<i>P. nyikae</i> Radcl.-Sm.	Malawi	Tropical Africa	x	x	x	Radcliffe-Smith 1996
Subg. <i>Afroswartziani</i>	<i>P. ornatekenensis</i> Dinter & Pax	Angola, Botswana, Namibia, Zambia, Zimbabwe	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. oppositifolius</i> Baill. ex Müll.Arg.	Masarcenes	Indian Ocean	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartziani</i> ?	<i>P. parvifolius</i> Buch.-Ham. ex D.Don	Bhutan, India, Myanmar, Nepal	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroswartziani</i>	<i>P. parvus</i> Hutch.	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. pendulus</i> Roxb.	India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Afroswartziani</i>	<i>P. phillyreifolius</i> Poir.	Masarcenes	Indian Ocean	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartziani</i>	<i>P. pierottii</i> Jean F.Brunel	Togo	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. piletostigma</i> Coode	Masarcenes	Indian Ocean	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartziani</i>	<i>P. prostratus</i> Müll.Arg.	Angola, Zimbabwe	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. pseudocarunculatus</i> Radcl.-Sm.	Democratic Republic of the Congo, Zambia	Tropical Africa	x	x	x	Radcliffe-Smith 1996, but see <i>P. carunculatus</i> Jean F.Brunel
Subg. <i>Afroswartziani</i>	<i>P. rangoolekensis</i> Leandri	Madagascar	Madagascar	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. rheedei</i> Wight	India, Sri Lanka, Myanmar	Mainland Asia	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. rhizomatous</i> Radcl.-Sm.	United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. rotundifolius</i> J.G.Klein ex Willd.	Tropical Africa to Sri Lanka and India	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. rouxi</i> Jean F.Brunel	Ghana, Togo	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. sepialis</i> Müll.Arg.	Ethiopia, Kenya, Sudan, Uganda, United Republic of Tanzania	Tropical Africa	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. serandii</i> Jean F.Brunel	Guinea	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. shabaensis</i> Jean F.Brunel	Democratic Republic of the Congo	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. subfrutescens</i> Schumach. & Thonn.	Benin, Burkina Faso, Ghana, Ivory Coast, Mali, Togo	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. tanguensis</i> Jean F.Brunel	Ethiopia, Kenya, Somalia, Uganda, United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. tanensis</i> Jean F.Brunel	Kenya	Madagascar	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. tenuifolia</i> Radcl.-Sm.	Cameroun to Ethiopia and Zimbabwe	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. thulinii</i> Radcl.-Sm.	Zambia	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. tukuyuanus</i> Jean F.Brunel	United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. idonoclea</i> Radcl.-Sm.	Madagascar	Madagascar	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. ukagurensis</i> Radcl.-Sm.	Malawi, Zambia, Zimbabwe	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. yambaeensis</i> Jean F.Brunel	United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. vanderystii</i> Hutch. & De Wild.	Congo	Tropical Africa	x	x	x	Raimanana et al. 2013
Subg. <i>Afroswartziani</i>	<i>P. venustulus</i> Leandri	Democratic Republic of the Congo	Madagascar	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. viquierenis</i> Jean F.Brunel	Madagascar	Madagascar	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. zambicus</i> Radcl.-Sm.	Zambia	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i>	<i>P. zomboides</i> Radcl.-Sm.	Malawi, Zambia, Zimbabwe	Tropical Africa	x	x	x	Brunei 1987
Subg. <i>Afroswartziani</i> sect. <i>Callidiscis</i>	<i>P. fischeri</i> Pax	Ethiopia, Kenya, Uganda, United Republic of Tanzania	Tropical Africa	x	x	x	Brunei 1987

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Afroswartzianae</i> sect. <i>Calidisci</i>	<i>P. immuensis</i> Cufod.		Tropical Africa				Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Calidisci</i>	<i>P. wingfieldii</i> Radcl.-Sm.	Democratic Republic of the Congo, Ethiopia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Calidisci</i>	<i>P. yangambiense</i> Jean F.Brunel	United Republic of Tanzania	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Calidisci</i>	<i>P. youngii</i> Jean F.Brunel	Democratic Republic of the Congo	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Calidisci</i>	<i>P. felicis</i> Jean F.Brunel	Guinea	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Fluitantoides</i>	<i>P. microdendron</i> Müll.Arg.	Angola, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Microdendron</i>	<i>P. aspersus</i> Jean F.Brunel & Jacq.Roux	Cameroon	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. bergeronae</i> Jean F.Brunel & Jacq.Roux	West Tropical Africa	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. berqueriiflora</i> Robyns & Lawalée	Tropical Africa	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. burundensis</i> Jean F.Brunel	Burundi	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. caligatus</i> Jean F.Brunel & Jacq.Roux	Cameroon	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. deserti</i> Hutch.	Nigeria	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. gagnieuvei</i> Jean F.Brunel & Jacq.Roux	Democratic Republic of the Congo, Ghana, Ivory Coast, Nigeria, Sierra Leone, Togo	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. jaegeri</i> Jean F.Brunel & Jacq.Roux	Sierra Leone	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. kivuensis</i> Jean F.Brunel	Congo	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. lehmannii</i> Robyns & Lawalée	Ethiopia, Malawi, Mozambique, Zaire, Zambia, Zimbabwe	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. leucanthus</i> Pax	Ghana	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. magnificens</i> Radcl.-Sm.	Congo, Democratic Republic of the Congo	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. mieschii</i> Jean F.Brunel & Jacq.Roux	Ivory Coast	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. nozermanianus</i> Jean F.Brunel & Jacq.Roux	United Republic of Tanzania	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. podontadenioides</i> Jean F.Brunel	Angola, Burundi, Kenya, Rwanda, Uganda, United Republic of Tanzania, Zaire	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. podontadenius</i> Müll.Arg.	Botswana, Burundi, Cameroon, Ethiopia, Kenya, Rwanda, Sudan, Uganda, United Republic of Tanzania, Zaire, Zambia, Zimbabwe	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. pseudonitururi</i> Müll.Arg.		Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. raynaili</i> Jean F.Brunel & Jacq.Roux	Cameroon, Gabon	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. trichotepala</i> Brenan	Congo, Rwanda	Tropical Africa	x	x	x	Brunel & Roux 1981
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. volkense</i> Engl. & Lawalée	Kenya, Tanzania	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. xiphophorus</i> Jean F.Brunel	Democratic Republic of the Congo	Tropical Africa	x	x	x	Webster 2002 synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. avernsis</i> Müll.Arg.	Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. boehmii</i> Pax	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia, Zimbabwe	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. confusus</i> Brenan	Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. fluminis-athei</i> Radcl.-Sm.	Malawi	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. meyerianus</i> Müll.Arg.	Kenya	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. microphyllinus</i> Müll.Arg.	South Africa	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. mittenianus</i> Hutch.	Angola	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. oblongiglandia</i> M.G.Gilbert	Kenya, United Republic of Tanzania	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. oxyccifolius</i> Hutch.	Ethiopia, Kenya, Zaire	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. paxii</i> Hutch.	Angola, United Republic of Tanzania	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. schaulsii</i> Jean F.Brunel	United Republic of Tanzania, Mozambique, Zambia	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. tanzanianus</i> Jean F.Brunel	Cameroon	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. virginatus</i> Müll.Arg.	United Republic of Tanzania	Tropical Africa	x	x	x	Brunel 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. austroparensis</i> Radcl.-Sm.	Angola, Democratic Republic of the Congo, Malawi, Zambia	Tropical Africa	x	x	x	Radcliffe-Smith 1992
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. boreensis</i> M.G.Gilbert	United Republic of Tanzania	Tropical Africa	x	x	x	Gilbert 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. caespitosus</i> Brenan	Ethiopia	Tropical Africa	x	x	x	Brenan 1967
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. dewildeorum</i> M.G.Gilbert	Malawi, Zambia	Tropical Africa	x	x	x	Gilbert 1987
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. dictyophleboides</i> Radcl.-Sm.	Ethiopia	Tropical Africa	x	x	x	Radcliffe-Smith 1992
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. mooreyi</i> M.G.Gilbert	Ethiopia	Tropical Africa	x	x	x	Raimannana & Hoffmann 2014
Subg. <i>Afroswartzianae</i> sect. <i>Odontadeni</i>	<i>P. retinervis</i> Hutch.	Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Raimannana & Hoffmann 2014
Subg. <i>Anisonemoideae</i>	<i>P. ambatovolana</i> Leandri	Madagascar	Madagascar	x	x	x	Raimannana & Hoffmann 2014
Subg. <i>Anisonemoideae</i>	<i>P. analameraei</i> Leandri	Madagascar	Madagascar	x	x	x	Raimannana & Hoffmann 2014
Subg. <i>Anisonemoideae</i>	<i>P. ankaranensis</i> Leandri	Madagascar	Madagascar	x	x	x	Raimannana & Hoffmann 2014
Subg. <i>Anisonemoideae</i>	<i>P. bemangadiensis</i> Ralim.						

Appendix 2 (cont.)

Subgeneric placement	Species	Major area	Global area	D ¹	M ²	L ³	Most important literature
Subg. <i>Anisonemoides</i>	<i>P. berrierianus</i> Baill.	Madagascar, Mozambique	Tropical Africa	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. bojerianus</i> (Baill.) Müll.Arg.	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. gordonii</i> Ralm. & Petra Hoffm.	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. goudotianus</i> (Baill.) Müll.Arg.	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. humbertianus</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. iraisensis</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. isomorrensis</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. mananarensis</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. manadiensis</i> Ralm. & Petra Hoffm.	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. multiflorus</i> Poir.	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. obcordophyllum</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Anisonemoides</i>	<i>P. yakimikararae</i> Leandri	Madagascar	Madagascar	x	x	x	Ralimanana & Hoffmann 2014
Subg. <i>Betsileani</i>	<i>P. bathynus</i> Leandri	Madagascar	Madagascar	x	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	x	Ralimanana & Hoffmann 2011
Subg. <i>Ceramanthus</i> ?	<i>P. binhi</i> Thin	Vietnam	Mainland Asia	~	Thin 2007	Thin 2007	Thin 2007
Subg. <i>Ceramanthus</i> sect. <i>Antisolidobium</i>	<i>P. herstingii</i> Jean F.Brunel	Benin, Ghana, Guinea, Ivory Coast, Sierra Leone, Togo	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Antisolidobium</i>	<i>P. kewitwitschianus</i> Müll.Arg.	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Bivia</i>	<i>P. petraeus</i> A.Chev. & Beille ex Beille	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Ceramanthus</i>	<i>P. albidiscus</i> (Ridl.) Airy Shaw	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Clytopsis</i>	<i>P. cochinchinensis</i> Spreng.	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Eholowiana</i>	<i>P. letouzeyanus</i> Jean F.Brunel	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Eholowiana</i>	<i>P. petaloideus</i> Paul G.Wilson	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Ceramanthus</i> sect. <i>Apolepsis</i>	<i>P. orbiculatus</i> Rich.	Angola, Democratic Republic of the Congo, Malawi, United Republic of Tanzania, Zambia	Tropical Africa	x	x	x	Brune & Roux 1985, Brunel 1987
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. attenuatus</i> Miq.	Brazil, Colombia, Ecuador, French Guyana, Peru, Venezuela	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. avaransis</i> G.L.Webster	Ecuador	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. bernardii</i> Jabi.	Venezuela	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. caelestis</i> G.L.Webster	Colombia	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. madeirensis</i> Croizat	Brazil, Colombia	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. manusensis</i> W.A.Rodrigues	Brazil	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. planiflora</i> G.L.Webster	Costa Rica	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. skutchii</i> Standl.	Colombia	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Hyaeanthus</i>	<i>P. vallenanus</i> Croizat	Argentina, Brazil, Caribbean, French Guiana, Mexico, Venezuela	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. acuminatus</i> Vahl	Colombia, Costa Rica, Ecuador, Nicaragua, Panama, Peru	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. brasiliensis</i> (Aubl.) Poir.	Brazil, Guyana, Peru, Surinam, Venezuela,	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. caymanensis</i> G.L.Webster & Proctor	Cayman Islands	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. graveolens</i> Kunth	Brazil, Colombia, Costa Rica, Ecuador, Mexico, Peru, Venezuela	Tropical South America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. flesneri</i> G.L.Webster	Costa Rica, Mexico	Central America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. mevaughii</i> G.L.Webster	Venezuela	Central America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. meridensis</i> G.L.Webster	Costa Rica, El Salvador, Mexico	Central America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. moczanicianus</i> Baill.	Peru	Central America	x	x	x	Webster 2004
Subg. <i>Conami</i> sect. <i>Nothoclema</i>	<i>P. pavonianus</i> Baill.	Cuba	West Indies	x	x	x	Webster 2004
Subg. <i>Cyclanthera</i> sect. <i>Calitrichoides</i>	<i>P. camosulus</i> Müll.Arg.	Haiti	West Indies	x	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	x	Webster 1957
Subg. <i>Cyclanthera</i> sect. <i>Cyclanthera</i>	<i>P. meridensis</i> G.L.Webster	Cuba, Dominican Republic, Haiti	West Indies	x	x	x	Webster 2002b
Subg. <i>Cyclanthera</i> sect. <i>Cyclanthera</i>	<i>P. lindenianus</i> Baill.	Cuba, Haiti	West Indies	x	x	x	Webster 1957
Subg. <i>Cyclanthera</i> sect. <i>Cyclanthera</i>	<i>P. tenuicaulis</i> Müll.Arg.	India	Mainland Asia	x	x	x	Pagare et al. 2016
Subg. <i>Emblica</i>	<i>P. anomala</i> (Gamble) G.L.Webster	Cambodia	Mainland Asia	x	x	x	Balakrishnan & Nair 1982
Subg. <i>Emblica</i>	<i>P. andamanicus</i> N.P.Balakr. & N.G.Nair	Lao People's Democratic Republic, Thailand, Vietnam	Mainland Asia	x	x	x	Airy Shaw 1974
Subg. <i>Emblica</i>	<i>P. bokorensis</i> Tagane	Sri Lanka	Mainland Asia	x	x	x	Airy Shaw 1974
Subg. <i>Emblica</i>	<i>P. collinsae</i> Craib	India	Indian Ocean	x	x	x	Airy Shaw 1974
Subg. <i>Emblica</i>	<i>P. dealbatus</i> Aiston	Maldives	Malesia	x	x	x	Airy Shaw 1974
Subg. <i>Emblica</i>	<i>P. hasskarlianus</i> Müll.Arg.	Thailand	Mainland Asia	x	x	x	Airy Shaw 1969
Subg. <i>Emblica</i>	<i>P. kerrii</i> Airy Shaw	Vietnam	Mainland Asia	x	x	x	Airy Shaw 1969
Subg. <i>Emblica</i>	<i>P. pacensis</i> Thin	Vietnam	Mainland Asia	x	x	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. praeeribusus</i> Müll.Arg.	Bhutan, China, India, Myanmar	Mainland Asia	~	~	~	Collett & Hemsley 1890
Subg. <i>Emblica</i> ?	<i>P. prainianus</i> Collett & Hemsl.	Myanmar	Mainland Asia	~	~	~	
Subg. <i>Emblica</i> ?	<i>P. rheophyticus</i> M.G.Gilbert & P.T.Li	China	Mainland Asia	~	~	~	
Subg. <i>Emblica</i> ?	<i>P. scaphifolius</i> Hook.f.	India	Mainland Asia	~	~	~	Hooker 1890
Subg. <i>Emblica</i> sect. <i>Botryoides</i>	<i>P. baeobotryoides</i> Wall.	India, Myanmar, People's Republic of Bangladesh	Mainland Asia	~	~	~	Brunel 1987
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. albizzoides</i> (Kurz) Hook.	Cambodia	Mainland Asia	~	~	~	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. angolarensis</i> Baile	Myanmar, Thailand	Mainland Asia	~	~	~	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. columnaris</i> Müll.Arg.	Mainland Asia, Malesia	Mainland Asia	~	~	~	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. embica</i> L.	Lao People's Democratic Republic, Thailand, Vietnam	Mainland Asia	~	~	~	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. geoffrayi</i> Baile	Cambodia	Mainland Asia	~	~	~	Ganean 2003
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. hamandii</i> Baile	India	Mainland Asia	~	~	~	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. indofischeri</i> Bennet	Taiwan	Mainland Asia	~	~	~	Hayata 1904
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. lawii</i> J. Graham	Peninsular Malaysia, Indonesia (Sumatra), Thailand, China (Hainan), Indonesia (Borneo), Lao People's Democratic Republic, Myanmar, Peninsular Malaysia, Thailand, Vietnam	Mainland Asia	~	~	~	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. littoralis</i> Hayata	Peninsular Malaysia, Indonesia (Sumatra), Thailand, China (Hainan), Indonesia (Borneo), Lao People's Democratic Republic, Myanmar, Peninsular Malaysia, Thailand, Vietnam	Mainland Asia	~	~	~	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. oxyphyllus</i> Müll.Arg.	Peninsular Malaysia, Indonesia (Sumatra), Thailand, China (Hainan), Indonesia (Borneo), Lao People's Democratic Republic, Myanmar, Peninsular Malaysia, Thailand, Vietnam	Mainland Asia	~	~	~	
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. pachyphyllus</i> Müll.Arg.	Peninsular Malaysia, Indonesia (Sumatra), Thailand, China (Hainan), Indonesia (Borneo), Lao People's Democratic Republic, Myanmar, Peninsular Malaysia, Thailand, Vietnam	Mainland Asia	~	~	~	
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. pectinatus</i> Hook.f.	Vietnam	Tropical South America	~	~	~	Beille 1927
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. phiquocensis</i> Baile	India, Sri Lanka, Thailand	Mainland Asia	~	~	~	Müller 1866
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. philippinus</i> Wild.	Myanmar	Mainland Asia	~	~	~	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Emblica</i>
Subg. <i>Emblica</i> sect. <i>Emblica</i>	<i>P. pomiferus</i> Hook.f.	Brazil	Tropical South America	~	~	~	Secco & De Rosáro 2015
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. aracensis</i> G.L.Webster ex Secco & A. Rosário	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. carenariae</i> Steyermark	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. chimanitae</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. diudae</i> Gleason	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. jablonkiana</i> Steyermark & Luteyn	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. jaenaensis</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. lediformis</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. longistylus</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. maguirei</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster & Carpenter 2008
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. majus</i> Steyermark	Venezuela	Tropical South America	~	~	~	Webster 1957, sometimes referenced as <i>P. major</i> Steyermark.
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. minutifolius</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. myrsinifolius</i> Kunth	Colombia, Guyana, Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. nebulosae</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. obfalcatus</i> Lasser & Maguire	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. paraqueensis</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. pycnophyllum</i> Müll.Arg.	Guyana, Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. stroblaceus</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. subapicalis</i> Jabl.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. tepuicola</i> Steyermark	Guyana, Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. vacinifolius</i> (Müll.Arg.) Müll.Arg.	Venezuela	Tropical South America	~	~	~	Webster 1957
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. venturi</i> Jabl.	Brazil	Tropical South America	~	~	~	Webster & Carpenter 2002
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. websterianus</i> Steyermark	Colombia to Peru	Tropical South America	~	~	~	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. cuatrecasasianus</i> G.L.Webster	Colombia	Tropical South America	~	~	~	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. popayanensis</i> Pax	Colombia	Tropical South America	~	~	~	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. uscuroides</i> Müll.Arg.	Colombia, Ecuador	Tropical South America	~	~	~	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. sponifolius</i> Müll.Arg.	Colombia	Tropical South America	~	~	~	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. symphorocarpoides</i> Kunth	Costa Rica	Central America	~	~	~	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. valerii</i> Standl.	Vietnam	Central America	~	~	~	Webster 2002b
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. arenarius</i> Baile	Philippines	Malesia	~	~	~	Raimannana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. benguetensis</i> C.B.Rob.	Philippines	Malesia	~	~	~	Raimannana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. charmaenepeuce</i> Ridl.	Indonesia (Borneo incl. Sabah), Peninsular Malaysia, Thailand, Vietnam	Malesia	~	~	~	Raimannana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. chayamantiae</i> Chantar. & Kantachot	Thailand	Malesia	~	~	~	Raimannana et al. 2013, Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. erythriticus</i> C.B.Rob.	Philippines	Malesia	~	~	~	Robinson 1911, Chen et al. 2009
Subg. <i>Emblica</i> sect. <i>Microglachidion</i>	<i>P. marians</i> Müll.Arg.	Marianas	Malesia	~	~	~	Raimannana 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>Emblica</i> sect. <i>Urinaria</i>	<i>P. petelotii</i> Croizat	Vietnam	Mainland Asia Pacific	x	x	x	Thin 2007
Subg. <i>Emblica</i> sect. <i>Urinaria</i>	<i>P. societatis</i> Müll.Arg.	Cook Islands, French Polynesia		x	x	x	Raimannana et al. 2013; Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urinaria</i>	<i>P. submarginalis</i> Aity Shaw	Indonesia, Flores	Malesia	x	x	x	Raimannana et al. 2013; Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urinaria</i>	<i>P. sulcatus</i> J.T.Hunter & J.J.Bruhl	Australia (Queensland)	Australia	x	x	x	Raimannana et al. 2013; Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urinaria</i>	<i>P. thaii</i> Thin	Vietnam	Mainland Asia	x	x	x	Thin 2007
Subg. <i>Emblica</i> sect. <i>Urinaria</i>	<i>P. trungii</i> Thin	Vietnam	Mainland Asia	x	x	x	Thin 2007
Subg. <i>Emblica</i> sect. <i>Urinaria</i>	<i>P. tsarongensis</i> W.W.Sim.	China	Mainland Asia	x	x	x	Smith 1921
Subg. <i>Emblica</i> sect. <i>Urinaria</i> subsect. <i>Benguetensis</i>	<i>P. coi</i> M.J.Wu, Ferreras & Y.J.Chen	Philippines	Malesia	x	x	x	Wu et al. 2017
Subg. <i>Emblica</i> sect. <i>Urinaria</i> subsect. <i>Urinaria</i>	<i>P. embergeri</i> Haïcour & Rossignol	China to Vietnam and Taiwan	Mainland Asia	x	x	x	Raimannana et al. 2013; Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Emblica</i> sect. <i>Urinaria</i> subsect. <i>Urinaria</i>	<i>P. urinaria</i> L.	Pantropical: origin Asia	Pantropical	x	x	x	Raimannana et al. 2013; Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Eriococcus</i>	<i>P. anabaptitatus</i> Müll.Arg.	Sri Lanka	Malesia	x	x	x	Müller 1866
Subg. <i>Eriococcus</i>	<i>P. balakrishnanii</i> Sunil, K.M.P.Kumar & Naveen Kum.	India	Mainland Asia	x	x	x	Sunil et al. 2016
Subg. <i>Eriococcus</i>	<i>P. chandraposei</i> Govaerts & Radcl.-Sm.	India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i>	<i>P. chantieri</i> André	China	Mainland Asia	x	x	x	Li 1987a
Subg. <i>Eriococcus</i>	<i>P. fimbriata</i> P.T.Li	China	Mainland Asia	x	x	x	Li 1987a
Subg. <i>Eriococcus</i>	<i>P. franchetianus</i> H.Lév.	India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i>	<i>P. gageanus</i> (Gamble) M.Mohanan	Philippines	Malesia	x	x	x	Robinson 1911
Subg. <i>Eriococcus</i>	<i>P. macregorii</i> C.B.Rob.	Peninsular Malaysia	Mainland Asia	x	x	x	Ridley 1909
Subg. <i>Eriococcus</i>	<i>P. muscosus</i> Ridl.	India	Mainland Asia	x	x	x	
Subg. <i>Eriococcus</i>	<i>P. rangacharii</i> Munugan, Kabeer & G.V.S.Murthy	India	Mainland Asia	x	x	x	
Subg. <i>Eriococcus</i>	<i>P. singampattianus</i> (Sebast. & A.N.Henry) Kumar & Chandrababu	India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i>	<i>P. talbotii</i> Seidg.	India	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i>	<i>P. terrandrus</i> Roxb.	India, People's Republic of Bangladesh	Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i> sect. <i>Embilicastrum</i>	<i>P. balgooyi</i> Petra Hoffm. & A.J.M.Baker	Malaysia (Borneo), Philippines	Malesia	x	x	x	Hoffmann et al. 2003
Subg. <i>Eriococcus</i> sect. <i>Embilicastrum</i>	<i>P. curranii</i> C.B.Rob.	Australia, Indonesia (Java)	Australia, Malesia	x	x	x	Robinson 1909
Subg. <i>Eriococcus</i> sect. <i>Embilicastrum</i>	<i>P. lamprophyllus</i> Müll.Arg.	Philippines	Malesia	x	x	x	Müller 1866
Subg. <i>Eriococcus</i> sect. <i>Embilicastrum</i>	<i>P. robinsonii</i> Merr.	Peninsular Malaysia	Mainland Asia	x	x	x	Merrill 1912
Subg. <i>Eriococcus</i> sect. <i>Embilicastrum</i>	<i>P. watsonii</i> Aity Shaw	Indonesia (Java, Sumatra), Thailand	Mainland Asia	x	x	x	Airy Shaw 1969
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. acutissimum</i> Miq.	China	Mainland Asia	x	x	x	Li 1987a
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. angchenerensis</i> P.T.Li	Cambodia, Vietnam	Tropical Africa	x	x	x	Thin 2007
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. guangdongensis</i> P.T.Li	Hainan	Mainland Asia	x	x	x	Li 1987a
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. kampotensis</i> Beille	Lao People's Democratic Republic	Mainland Asia	x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. nanellus</i> P.T.Li	Malaysia	Mainland Asia	x	x	x	Müller 1866
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. spirae</i> Beille	Australia (Northern Territory)	?Australia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. acutus</i> Wall. ex Müll.Arg.	Sri Lanka	Malesia	x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. amstrongii</i> Benth.	Vietnam	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. baillonianus</i> Müll.Arg.	Myanmar	Malesia	x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. balansae</i> Beille	Philippines	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. beddomei</i> (Gamble) M.Mohanan	China	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. birmamicus</i> Müll.Arg.	Sri Lanka	Malesia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. blancoanus</i> Müll.Arg.	Myanmar, Thailand, Vietnam	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. bodinieri</i> (H.Lév.) Render	Vietnam	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. chekiangensis</i> M.Schmid	Peninsular Malaysia	Mainland Asia	x	x	x	Gage 1914
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. cinereus</i> Müll.Arg.	India	Mainland Asia	x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. elegans</i> Wall.	China	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. evardii</i> Beille	Sri Lanka	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. filicifolius</i> Gage	India	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. glabratius</i> (Wight) Müll.Arg.	China	Mainland Asia	x	x	x	Gage 1914
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. forestii</i> W.W.Sim.	Lesser Sunda Islands	Mainland Asia	x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococodes</i>	<i>P. glabrescens</i> (Miq.) Müll.Arg.	Malesia	Malesia	x	x	x	Beille 1927

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. <i>P. gracilipes</i> (Miq.) Mill.Arg.	India, Myanmar, Peninsular Malaysia China, Indonesia, Lao People's Democratic Republic, Malaysia, Thailand, Vietnam Philippines China	Mainland Asia Mainland Asia	x	x	x	Balakrishnan & Chakrabarty 2007
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. greenii</i> Elmer	Airy Shaw 1975					
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. hainanensis</i> Merr.			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. heynneanus</i> Mill.Arg.			x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. insulensis</i> Beille			x	x	x	Merrill 1935 Müller 1863 Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. kirabaluicus</i> Airy Shaw			x	x	x	Airy Shaw 1974, 1975
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. laurianus</i> C.B.Rob.			x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. leptocladios</i> Benth.			x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. leyensis</i> Elmer			x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. macrocalyx</i> Mill.Arg.			x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. megacarpus</i> (Gamble) Kumari & Chandrab.			x	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.			x	x	x	Chen et al. 2009
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. mindorensis</i> C.B.Rob.			x	x	x	Chen et al. 2009
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. mucronulatus</i> J.J.Sm.			x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. oreophilus</i> Mill.Arg.			x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. pifreyi</i> Beille			x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. pulcherrimus</i> Mill.Arg.			x	x	x	Airy Shaw 1975
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. pulchroides</i> Beille			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. rubescens</i> Beille			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. rubristipulus</i> Govaerts & Radcl.-Sm.			x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. sibuyanensis</i> Elmer			x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. sikimensis</i> Mill.Arg.			x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Eriococcus</i>
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. singularis</i> (Miq.) Mill.Arg.			x	x	x	Chen et al. 2009
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. sociopensis</i> Caib			x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. stipularis</i> Merr.			x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. taxodifolius</i> Beille			x	x	x	Robinson 1909
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. trichosporus</i> Adelb.			x	x	x	Beille 1927
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. triphyllius</i> C.B.Rob.			x	x	x	Becker 1945
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. Wrightianus</i> Mill.Arg.			x	x	x	Robinson 1909
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. nhatrangensis</i> Beille			x	x	x	Müller 1863
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. singalensis</i> (Miq.) Mill.Arg.			x	x	x	Brunei 1987
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. strobliana</i> Ciba			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. stipularis</i> Merr.			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. taxodifolius</i> Beille			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. trichosporus</i> Adelb.			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. triphyllius</i> C.B.Rob.			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. Wrightianus</i> Mill.Arg.			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Eriococcus</i>	<i>P. nhatrangensis</i> Beille			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Nymphanthus</i>	<i>P. ruber</i> (Lour.) Spreng.			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Nymphanthus</i>	<i>P. touranensis</i> Beille			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Scepsama</i>	<i>P. buxifolius</i> (Blume) Mill.Arg.			x	x	x	
Subg. <i>Eriococcus</i> sect. <i>Scepsama</i>	<i>P. palauensis</i> Hosok.			x	x	x	
Subg. <i>Gomphidium</i>	<i>P. ankaranense</i> (Leandri) Petra Hoffm. & McPherson			x	x	x	Raimannana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. aquoinleensis</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. apiculatus</i> Merr.			x	x	x	Merrill 1920
Subg. <i>Gomphidium</i>	<i>P. barraoaensis</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. bogoriensis</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. carlotae</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. cherrieri</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. ciliaris</i> Baill.			x	x	x	Guillaumin 1927
Subg. <i>Gomphidium</i>	<i>P. cordatulus</i> C.B.Rob.			x	x	x	Robinson 1909
Subg. <i>Gomphidium</i>	<i>P. dorothaeae</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. dumosaensis</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. favieri</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. fractiflexus</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. golorense</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. humbertii</i> (Leandri) Petra Hoffm. & McPherson			x	x	x	Raimannana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. iucundum</i> (Leandri) Petra Hoffm.			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. iichenisivae</i> (Leandri) ex Humbert			x	x	x	Raimannana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. longeranensis</i> Guillaumin ex M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. luciae</i> M.Schmid			x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. luciferae</i> M.Schmid			x	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. mandjeiaensis</i> M. Schmid <i>P. marojejensis</i> (Leandri) Petra Hoffm. & McPherson	New Caledonia Madagascar	New Caledonia Madagascar	x	x	x	McPherson & Schmid 1991 Raimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. memyaeensis</i> M. Schmid <i>P. meuiensis</i> M. Schmid <i>P. nitens</i> M. Schmid	New Caledonia New Caledonia Madagascar	New Caledonia New Caledonia Madagascar	x	x	x	McPherson & Schmid 1991 McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. oreichtitus</i> Leandri <i>P. ovatifolius</i> J.-J. Sm.	Madagascar	Madagascar	x	x	x	Raimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. parainduratus</i> M. Schmid <i>P. parangoyensis</i> M. Schmid	Moluccas	New Caledonia	x	x	x	Smith 1920 McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. petitiatus</i> Guillaumin <i>P. perrieri</i> (Leandri) Petra Hoffm. & McPherson	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991 McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. pronyensis</i> Guillaumin <i>P. pseudotrichopodus</i> M. Schmid	Madagascar	Madagascar	x	x	x	McPherson & Schmid 1991 McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. rozeniae</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	Raimanana & Hoffmann 2011
Subg. <i>Gomphidium</i>	<i>P. sambiranensis</i> Leandri	Madagascar	Madagascar	x	x	x	Warburg 1891
Subg. <i>Gomphidium</i>	<i>P. sessilis</i> Warb. <i>P. stutifolia</i> Airy Shaw	Malaysia	Malaysia	x	x	x	Airy Shaw 1880a
Subg. <i>Gomphidium</i>	<i>P. tabularis</i> Airy Shaw	Malaysia	Malaysia	x	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	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. trichopodus</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. umbellata</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. unifoliatum</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. valeriae</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. virgultarium</i> Däniker	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. vulcani</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. yvetteae</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i>	<i>P. baladeensis</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Elietherogynum</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	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. brassii</i> C. T. White	Australia (Queensland)	New Caledonia	x	x	x	Webster 2001 Synopsis of <i>Gomphidium</i>
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. deciduifolium</i> Däniker	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. francii</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	Guillaumin 1927
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. guillaumii</i> Däniker	Australia (Queensland)	New Caledonia	x	x	x	Webster 2001 Synopsis of <i>Gomphidium</i>
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. hypospadius</i> F. Muell.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. ligustrilobius</i> S. Moore	Irian Jaya	Philippines	x	x	x	Webster & Airy Shaw 1971
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. maritimus</i> J.-J. Sm.	New Caledonia	New Caledonia	x	x	x	Chen et al. 2009 pollen
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. ramosii</i> Quisumb. & Merr.	Malesia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. serpenitinus</i> S. Moore	New Caledonia	New Caledonia	x	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	x	Bismarck Archipel, Papua New Guinea
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. tireliae</i> M. Schmid	Bismarck Archipel, Papua New Guinea	New Caledonia	x	x	x	Müller 1866, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. verrucosus</i> Airy Shaw	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. bipinnuloides</i> Baill.	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
subsect. <i>Elietherogynum</i>							
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. casearoides</i> S. Moore	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. comptonii</i> S. Moore	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. conjugatus</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. dracunculoides</i> Baill.	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. gneissicus</i> S. Moore	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. loranthoides</i> Baill.	New Caledonia	New Caledonia	x	x	x	Lobreau-Callen et al. 1988
Subg. <i>Gomphidium</i> sect. <i>Adenoglochidion</i>	<i>P. macrochorion</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Elietherogynum</i>							

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>Adenoglachidion</i>	<i>P. margaretae</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Eleutherogynum</i>	<i>P. montrouzieri</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglachidion</i>	<i>P. moratii</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Eleutherogynum</i>	<i>P. ouvéanus</i> Daneker	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglachidion</i>	<i>P. rhodocladus</i> S. Moore	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921
subsect. <i>Eleutherogynum</i>	<i>P. salicifolius</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglachidion</i>	<i>P. sarasinii</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Eleutherogynum</i>	<i>P. torrentium</i> Müll. Arg.	New Caledonia	New Caledonia	x	x	x	Müller 1866, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Adenoglachidion</i>	<i>P. vespertilio</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Eleutherogynum</i>	<i>P. yaouensis</i> Schltr.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Calodictyon</i>	<i>P. tuerckheimii</i> G.L. Webster	Guatemala	Central America	x	x	x	Webster 1967a, Webster & Carpenter 2008
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. echinacifolius</i> Airy Shaw & G.L. Webster	Papua New Guinea	Male sia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. amieuensis</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. ardisianthus</i> Airy Shaw & G.L. Webster	Iran Jaya	Male sia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. balansaeanum</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. bougeotii</i> Baill.	Iran Jaya	Male sia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. buxoides</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. caicicola</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. castus</i> S. Moore	New Caledonia	New Caledonia	x	x	x	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. chamaecerasus</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	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. dzumacensis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. froudii</i> Airy Shaw	Papua New Guinea	Male sia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. glochidioides</i> Elmer	Philippines	Male sia	x	x	x	Chen et al. 2009, pollen
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. heleneae</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. heterodoxus</i> Müll. Arg.	Fiji	Pacific	x	x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. holaiolouensis</i> M. Schmid	New Caledonia	New Caledonia	x	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	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. koniamboense</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. kostermansi</i> Airy Shaw	Iran Jaya	Male sia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. kouaouaenensis</i> M. Schmid	New Caledonia	New Caledonia	x	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	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. mangenotii</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. montis-fortium</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. morei</i> M. Schmid	New Caledonia	New Caledonia	x	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	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. ringenaensis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. pancherianus</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. paucitepalum</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. peichikaraensis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. philijenensis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. polygnus</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. poubeoensis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. poumensis</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	Rendle et al. 1921, McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. pterocladius</i> S. Moore	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. quintuplinervis</i> M. Schmid	New Caledonia	New Caledonia	x	x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. rupi-insularis</i> Hosok.	Caroline Isl.	Australia (Queensland)	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. sauropodoides</i> Airy Shaw	Australia	Australia	x	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. securinerveoides</i> Merr.	Philippines	Malesia	x	x	x	Chen et al. 2009 pollen
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. smithianus</i> G.L.Webster	Fiji	New Caledonia	x	x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. stenorophylloides</i> Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. tangense</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. terulopedicellatus</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. tiebaghiensis</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. trikopalus</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. unioensis</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. vellonii</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. avanguensis</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Physoglachidion</i>	<i>P. faguetii</i> Baill.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. jauberti</i> Vleil. ex Guillaumin	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Physoglachidion</i>	<i>P. koghiensis</i> Guillaumin	New Caledonia	New Caledonia	x	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	x	McPherson & Schmid 1991
subsect. <i>Physoglachidion</i>	<i>P. nothisi</i> M.Schmid	New Caledonia	New Caledonia	x	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	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. pindaiensis</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. platycalyx</i> Mill.Arg.	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
Subg. <i>Gomphidium</i> sect. <i>Gomphidium</i>	<i>P. stipitatus</i> M.Schmid	New Caledonia	New Caledonia	x	x	x	McPherson & Schmid 1991
subsect. <i>Physoglachidion</i>		Vanuatu	Pacific	x	x	x	Guillaumin 1937, but see Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Leptonema</i>	<i>P. kanalensis</i> Baill.	New Caledonia	New Caledonia	x	x	x	Webster & Carpenter 2008
Subg. <i>Gomphidium</i> sect. <i>Leptonema</i>	<i>P. acleptifolius</i> J.J.Sm.	Iran Jaya	Airy Shaw 1980a	x	x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. amicorum</i> G.L.Webster	Tonga	Australia (Queensland), Papua New Guinea	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. aphaniotis</i> Airy Shaw & G.L.Webster	Australia (Queensland), Papua New Guinea	Australia, Malesia	x	x	x	Smith 1912
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. elamboides</i> (F.Muell.) Diels	Australia (Queensland), Papua New Guinea	Australia, Malesia	x	x	x	Webster & Airy Shaw 1971
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. cuscutiflorus</i> S.Moore	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. effusus</i> S.Moore	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. finschii</i> K.Schum.	Papua New Guinea	Malesia	x	x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. flaviflorus</i> Airy Shaw	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. gielcerupi</i> J.J.Sm.	Papua New Guinea	Malesia	x	x	x	Smith 1912
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. insulae-japoni</i> Airy Shaw	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. merinthopodus</i> Diels	Papua New Guinea	Malesia	x	x	x	Webster & Airy Shaw 1971
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. papuanus</i> Gage	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. pergracilis</i> Gillespie	Fiji	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. pol-borealis</i> Airy Shaw	Iran Jaya	Australia (Queensland), Papua New Guinea	x	x	x	Webster & Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. paelongipes</i> Airy Shaw & G.L.Webster	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. pullenii</i> Airy Shaw & G.L.Webster	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. rheophilus</i> Airy Shaw	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. rosselensis</i> Airy Shaw & G.L.Webster	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. rubriflorus</i> J.J.Sm.	Papua New Guinea	Malesia	x	x	x	Smith 1912
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. rufischanei</i> Weizen, R.W.Bouman & Ent	Malaysia (Borneo)	Bouman et al. 2018				
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. salomonis</i> Airy Shaw	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. tagulae</i> Airy Shaw & G.L.Webster	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. teruriachis</i> J.J.Sm.	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. utricularis</i> Airy Shaw & G.L.Webster	Papua New Guinea	Malesia	x	x	x	Airy Shaw 1980a
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. warburgii</i> Airy Shaw & G.L.Webster	Papua New Guinea	Malesia	x	x	x	Webster 1986
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. williesianus</i> Mill.Arg.	Fiji	Tropical Africa, Asia	x	x	x	Raimannana & Hoffmann 2011
Subg. <i>Gomphidium</i> sect. <i>Nymiana</i>	<i>P. maderaspalinus</i> L.	Philippines	Malesia	x	x	x	Merril 1926
Subg. <i>Kirganella</i> ?	<i>P. caudatofolius</i> Merr.						

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. <i>P. reyerii</i> Warb.	Philippines	Malisia	x	x		Warburg 1891
Subg. <i>Kirganella</i>	<i>P. martinii</i> Radcl.-Sm.	Papua New Guinea	Malisia	x	x		Radicliffe-Smith 1996
Subg. <i>Kirganella</i>	<i>P. oligospermus</i> Hayata	Zambia	Tropical Africa	x	x		Li 1987
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. angavensis</i> Leandri	Taiwan	Malisia	x	x		Brunel 1987a
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. archboldianus</i> Airy Shaw & G.L. Webster	Madagascar	Malisia	x	x		Webster & Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. baccatus</i> f. <i>Muell.</i> ex Benth.	Australia	Australia	x	x		Barrett & Tefford 2015
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. caesius</i> Airy Shaw & G.L. Webster	Australia	Malisia	x	x		Webster & Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. casticum</i> P.Wilhem	Madagascar	Malisia	x	x		Müller 1866
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. ciccoides</i> Müll.Arg.	Australia	Australia	x	x		Webster & Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. depanchei</i> Müll.Arg.	New Caledonia	Malesia	x	x		Müller 1863
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. fusculoides</i> Müll.Arg.	Madagascar	Malisia	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. glaucinuus</i> (Miq.) Müll.Arg.	Indonesia (Sumatra)	Malisia	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. matitanensis</i> Leandri	Madagascar	Malisia	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. microcarpus</i> (Benth.) Müll.Arg.	India, Indonesia, Myanmar, Thailand	Mainland Asia, Malesia	x	x		Luo et al. 2011
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. muellerianus</i> (Kunze) 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		Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Anisonema</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>Anisonema</i>	<i>P. ovalifolius</i> Forsk.	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>Anisonema</i>	<i>P. peruviana</i> (Bail.) Müll.Arg.	Comoros, Madagascar	Malisia	x	x		Raimannan & Hoffmann 2011: subg. <i>Kirganella</i> , probably sect. <i>Anisonema</i>
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. polystachys</i> Schumach.	Cameroun, Congo, Gabon, Togo	Tropical Africa	x	x		Bruneau & Punt 1983
Subg. <i>Kirganella</i> sect. <i>Anisonema</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		Bruneau & Punt 1983
Subg. <i>Kirganella</i> sect. <i>Anisonema</i>	<i>P. seyrigii</i> Leandri	Madagascar	Malisia	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Brazzeana</i>	<i>P. dinklagei</i> Pax	Cameroon, Democratic Republic of the Congo, Gabon, Republic of Equatorial Guinea	Tropical Africa	x	x		Meuwis & Punt 1983
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. coluteoides</i> Ball.	Madagascar	Malisia	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Kirganella</i>
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. kidnae</i> Challen & Petra Hoffman.	Cameroun	Tropical Africa	x	x		Challen et al. 2011
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. orientalis</i> (Craib) Airy Shaw	Thailand	Mainland Asia	~	x		Airy Shaw 1971
Subg. <i>Kirganella</i> sect. <i>Chorisandra</i>	<i>P. pinnatum</i> (Wight) G.L.Webster	Kenya, Malawi, Mozambique, United Republic of Tanzania, Zimbabwe	Tropical Africa	x	x		Webster 1957
Subg. <i>Kirganella</i> sect. <i>Cicca</i>	<i>P. ibonensis</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>Apronosella</i>	<i>P. chacoensis</i> Morong	Argentina, Brazil, Paraguay, Bolivia	Tropical South America	x	x		Webster 2001b
Subg. <i>Kirganella</i> sect. <i>Cicca</i> subsect. <i>Apronosella</i>	<i>P. elisiae</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		Webster 2001b
Subg. <i>Kirganella</i> sect. <i>Cicccopsis</i>	<i>P. pseudococcica</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>Omphacodopsis</i>	<i>P. flexuosus</i> (Siebold & Zucc.) Müll.Arg.	China, Japan	Mainland Asia	x	x		Fluegeopsis 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		Fluegeopsis Brunel 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. physocarpus</i> Müll.Arg.	Benin, Cameron, Congo, Democratic Republic of the Congo, Gabon, United Republic of Tanzania, Zambia	Tropical Africa	x	x		Bruneau 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. cedrelifolius</i> Verdc.	South Africa	Tropical Africa	x	x		Bruneau 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. engleri</i> Pax	United Republic of Tanzania	Tropical Africa	x	x		Bruneau 1987, but see Breteler 2012
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. polyanthus</i> Pax	Cameroon, Central African Republic, Congo	Tropical Africa	x	x		Bruneau 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. profusus</i> N.E.Br.	Democratic Republic of the Congo, South Africa, Zambia	Tropical Africa	x	x		Bruneau 1987
Subg. <i>Kirganella</i> sect. <i>Polyanthi</i>	<i>P. schlebenii</i> Mansf. ex Radcl.-Sm.	Cameroun, Ghana, Ivory Coast, Liberia	Tropical Africa	x	x		Bruneau 1987
Subg. <i>Kirganella</i> sect. <i>Pseudomenanda</i>	<i>P. purpureus</i> Müll.Arg.	United Republic of Tanzania	Tropical Africa	x	x		Bruneau 1987
Subg. <i>Kirganella</i> sect. <i>Pseudomenanda</i>		Angola, Namibia	Tropical Africa	x	x		Müller 1866

Appendix 2 (cont.)

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	Nicaragua, Costa Rica, Guatemala, Honduras, Mexico, Venezuela	Central to North America	x			
Subg. <i>Phyllanthus</i>	<i>P. leptocaulos</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. pohlianus</i> Müll.Arg.	Brazil	Tropical South America	x			Müller 1873
Subg. <i>Phyllanthus</i>	<i>P. simpliciaulis</i> Müll.Arg.	Brazil	Tropical South America	~			Müller 1863, 1866
Subg. <i>Phyllanthus</i>	<i>P. subcuneatus</i> Greenm.	Mexico	North America	~			Greenman 1898
Subg. <i>Phyllanthus</i>	<i>P. angustissimus</i> Müll.Arg.	Brazil	Tropical South America	x	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
Subg. <i>Phyllanthus</i>	<i>P. flagelliformis</i> Müll.Arg.	Brazil	Tropical South America	x	x		Santiago et al. 2006
Subg. <i>Phyllanthus</i>	<i>P. gladiatus</i> Müll.Arg.	Brazil	Tropical South America	x	x		Santiago et al. 2006
Subg. <i>Phyllanthus</i>	<i>P. klotzschianus</i> Müll.Arg.	Brazil, Guyana	Tropical South America	x	x		Santiago et al. 2006
Subg. <i>Phyllanthus</i>	<i>P. scoparius</i> Müll.Arg.	Brazil	Tropical South America	x	x		Santiago et al. 2006
Subg. <i>Phyllanthus</i>	<i>P. choreotroides</i> Müll.Arg.	Brazil	Tropical South America	x	x		Santiago et al. 2006
Subg. <i>Phyllanthus</i>	<i>P. galapensis</i> L.J.M.Santiago	Brazil	Tropical South America	x	x		Santiago et al. 2006
Subg. <i>Phyllanthus</i>	<i>P. sarothamnoidea</i> Govaerts & Radcl-Sm.	Brazil	Tropical South America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i>	<i>P. spartioides</i> Pax & K.Hoffm.	Brazil	Tropical South America	x	x		Santiago et al. 2006
Subg. <i>Phyllanthus</i>	<i>P. avicularis</i> Müll.Arg.	Mexico	Tropical South America	x	x		Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Subg. <i>Phyllanthus</i>	<i>P. brandegeei</i> Millsp.	Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guyana, Mexico, Nicaragua, Panama, Paraguay, Peru, Surinam, United States, Venezuela	North America	x	x	x	Webster 1955
Subg. <i>Phyllanthus</i>	<i>P. carolinensis</i> Walter	Mexico	North America	x	x	x	Webster 1955
Subg. <i>Phyllanthus</i>	<i>P. evanescens</i> Brandegee	Cuba	North, Central and Tropical South America	x	x	x	Webster 1970
Subg. <i>Phyllanthus</i>	<i>P. heliotropus</i> C.Wright ex Griseb.	Colombia, Costa Rica, Dominican Republic, Surinam, Venezuela	North America	x	x	x	Webster 1956
Subg. <i>Phyllanthus</i>	<i>P. hyssopifoliae</i> Kunth	Mexico	North America	x	x	x	Webster 1956
Subg. <i>Phyllanthus</i>	<i>P. baeckeoides</i> J.T.Hunter & J.J.Bruhl	Australia (Western Australia)	Australia	x	x	x	Lysandra
Subg. <i>Phyllanthus</i>	<i>P. carpentariae</i> Müll.Arg.	Australia (Northern Territory)	Australia	x	x	x	Webster 2002b
Subg. <i>Phyllanthus</i>	<i>P. caerulea</i> J.T.Hunter & J.J.Bruhl	Australia (Queensland)	Australia	x	x	x	Lysandra
Subg. <i>Phyllanthus</i>	<i>P. collinus</i> Domin	Australia (Queensland)	Australia	x	x	x	Webster Outline of Australian <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i>	<i>P. dallasianus</i> Bentham	Australia (Queensland)	Australia	x	x	x	Webster 1978
Subg. <i>Phyllanthus</i>	<i>P. eremicus</i> R.L.Barnett & I.Telford	Australia (Western Australia)	Australia	x	x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i>	<i>P. eutaxioides</i> S.Moore	Australia (Northern Territory)	Australia	x	x	x	Moore 1920
Subg. <i>Phyllanthus</i>	<i>P. flagellaris</i> Bentham	Australia (Queensland)	Australia	x	x	x	Webster Outline of Australian <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i>	<i>P. fuemnrohrii</i> F.Muell.	Australia (Northern Territory)	Australia	x	x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i>	<i>P. gunni</i> Hook.f.	Australia (East and Southeast)	Australia	x	x	x	Webster Outline of Australian <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i>	<i>P. hamelinii</i> R.L.Barnett & I.Telford	Mexico	North America	x	x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i>	<i>P. harimanii</i> G.L.Webster	Australia (Western Australia)	Australia	x	x	x	Webster 1978
Subg. <i>Phyllanthus</i>	<i>P. indigoterooides</i> Bentham	Australia (Queensland)	Australia	x	x	x	Barrett & Telford 2015
Subg. <i>Phyllanthus</i>	<i>P. involutus</i> J.T.Hunter & J.J.Bruhl	Australia (Queensland)	Australia	x	x	x	Lysandra
Subg. <i>Phyllanthus</i>	<i>P. laevis</i> Muell.	Australia	Australia	x	x	x	Airy Shaw 1980b
Subg. <i>Phyllanthus</i>	<i>P. lacunellus</i> A.Ish. Shaw	Australia (Queensland)	Australia	x	x	x	Airy Shaw 1980b
Subg. <i>Phyllanthus</i>	<i>P. mitchelli</i> Bentham	Australia (Southeast Queensland and East New South Wales)	Australia	x	x	x	Bentham 1873
Subg. <i>Phyllanthus</i>	<i>P. microcladus</i> Müll.Arg.	Australia (Queensland)	Australia	x	x	x	Webster Manuscript enumeration australian taxa: <i>Lysandra</i>
Subg. <i>Phyllanthus</i>	<i>P. occidentalis</i> J.T.Hunter & J.J.Bruhl	Australia (Queensland)	Australia	x	x	x	Hunter & Bruhl 1997b
Subg. <i>Phyllanthus</i>	<i>P. savannicola</i> Domin	Australia (Queensland)	Australia	x	x	x	Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Phyllanthus</i>	<i>P. saxosus</i> F.Muell.	Australia (Queensland, New South Wales)	Australia	x	x	x	Webster 2002b
Subg. <i>Phyllanthus</i>	<i>P. similis</i> Müll.Arg.						

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>Lysiandra</i>	<i>P. subrenulatus</i> F.Muell.	Australia (Queensland, New South Wales)	Australia	x	x	x	Von Mueller 1859
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i>	<i>P. carmeniculae</i> R.T.M.Ribeiro & Loida	Brazil	Tropical South America	x	x	x	Ribeiro et al. 2017
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i>	<i>P. eremita</i> Funex & Hassemer	Brazil	Tropical South America	~			Funex & Hassemer 2017
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i>	<i>P. tumbensis</i> Funex, J.P.R.Ferreira & Hassemer	Brazil	Tropical South America	x	x	x	Funex 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	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. acutifolius</i> Poir. ex Spreng.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. alleimii</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. arenicola</i> Casar.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. atalaiensis</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. blanchetianus</i> Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. bradeanus</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. caparaensis</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. carvalhoi</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</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>Claussenianii</i>	<i>P. fastigiatus</i> Mart. ex Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. glaziovii</i> Wall. ex Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. gongyloides</i> Cordeiro & Carn.-Torres	Brazil	Tropical South America	x	x	x	Cordeiro & Carneiro-Torres 2004
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. heteradenius</i> Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. hypoleucus</i> Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. itaiiaensis</i> Brade	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. legoensis</i> Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. mocotensis</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. pírani</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. retroflexus</i> Brade	Brazil	Tropical South America	x	x	x	Silva & Sales 2008
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. sincensis</i> G.L.Webster	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. submarginatus</i> Müll.Arg.	Brazil	Tropical South America	x	x	x	Webster 2002a
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Claussenianii</i>	<i>P. augustinii</i> Baill.	Southeast Brazil	Tropical South America	x	x	x	Webster 2002 outline neotropical taxa
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. boliviensis</i> Pax & K.Hoffm.	Bolivia	Tropical South America	x	x	x	Webmea 2009
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	x	West Indies
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect. <i>Niruri</i>	<i>P. mimicus</i> G.L.Webster	Trinidad & Tobago	Tropical South America	x	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	Tropical South America	x	x	x	Webster 2002a
			North, Central and Tropical South America				

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>P. perpusillus</i> Baill.	Brazil	Tropical South America	x	x		Webster 2002a
<i>Niruri</i>		Dominican Republic	West Indies	x	x		Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. annicola</i> G.L.Webster	Haiti	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. brachyphyllus</i> Urb.	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. buchii</i> Urb.	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. dimorphus</i> Britton & P.Wilson	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. echinospermus</i> C.Wright	Cuba	West Indies	x	x		Webster 1955, 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. fuentesii</i> Urb.	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. imbricatus</i> G.L.Webster	Cuba	West Indies	x	x		Webster 1955, 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. junceus</i> Mill.Arg.	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. leptoneurus</i> Urb.	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. maestrensis</i> Urb.	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Dominican Republic, Haiti	West Indies	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. micranthus</i> A.Rich.	Cuba	Caribbean, Florida, Venezuela	x	x		Webster 1955, 1957
<i>Pentaphylli</i>		Caribbean, Florida, Venezuela	North, Central and Tropical South America	x	x		Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. pentaphyllus</i> C.Wright ex Griseb.	Cuba	North, Central and Tropical South America	x	x		Webster 1955, 1957
<i>Pentaphylli</i>		Caribbean, Florida, Venezuela	North, Central and Tropical South America	x	x		Webster 1955, 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. pulvifolius</i> Urb.	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Caribbean, Florida, Venezuela	North, Central and Tropical South America	x	x		Webster 1957
Subg. <i>Phyllanthus</i> sect. <i>Phyllanthus</i> subsect.	<i>P. selbyi</i> Britton & P.Wilson	Cuba	West Indies	x	x		Webster 1957
<i>Pentaphylli</i>		Argentina, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru, United States, Venezuela	Tropical South to North America	x	x		Bruneel 1987
Subg. <i>Phyllanthus</i> sect. <i>Salviniaopsis</i>	<i>P. fluitans</i> Benth. ex Mill.Arg.	United States	North America	x	x		
<i>Pentaphylli</i>		Argentina, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru, United States, Venezuela	Pan-tropical	x	x		Raimannana et al. 2013
Subg. <i>Swartzian</i>	<i>P. abnormis</i> Baill.	Brazil, Colombia, Mexico, Trinidad & Tobago, Venezuela	Pantropical	x	x		Raimannana et al. 2013
Subg. <i>Swartzian</i>	<i>P. amarus</i> Schumach. & Thonn.	Jamaica	West Indies	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. canibaeus</i> Urb.	Widespread in Tropical Africa (o Asia), naturalised elsewhere	Mainland Asia	x	x		Webster 1957
Subg. <i>Swartzian</i>	<i>P. fadenii</i> Urb.	Mexico	North America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. fraternus</i> G.L.Webster	Brazil	Tropical South America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. hexadactylus</i> McVaugh	Bolivia, Brazil, Colombia, Venezuela	Tropical South America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. leptophyllum</i> Mill.Arg.	Bolivia, Brazil, Colombia, Venezuela	Tropical South America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. lindbergii</i> Müll.Arg.	Bolivia, Brazil, Colombia, Venezuela	Tropical South America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. microphyllum</i> Kunth	Brazil, Colombia, Venezuela	Tropical South America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. minutulus</i> Müll.Arg.	Cuba	West Indies	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. procerus</i> C.Wright	Mexico	North America	x	x		Webster 2002 Synopsis <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Swartzian</i>	<i>P. standleyi</i> McVaugh	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>Swartzian</i>	<i>P. stipulatus</i> (Ratf.) G.L.Webster	Colombia	North America	x	x		Croizat 1945
Subg. <i>Swartzian</i>	<i>P. vichadensis</i> Croizat	United States	Tropical South America	x	x		Bruneel 1987
Subg. <i>Swartzian</i>	<i>P. warnockii</i> G.L.Webster	United Republic of Tanzania	Tropical Africa	x	x		Radcliffe-Smith 1982
Subg. <i>Swartzian</i>	<i>P. frazieri</i> Radcl.-Sm.	Mozambique	Tropical Africa	x	x		Radcliffe-Smith 1996
Subg. <i>Swartzian</i>	<i>P. manicaeensis</i> Jean F.Brunel	Mozambique	Tropical Africa	x	x		Gandoger 1919
Subg. <i>Swartzian</i>	<i>P. mozambicensis</i> Gaud.	Angola, Botswana, Malawi, Mozambique, South Africa, United Republic of Tanzania, Zambia, Zimbabwe	Tropical Africa	x	x		Bruneel 1987
Subg. <i>Swartzian</i>	<i>P. angolensis</i> Müll.Arg.	Mozambique	Tropical Africa	x	x		Tropical Africa
Subg. <i>Swartzian</i>	<i>P. graminicola</i> Hutch.	Angola, Mozambique, South Africa	Tropical Africa	x	x		Bruneel 1987
Subg. <i>Swartzian</i>	<i>P. foetidissima</i> Welw.	Mozambique	Tropical Africa	x	x		Bruneel 1987
Subg. <i>Swartzian</i>	<i>P. istiseraea</i> Jean F.Brunel	Mozambique	Tropical Africa	x	x		Bruneel 1987
Subg. <i>Swartzian</i>	<i>P. cucumerina</i> Jean F.Brunel	Angola	Madagascar	x	x		Bruneel 1987
Subg. <i>Swartzian</i>	<i>P. deavii</i> Leandri ex Humbert	Angola, Botswana, Namibia, Zambia, Zimbabwe	Tropical Africa	x	x		Bruneel 1987
Subg. <i>Swartzian</i>	<i>P. mendesii</i> Jean F.Brunel			x	x		Bruneel 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	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Phyllanthus</i>
Subg. <i>Tenellanthus</i> sect. <i>Pentandra</i>	<i>P. pentandrus</i> Schumach. & Thonn.	Benin, Botswana, Burkina Faso, Namibia, Nigeria, South Africa, United Republic of Tanzania	Tropical Africa	x	x	x	Ralimanana & Hoffmann 2011
Subg. <i>Tenellanthus</i> sect. <i>Tenellanthus</i>	<i>P. comorensis</i> Leandri	Gabon, Ghana, Guinea, Liberia, Madagascar, Mozambique, Republic of Equatorial Guinea, United Republic of Tanzania	Indian Ocean	x	x	x	Bruneel 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	Ralimanana & Hoffmann 2011
Subg. <i>Tenellanthus</i> sect. <i>Tenellanthus</i>	<i>P. tenellus</i> Roxb.	Pantropical	Pantropical	x	x	x	Ralimanana & Hoffmann 2011
Subg. <i>Xylophylla</i> ?	<i>P. auristadio</i> Mart. ex Colla	Brazil	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> ?	<i>P. larensis</i> Steyermark.	Venezuela	Tropical South America	x	x	x	Ralimanana & Hoffmann 2011
Subg. <i>Xylophylla</i> ?	<i>P. minarum</i> Standl. & Steyermark.	Guatemala	Central America	x	x	x	Bruneel 1987
Subg. <i>Xylophylla</i> ?	<i>P. peteniensis</i> Lundell	Guatemala	Central America	~	x	x	Jablonski 1967
Subg. <i>Xylophylla</i> ?	<i>P. sellowianus</i> (Klotzsch) Müll.Arg.	Argentina, Brazil, Paraguay, Uruguay	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Adiantoides</i>	<i>P. adiantoides</i> Klotzsch	Guyana, Surinam	Tropical South America	x	x	x	Bruneel 1987
Subg. <i>Xylophylla</i> sect. <i>Asteranthera</i>	<i>P. borjaensis</i> Jabi.	Colombia, Venezuela	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Asteranthera</i>	<i>P. gentylis</i> G.L.Webster	Panama	Tropical America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Asteranthera</i>	<i>P. juglandifolius</i> Willd.	Brazil, Colombia, Guyana, Venezuela	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. atabapoensis</i> Jabi.	Mexico	Tropical South America	x	x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. mickeli</i> McVaugh	Venezuela	Tropical South America	x	x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. paeverensis</i> Jabi.	Brazil, Colombia, Venezuela	Tropical South America	x	x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. rupestris</i> Kunth	Brazil	Tropical South America	x	x	x	Webster 2001b
Subg. <i>Xylophylla</i> sect. <i>Brachycladus</i>	<i>P. spruceanus</i> Müll.Arg.	Mexico	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Ciccastrum</i>	<i>P. purpusii</i> Brandegeae	Brazil	North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Diplocica</i>	<i>P. riedelianus</i> Müll.Arg.	Brazil	North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. octomerenus</i> Müll.Arg.	Mexico: Veracruz	North America	x	x	x	Müller 1873
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. adenodiscus</i> Müll.Arg.	Windward Islands	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. andersenii</i> Müll.Arg.	Brazil	North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. blandifolius</i> C. Brandegee	Colombia, Mexico, Peru, Venezuela	North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. blanchieri</i> Croizat	Mexico	North America	x	x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. botryanthus</i> Müll.Arg.	Mexico	North America	x	x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. chiapensis</i> Sprague	Brazil	North America	x	x	x	Silva & Sales 2006
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. coelocomoranensis</i> Croizat	Mexico	North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. gradyi</i> M.J.Silva & M.F.Sales	Brazil	North America	x	x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. grandifolius</i> L.	Mexico	North America	x	x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. huallagensis</i> Standl. ex Croizat	Peru	North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. laxiflorus</i> Benth.	Guatemala, Mexico	Central and North America	x	x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. mutisianus</i> G.L.Webster	Colombia	Tropical South America	x	x	x	Webster 2001a
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. nutans</i> Sw.	Cuba, Jamaica	Central and North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. oaxacanus</i> Brandegee	Mexico	Central and North America	x	x	x	Croizat 1943
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. pachystylus</i> Urb.	Cuba	Central and North America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. poospigianus</i> (Müll.Arg.) Müll.Arg.	Brazil, Peru	Central and North America	~	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. prunifolius</i> Rusby	Bolivia	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. racemigerus</i> Müll.Arg.	Peru, Venezuela	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. ramosus</i> Vell.	Brazil	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. teguineensis</i> B.L.Rob. & Greenm.	Mexico	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. umbratus</i> Müll.Arg.	Brazil	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. urbanianus</i> Mansf.	Haiti	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. ventricosus</i> G.L.Webster	Peru	Tropical South America	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. vincentiae</i> J.F.Macbr.	Venezuela	Tropical South America	x	x	x	Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Subg. <i>Xylophylla</i> sect. <i>Elutanthos</i>	<i>P. zanthoxyloides</i> Steyermark.	Jamaica	Tropical South America	x	x	x	Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Subg. <i>Xylophylla</i> sect. <i>Epistylum</i>	<i>P. axillaris</i> Müll.Arg.	Jamaica	West Indies	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Epistylum</i>	<i>P. caulinervosus</i> (Sw.) Griseb.	Jamaica	West Indies	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Epistylum</i>	<i>P. cladanthus</i> Müll.Arg.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Glyptothamnus</i>	<i>P. chrysophyllum</i> R.A.Howard	Tobago	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. acacioides</i> Urb.	Dominican Republic, Haiti	West Indies	x	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	Brazil	Tropical South America	x	x	x	Müller 1873
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. maritima</i> Müll.Arg.	Dominica, Jamaica, Martinique	West Indies	x	x	x	Webster 2002 Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Hemiphyllanthus</i>	<i>P. megapodus</i> G.L.Webster			x	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>Hemiphylanthus</i>	<i>P. mimosoides</i> Sw.	Leeward Islets, Trinidad	West Indies	x	x	x	Webster 2002; Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Hemiphylanthus</i>	<i>P. myriophyllus</i> Urb.	Haiti	West Indies	x	x	x	Webster 2002; Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Hemiphylanthus</i>	<i>P. ovatus</i> Poir.	Martinique	West Indies	x	x	x	Webster 2002; Synopsis of <i>Phyllanthus</i> subg. <i>Xylophylla</i>
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. subcarnosum</i> C. Wright ex Griseb.	Cuba, Haiti	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. chamaecristoides</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. comosus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. cuneifolius</i> (Britton) Croizat	Puerto Rico	Central America	x	x	x	Voronova et al. 2007
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. formosus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. myrtilloides</i> Griseb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. nummularioides</i> Müll. Arg.	Dominican Republic	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. orbicularis</i> Kunth	Cuba to Puerto Rico, Surinam	West Indies	x	x	x	Hidalgo et al. 2017
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. phialanthoides</i> Falcón & J.L. Gómez	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. phlebocarpus</i> Urb.	Cuba	West Indies	x	x	x	Brutton 1920; Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. scopolium</i> (Britton) Urb.	Cuba	Central America	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. salvifolius</i> Kunth	Colombia, Costa Rica, Peru, Venezuela	West Indies	x	x	x	Webster 1955, 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. cinctus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1955, 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. compactus</i> G.L. Webster	Cuba	West Indies	x	x	x	Webster 1955, 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. ekmanii</i> G.L. Webster	Cuba	West Indies	x	x	x	Webster 1955, 1958
Subg. <i>Xylophylla</i> sect. <i>Omphacodes</i>	<i>P. cristalensis</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Discolors			West Indies	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. discolor</i> Poepp.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. microdictyus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. excisus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Incrustati			West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. incrustatus</i> Urb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. williamsiae</i> Griseb.	Cuba	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. mirificus</i> G.L. Webster	Cuba	West Indies	x	x	x	Webster 1958
Minifici			West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. angustifolius</i> (Sw.) Sw.	Jamaica	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. arboscula</i> (Sw.) J.F. Gmel.	Jamaica	West Indies	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. epiphyllanthus</i> L.	Jamaica	West Indies	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. eximius</i> G.L. Webster & Proctor	Jamaica	West Indies	x	x	x	Webster 1960
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. laitifolius</i> (L.) Sw.	Jamaica	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. montanus</i> (Sw.) Sw.	Jamaica	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. obtusatus</i> (Burm.) Müll. Arg.	Brazil	Tropical South America	x	x	x	Müller 1866
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. procors</i> G.L. Webster	Jamaica	West Indies	x	x	x	Webster 1958
Subg. <i>Xylophylla</i> sect. <i>Thamnocharis</i>	<i>P. robustus</i> Mart. ex Colla	Brazil	Tropical South America	x	x	x	Colla 1831
Former <i>Isocladus</i>	<i>P. farax</i> Müll. Arg.	Brazil	Tropical South America	x	x	x	Müller 1855
Former <i>Isocladus</i>	<i>P. incurvus</i> Thunb.	Tropical Africa	Tropical Africa	x	x	x	Brunei 1987
Former <i>Isocladus</i>	<i>P. serpentinicola</i> Radcl.-Sm.	Zimbabwe	Tropical Africa	x	x	x	Radcliffe-Smith 1996
Former <i>Isocladus</i>	<i>P. tener</i> Radcl.-Sm.	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. aridus</i> Benth.	Australia (Tasmania)	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. australis</i> Hook f.	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. calycinus</i> Labill.	Argentina	Tropical South America	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. cordobensis</i> (Kuntze) K. Schum.	Brazil	Tropical South America	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. dawsonii</i> Steyermark	Brazil	Tropical South America	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. dictyospermum</i> Müll. Arg.	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. erwinii</i> J.T. Hunter & J.J. Brühl	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. hirtellus</i> F.Muell. ex Müll. Arg.	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. facutinus</i> F.Muell.	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. oblongatus</i> J.T. Hunter & J.J. Brühl	Australia	Australia	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. phifillous</i> Balli.	Argentina	Tropical South America	x	x	x	Webster 2002b
Former <i>Isocladus</i>	<i>P. ramulosus</i> Müll. Arg.	Argentina, Brazil	Tropical South America	x	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>Isocladus</i> sect. <i>Antipodanthus</i>	<i>P. rosmarinifolius</i> Müll.Arg.	Brazil	Tropical South America	x	x		Webster 2002b
Former <i>Isocladus</i> sect. <i>Antipodanthus</i>	<i>P. salessiae</i> M.J.Silva	Brazil	Tropical South America	x	x		Silva 2009
Former <i>Isocladus</i> sect. <i>Antipodanthus</i>	<i>P. scaber</i> Kloitzsch	Australia	Australia	x	x		Webster 2002b
Former <i>Isocladus</i> sect. <i>Antipodanthus</i>	<i>P. striatula</i> J.T.Hunter & J.J.Bruhl	Australia	Australia	x	x		Webster 2002b
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. caraculensis</i> Jean F.Brunel	Angola	Tropical Africa	x	x		Brunel 1987
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. cuneensis</i> Jean F.Brunel	Angola	Tropical Africa	x	x		Brunel 1987
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. karibensis</i> Jean F.Brunel	Namibia, South Africa	Tropical Africa	x	x		Brunel 1987
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. liebmanni</i> Müll.Arg.	Mexico, United States, Florida	North, Central and Tropical South America	x	x		Webster 2001b
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. mendoncae</i> Jean F.Brunel	Ethiopia, Mozambique	Tropical Africa	x	x		Brunel 1987
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. paxianus</i> Dinter	Angola, Democratic Republic of the Congo, Namibia	Tropical Africa	x	x		Brunel 1987
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. polygonoides</i> Nutt. ex Spreng.	Mexico, United States	North America	x	x		Webster 2001b
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. revaughnii</i> Coode	Mascatenes, Mozambique	Tropical Africa	x	x		Brunel 1987
Former <i>Isocladus</i> sect. <i>Isocladus</i> sensu Brunel 1987	<i>P. spinosus</i> Chiov.	Somalia	Tropical Africa	x	x		Brunel 1987
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. bahiensis</i> Müll.Arg.	Brazil	Tropical South America	x	x		Müller 1863, 1866, 1873
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. barbareae</i> M.C.Johnst.	México	North America	x	x		Johnston 1986
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. encoides</i> Torr.	México	North America	x	x		Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. fraguensis</i> M.C.Johnst.	México	North America	x	x		Webster 2001b
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. galeottianus</i> Baill.	México	North America	x	x		Webster 2001b
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. gypsicola</i> McVaugh	Sri Lanka	Malesia	x	x		Webster 1987
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. hakalagensis</i> Twráilew ex Trimen	Paraguay	Tropical South America	x	x		Müller 1866, 1873
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. neoleonensis</i> Croizat	México	North America	x	x		Webster 2002 Outline of the Neotropical infrageneric taxa of <i>Phyllanthus</i> (<i>Euphorbiaceae</i>)
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. peninsulae</i> Brandegee	México	North America	x	x		Webster 2001b
Former <i>Isocladus</i> sect. <i>Paraphyllanthus</i>	<i>P. saffordii</i> Merr.	Guam	Malesia	x	x		Merrill 1914
Incertae sedis	<i>P. antisphylioides</i> Merr.	Philippines	Malesia				See Webster Manuscript outline neotropical <i>Phyllanthus</i>
Incertae sedis	<i>P. boliviensis</i> Steyermark.	Venezuela	Malesia				Possible <i>Eriococcus</i> , but species not seen
Incertae sedis	<i>P. celebicus</i> Koord.	Cebbes	Unknown				Specimens not seen or described
Incertae sedis	<i>P. hortensis</i> Govaerts & Radcl.-Sm.	Somalia	Tropical Africa				Male flowers not known
Incertae sedis	<i>P. lantilloides</i> M.G.Gilbert & Thulin	Celebes	Malesia				Possible <i>Eriococcus</i> , but species not seen
Incertae sedis	<i>P. minahassae</i> Koord.	Venezuela	Tropical South America				Sterile
Incertae sedis	<i>P. omissensis</i> Steyermark.	India	Mainland Asia				
Incertae sedis	<i>P. petiolaris</i> Robt.	Uruguay	Tropical South America				
Incertae sedis	<i>P. pseudoguyanensis</i> Herter & Mansf.	Bhutan, India, Myanmar, Nepal	Mainland Asia				
Incertae sedis	<i>P. pseudopanificolus</i> R.L.Mitra & Sanjappa	India	Mainland Asia				
Incertae sedis	<i>P. rotundatus</i> Poir.	Philippines	Mainland Asia				
Incertae sedis	<i>P. squamifolius</i> (Lour.) Stokes	Vietnam	Mainland Asia				
Incertae sedis	<i>P. vergens</i> Baill.	Madagascar	Mainland Asia				
Incertae sedis	<i>P. villosus</i> Poir.	China	Tropical Africa				
Incertae sedis	<i>P. xylophylloides</i> Thulin	Somalia	Malesia				
Incertae sedis	<i>P. zippelianus</i> Müll.Arg.	Lesser Sunda Isl.	Mainland Asia				
sect. <i>Hedycarpidium</i> ⁴	<i>P. daclaceris</i> Thrin	Vietnam	Mainland Asia				
sect. <i>Hedycarpidium</i> ⁴	<i>P. songboiensis</i> Thrin	Vietnam	Mainland Asia				
sect. <i>Hedycarpidium</i> ⁴	<i>P. tui</i> Thrin	Vietnam	Mainland Asia				

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 *Baccarea* and its use by Thrin (2007) for *Phyllanthus* is invalid.