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# Revision of *Plerandra* (Araliaceae). I. A synopsis of the genus with an expanded circumscription and a new infrageneric classification

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Abstract. Phylogenetic studies have demonstrated that Schefflera, the largest genus of Araliaceae, is grossly polyphyletic, comprising five distinct clades within the family. In an effort to establish monophyletic genera among the elements that currently comprise Schefflera, the genus Plerandra is expanded to encompass all of the members of one of these clades. In this synoptical revision, a new infrageneric classification is presented (along with a key) in which six subgenera are recognized. Four of these subgenera are newly described (Plerandra subgenera Canacoschefflera, Costatae, Gabriellarum, and Veilloniorum) and a fifth represents a new combination (Plerandra subg. Dizygotheca). A total of 33 species (one with two subspecies) are accepted, one of which is newly described (P. veilloniorum), and 22 new combinations are made (P. actinostigma, P. baillonii, P. cabalionii, P. costata, P. crassipes, P. elegantissima, P. elongata, P. emiliana, P. gabriellae, P. leptophylla, P. nono, P. osyana, P. osyana subsp. toto, P. pachyphylla, P. pancheri, P. plerandroides, P. polydactylis, P. reginae, P. seemanniana, P. tannae, P. vanuatua, P. veitchii). Neotypes are provided for six accepted names and one heterotypic synonym, and lectotypes are designated for 13 accepted names and 16 heterotypic synonyms. For each accepted species, full synonymy is provided along with geographic range and notes.

Key Words: Araliaceae, *Dizygotheca*, *Plerandra*, *Schefflera*, New Caledonia, Fiji, Vanuatu, Solomon Islands, New Guinea.

The genus *Schefflera* J. R. Forst. & G. Forst. is currently circumscribed to comprise nearly 600 accepted species (Frodin & R. Govaerts, 2003 publ. 2004), with several hundred additional taxa remaining to be described (Frodin et al., 2010). Representatives of this large group occur in nearly all humid tropical and subtropical areas, and they often form an important and distinctive component of the flora, easily recognized by their unarmed woody habit, palmately compound leaves with sheathing petiole bases, and terminal (or pseudolateral) paniculate or compound-umbellate inflorescences. Over the last several decades, starting with Frodin (1970, 1975), the circumscription of *Schefflera* has been expanded to include elements previously placed by various authors in nearly 20 separate genera, making it by far the largest and most widely distributed genus of Araliaceae (Frodin et al., 2010).

The results of recent phylogenetic studies using molecular data have, however, called into question this long-standing trend. Based on a representative sampling of species from

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throughout the taxonomic breadth and geographic range of Schefflera, phylogenetic analyses of DNA sequence data have demonstrated that the genus is polyphyletic, comprising five clades that are scattered widely across the evolutionary tree of Araliaceae (Plunkett et al., 2004, 2005). Each of these clades exhibits a high degree of geographic structuring, reflected in the informal clade names we have developed (viz., Afro-Malagasy, Asian, Melanesian, and Neotropical Schefflera, plus Schefflera s. str., which comprises eight species restricted to islands in the southwest Pacific). Given the extent and nature of this polyphyly, the genus cannot be maintained using its current, broad definition. Reinstatement of many of the former segregate genera, as historically circumscribed, would be equally problematic because they too are polyphyletic or paraphyletic. Regardless of whether other previously recognized genera (even those that appear to be monophyletic) are reinstated, many hundreds of new combinations will be required.

Given this situation, we propose a classification system for the taxa currently placed in Schefflera s. lat. that is built on the criteria of monophyly, morphological diagnosability, and geographic coherence. At a minimum, each of the five Schefflera clades must be recognized as a distinct genus, although the morphological, eco-geographic, and phylogenetic diversity within some of them (most notably the Asian and Neotropical clades) may be better accommodated by recognizing several genera. In the three smaller clades (Melanesian and Afro-Malagasy Schefflera, plus Schefflera s. str.), however, our knowledge has advanced to a stage where we can propose a formal taxonomic treatment at and below the level of genus. The synoptical revision of the Melanesian Schefflera clade presented here represents the first in a series of papers that will ultimately revise all the elements currently recognized under Schefflera.

Within the Melanesian clade, recent phylogenetic studies (Plunkett & Lowry, 2012, and in prep.) provide strong evidence for subclades that are morphologically coherent. These subclades closely match the morphological groupings originally described in Oskolski and Lowry (2001) and summarized by Frodin (in Plunkett et al., 2005; Frodin et al., 2010) as subgeneric groups, with the informal names 'Canacoschefflera', 'Dictyophlebes', 'Dizygotheca', 'Gabriellae', and 'Plerandra'. While nuclear ITS and ETS sequence data indicated that 'Dizygotheca' might be polyphyletic (Plunkett & Lowry, 2012), analyses based on plastid sequences and the unlinked nuclear marker *rpb2* (Plunkett & Lowry, unpublished data) provide evidence for the monophyly of this group, suggesting that there are paralogous copies of the rDNA spacers. These results, coupled with the presence of several distinctive morphological synapomorphies (including two unusual features, paniculate-umbellate inflorescences and doubled anther sacs) have led us to accept 'Dizygotheca' as a natural group.

Based on our current understanding of relationships, two alternative approaches are available to treat the subclades of Melanesian Schefflera. Each of them could be recognized as a distinct, monophyletic and clearly diagnosable genus (see key provided below). However, their geographic distributions are largely overlapping, and several archipelagos (viz., New Caledonia, Fiji, and Vanuatu) have representatives of two or more of these groups. Moreover, despite their distinctive morphologies, many users of our taxonomic system might find such distinctions too subtle for easy recognition at the generic level. For these reasons, we have chosen to place the species belonging to the Melanesian clade in a single genus, for which the name *Plerandra* A. Gray has priority, and to treat each of the informal subgroups (mentioned above) as a subgenus, in keeping with an approach recently applied to Polyscias J. R. Forst. & G. Forst., the second largest genus of Araliaceae (Lowry & Plunkett, 2010). Species from two other major clades of Schefflera also occur in Melanesia, namely Asian Schefflera (most diverse in eastern and southeastern Asia and Malesia, but extending to New Guinea and the Solomon Islands) and Schefflera s. str. (found in both Melanesia and Polynesia). These species, however, are not closely related to members of the Melanesian clade and are readily distinguished from them on the basis of morphology.

In parallel to our phylogenetic investigations of the Melanesian clade, we have also conducted extensive field work and herbarium studies that have provided the basis for comprehensive revisions of each of the subclades that are now being finalized. In addition to the 33 validly published species we recognize within the Melanesian group (including one described here), 16 more species remain to be described in the 'Canacoschefflera', 'Dizygotheca', 'Gabriellae', and 'Plerandra' groups, bringing the total to 49 species. For practical reasons, we have chosen not to treat the entire genus *Plerandra* (as expanded here) in a single revision. This is in part because dealing with the comparatively large number of species involved would result in a complex and rather unwieldy revision. Moreover, given the strong geographic structuring found within *Plerandra*, treating them in separate revisions allows us to target users of the revisions more precisely.

In the present synopsis we provide an emended description of *Plerandra* and formally recognize each of the six infrageneric groups as a subgenus, describing four of them as new and providing a subgeneric key. We also propose new combinations in Plerandra for 22 taxa currently recognized in Schefflera, and place all other validly published names in synonymy. Our goal here is to provide a formal framework for the comprehensive revisions to follow, which will include full descriptions of subgenera, species and infraspecific taxa, keys, citation of exsiccatae, maps, line drawings, color photos, and risk of extinction assessments. We therefore refrain from describing new species here, with the exception of the single species that comprises one of the new subgenera, which is formally named in order to avoid ambiguity or confusion regarding the circumscription and typification of this new subgenus. Additional information on *Plerandra*, along with lists of exsiccatae and high quality digital images of most species, is available through the Araliaceae Internet Portal (http://www.tropicos.org/Name/40011498? projectid=39).

# **Synopsis**

**Plerandra** A. Gray, United States Exploring Expedition, Phanerogamia 1: 729. 1854. Type: *Plerandra pickeringii* A. Gray.

Hermaphroditic or andromonoecious, unarmed, glabrous, terrestrial (rarely epiphytic), evergreen trees. Stems monocaulous to well branched, pachycaulous. Leaves alternate, petiolate, the bases clasping with short or long, connate, ligulate stipules; blades palmately compound (rarely bundle compound); leaflets ovate to elliptic or oblong, or oblanceolate to obovate or obtriangular, sometimes narrowly so (typically heteroblastic, the juvenile foliage often strikingly different); chartaceous or papyraceous to subcoriaceous, coriaceous, strongly coriaceous, or somewhat succulent; entire (rarely toothed), sessile or petiolulate. Inflorescences terminal or pseudolateral, erect or pendant, umbellate, paniculate-umbellate or compound-umbellate, the ultimate units umbellules; pedicels slender to stout, unarticulated. Calvx forming a low rim or with small lobes; petals (4 or)5(to 8), valvate, free; stamens isomerous with petals or up to c. 500 in 1 to several series, thecae 2 or 4 per anther; carpels (2 or)3 to 19; ovary inferior, styles free to fully united, or stigmas sessile; the disc depressed or flat to conical or nearly hemispherical. Fruits drupaceous; glabrous; cylindrical or obconical to obloid, globose, ellipsoid, ovoid, obovoid, or obloidhemispherical; terete to slightly compressed laterally or weakly triangular when fresh (ribbed when dry); the endocarps crustaceous to boney. Endosperm uniform or ruminate.

Diversity and distribution.—A genus of 32 species (with 17 additional species that remain to be described), restricted to Melanesia (Fiji, New Caledonia, New Guinea, the Solomon Islands and Vanuatu) whose members occur in humid, seasonal, and dry forests and primary scrubland (maquis). Some species are commonly cultivated as ornamentals, especially *P. elegantissima* and *P. veitchii* (Lowry et al., 1989).

The genus *Plerandra* was described by Asa Gray (1854) on the basis of material collected several years earlier by the U.S. Exploring Expedition on the island of Ovalau in Fiji. Over the next 135 years the genus was progressively expanded with the description of ten more species from New Guinea, Fiji, and the Solomon Islands, all of which exhibited the principle distinguishing feature of the genus – an androecium comprising a large number of stamens, reaching well into the hundreds in several taxa. Frodin (in Frodin & R. Govaerts, 2003 publ. 2004)

transferred all members of *Plerandra* to *Schefflera*, in keeping with the broad concept of the latter genus he had first proposed more than four decades earlier (Frodin, 1970, 1975) and maintained until recently (Plunkett et al., 2005; Frodin et al., 2010). Nearly all other authors, however, have recognized *Plerandra* as distinct, perhaps the only exception being Lowry (1989). The expansion of *Plerandra* 

here to include all members of the Melanesian clade of *Schefflera* identified in our molecular phylogenetic studies (Plunkett et al., 2004, 2005) brings together for the first time elements that have historically been placed in *Plerandra* with others that have been treated by some authors in the genus *Dizygotheca* N. E. Br. (and its segregate *Octotheca* R. Vig.), over which the name *Plerandra* has priority.

# Key to the subgenera of Plerandra

- 1. Inflorescences paniculate-umbellate, the lateral axes with 1 to 3 median higher order axes borne singly, in pairs or in pseudowhorls; anthers double, with 4 thecae (New Caledonia, Vanuatu)......III. Plerandra subg. Dizygotheca
- 1. Inflorescences umbellate or compound umbellate (rarely with a single lateral axis borne below the terminal umbel); anthers simple, with 2 thecae.
  - 2. Leaf bases either with a persistent ligulate stipule (4.5–)6–10 cm long, or the ligule 1–3 cm long and early caducous, leaving an evident scar (Fiji, Solomon Islands)......II. *Plerandra* subg. *Costatae*
  - Leaf bases with a short, persistent ligulate stipule.
     Secondary veins closely spaced (venation "calophyllous"), (3 or) 4 or more per cm in median portion of central leaflet; young stems and/or petiole bases with light colored, circular to elliptic, pustulate lenticels (New Caledonia, Fiji, Vanuatu)......IV. *Plerandra* subg. *Gabriellarum*

3. Secondary veins widely spaced (venation not "calophyllous"), fewer than 3 per cm in median portion of central leaflet (obscure in some species); lenticels present or absent

- Stamens 5; ovary 2- to 5-carpellate (New Caledonia).
   Styles with distinct free arms, united only in the basal 1/4–2/3; largest (median) leaflet no more than 3.4 times as long as wide.....I. *Plerandra* subg. *Canacoschefflera*
  - 5. Styles united for their entire length, forming a beak in fruit; largest (median) leaflet at least (3.8–)4.2 times as long as wide......VI. *Plerandra* subg. *Veilloniorum*
- I. **Plerandra** A. Gray subg. **Canacoschefflera** Frodin, Lowry & G. M. Plunkett, **subg. nov.** Type: *Plerandra crassipes* (Baill.) Lowry, G. M. Plunkett & Frodin.

Hoc subgenus quoad folia ad basim stipula ligulata brevi persistente praedita, venas secundarias dissitas, inflorescentiam simpliciter compositeve umbellatam, stamina 5, antheras simplices thecis 2 etiam ovarium 2- ad 5-carpellatum *Plerandrae* subg. *Veilloniorum* Frodin et al. simillimum, sed ab eo folioli mediani longitudinis cum latitudine proportione 3.4 non excedente atque stylorum ramis liberis manifestis distinguitur.

Leaves subcoriaceous to strongly coriaceous, the base of the petiole clasping with a short ligulate stipule; secondary veins of leaflets widely spaced, fewer than 3 per cm in median portion of central leaflet. Inflorescences umbellate or compound umbellate (primary axes rarely with a single lateral axis borne below the terminal umbel). Stamens 5, anthers with 2 thecae. Carpels (2 or)3 to 5, styles with distinct free arms, united only in the basal 1/4–2/3. Diversity and distribution.—Plerandra subg. Canacoschefflera is endemic to New Caledonia, and comprises four described species as well as three new species that will be published shortly (Lowry et al., in prep.).

*Etymology.*—The name *Canacoschefflera* was originally coined by the third author of the present paper based on a latinization of the word "Kanak", the name for the native Melanesian peoples of New Caledonia, and the generic name *Schefflera*, to which the members of this distinctive group were previously assigned.

The name *Canacoschefflera* has been used in an informal manner in several publications over the last decade (viz. Oskolski & Lowry, 2001; Lowry et al., 2004; Plunkett et al., 2005; Frodin et al., 2010).

 Plerandra crassipes (Baill.) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera crassipes Baill., Adansonia 12: 144. 1878. Type: New Caledonia. Mt. Humboldt, 1200 m, Feb 1872 (fr), *B. Balansa 3385* (lectotype, **here designated**: P [P00649523]; isolectotypes: P [P00649522, P00649524], NOU).

- Schefflera balanseana Baill., Adansonia 12: 142. 1878. Type: New Caledonia. Forêts du Mt. Pénari, ca. 800 m, Feb 1872 (fr), *B. Balansa 3386* (lectotype, here designated: P [P00649525]; isolectotypes: P [P00649526, P00649527], NOU).
- Schefflera combouiensis Baker f., in A. B. Rendle et al., Journal of the Linnaean Society, Botany 45: 322. 1921. Type: New Caledonia. Comboui Mts., forest, above 3000 ft, serpentine, 1914 (fr), *R. H. Compton 2181* (holotype, BM; photo of holotype, G; isotype, NSW).
- Schefflera cussoniae Baill., Adansonia 12: 143. 1878. Type: New Caledonia. Without precise locality or date, (fr), J. I. A. Pancher s.n. (lectotype, here designated: P [P00649519]; isolectotypes: P [P00649520, P00649521]).
- Schefflera leratii R. Vig., Journal de Botanique (Morot), sér. 2, 3: 99. 1910–1913 (publ. 1925). Type: New Caledonia. Without precise locality or date, (fr), *B. Balansa 2866* (holotype, P [P00649516]; isotypes: P [P00649517, P00649518], K, MO [MO6332008], NOU).

Distribution.-Endemic to New Caledonia.

The lectotypes designated above were, in each instance, selected because they represent the most complete specimen from among the available syntypes. While the five isotypes of *Schefflera leratii* do not bear Balansa's number, careful examination reveals that they are part of the same gathering, notwithstanding the fact that they were annotated as "*Schefflera schlechteri*" in Viguier's hand.

 Plerandra elongata (Baill.) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera elongata Baill., Adansonia 12: 144. 1878. Type: New Caledonia. Mt. Pénari, 700 m, 2 Feb 1872 (fr), B. Balansa 3387 (lectotype, here designated: P [P00649528]; isolectotypes: P ([P00649529, P00649530]). Distribution.-Endemic to New Caledonia.

Several syntypes of *Plerandra elongata* are deposited at the Paris herbarium, from which we have selected the most complete specimen as the lectotype. *Schefflera schlechteri* was described on the basis of a Schlechter specimen deposited at Berlin that appears to have been destroyed. We have therefore designated the duplicate sheet at Paris as the lectotype.

 Plerandra emiliana (Baill.) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera emiliana Baill., Adansonia 12: 143. 1878. Type: New Caledonia. Hautes montagnes arides, without date, (fr), E. Vieillard 622"A" [= Pancher 206"A"=Mus. Néocal. 206"A"] (lectotype, here designated: P [P00649538]; isolectotypes: P [P00649536, P00649537, P00649539]).

Distribution.-Endemic to New Caledonia.

The protologue of Schefflera emiliana mentions two collections, Pancher 206 and Vieillard 622, which together comprise syntypes. Careful examination of the original material at P shows that they represent a single gathering, suggesting that Vieillard provided part of his material to Pancher, who assigned it one of his own numbers. The numbers given by Vieillard to his collections often correspond to material he regarded as belonging to a single species. This is clearly the case for the syntypes of S. emiliana bearing the number Vieillard 622, and also to those numbered Pancher 206, each of which comprises two clearly discernable gatherings belonging to different species, the second of these being Plerandra elongata. In order to avoid possible confusion, we have followed Lowry (1986) in assigning letters ("A" and "B") to distinguish the separate elements of each of Vieillard's number. From among the syntypes of S. emiliana, we have selected a sheet of Vieillard 622 "A" as the lectotype because it is more complete and better preserved than the other specimens.

 Plerandra pachyphylla (Harms) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera pachyphylla Harms, Botanische

<sup>Schefflera schlechteri Harms, Botanische Jahrbucher</sup> für Systematik, Pflanzengeschichte und Pflanzengeographie 39: 213. 1906. Type: New Caledonia. Auf den Bergen am Ngoye, 1000 m, 1 Nov 1902 (fr), R. F. R. Schlechter 15191 (holotype: B, apparently destroyed; lectotype, here designated: P [P00649531], isolectotypes [= remaining isotypes]: BM, BR, G [2 sheets], E, F, HBG, K, L, NSW, W, Z).

Jahrbucher für Systematik, Pflanzengeschichte und Pflanzengeographie 39: 212. 1906. Type: New Caledonia. Süd-Bezirk, auf den Bergen am Ngoye, 800 m, 19 Nov 1902 (fl), *R. F. R. Schlechter 15382* (holotype: B, apparently destroyed; lectotype, **here designated**: P [P00649555]; isolectotypes: BM, P [P00649556]).

Distribution.—Endemic to New Caledonia.

The holotype of *Schefflera pachyphylla* was deposited at Berlin but appears to have been destroyed. We have therefore designated the best preserved duplicate at Paris as the lectotype.

II. Plerandra A. Gray subg. Costatae G. M. Plunkett, Lowry & Frodin, subg. nov. Type: *Plerandra costata* (A. C. Sm.) G. M. Plunkett, Lowry & Frodin.

Hoc subgenus a *Plerandra* subg. *Dizygotheca* (N. E. Br.) Lowry et al. inflorescentia composite umbellata atque antheris simplicibus thecis 2, ab aliis subgeneribus stipulis ligulatis persistentibus (4.5–)6–10 cm longis vel ligulis mox caducis 1–3 cm longis cicatricem manifestam efferentibus distinguitur.

Leaves papyraceous to subcoriaceous, the base of the petiole clasping either with a persistent ligulate stipule (4.5-)6-10 cm long, or the ligule 1–3 cm long and early caducous, leaving an evident scar; secondary veins of leaflets closely spaced (venation "calophyllous"), 5 or 6 per cm in median portion of central leaflet. Inflorescences compound umbellate. Stamens 22 to 32, anthers with 2 thecae. Carpels 8 to 12, styles united for their entire length.

*Diversity and distribution.*—One species each in Fiji and the Solomon Islands.

*Plerandra* subg. *Costatae* corresponds to the 'Dictyophlebia' group in the informal classification of *Schefflera* proposed by Frodin et al. (2010; see also Plunkett et al., 2005) and comprises a well supported clade in the phylogenetic study of Plunkett and Lowry (2012).

**5.** Plerandra costata (A. C. Sm.) G. M. Plunkett, Lowry & Frodin, comb. nov.

Schefflera costata A. C. Sm., Bernice P. Bishop Museum Bulletin 141: 119. 1936. Type: Fiji. Taveuni, western slope between Somosomo and Wairiki, 600–900 m, 14 Dec 1933–8 Jan 1934 (immat fr), *A. C. Smith 886* (holotype: BISH; isotypes: BO, GH [073444], K, NY [238716(ID], S, UC, US [1676683]).

*Distribution.*—Endemic to the islands of Taveuni, Vanua Levu, and Viti Levu in the Fiji Islands.

Plerandra costata shares many reproductive and vegetative features with P. micrantha, although the two species were described in separate genera. Smith (1936, 1985) knew of only two collections of P. costata, both in fruit and thus lacking stamens. As such, he described this species in Schefflera (where he regarded it as closely related to S. seemanniana) rather than Plerandra, in which he placed other polyandrous species from Fiji. By contrast, Philipson (1951) knew that P. micrantha had numerous stamens and thus described it in Plerandra (indicating that it was vegetatively similar to P. solomonensis). Molecular data (Plunkett & Lowry, 2012) confirm the close relationship of P. costata and P. micrantha, as first suggested by Frodin (in Plunkett et al., 2005; Frodin et al., 2010), and this affinity is formalized here.

6. Plerandra micrantha Philipson, Bulletin of the British Museum (Natural History), Botany 1: 10. 1951. Schefflera dictyophlebia Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae, 335. 2003 (publ. 2004), non Schefflera micrantha (C. B. Clarke) Gamble (1919). Type: Solomon Islands. Guadalcanal, in stunted rain forest, 1700 ft, 4 May 1931 (fr), S. F. Kajewski 2619 (holotype: A [72120]; isotypes: BISH, BM, BO, BRI, P-n.v.).

*Distribution.*—Endemic to the Solomon Islands, recorded only from Guadalcanal.

When Frodin (in Frodin & R. Govaerts, 2003, publ. 2004) formally transferred *Plerandra micrantha* to *Schefflera*, he proposed the new name *S. dictyophlebia* because the combination *S. micrantha* was already occupied. This name was used in the molecular

phylogenetic studies of Plunkett et al. (2005) and Plunkett and Lowry (2012).

- III. Plerandra A. Gray subg. Dizygotheca (N. E. Br.) Lowry, G. M. Plunkett & Frodin, comb. et. stat. nov. Dizygotheca N. E. Br., Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew 1892: 197. 1892. Dizygotheca sect. Eudizygotheca R. Vig., Journal de Botanique (Morot) 19: 25. 1905, nomen superfl. Type: Dizygotheca nilssonii (Linden) N. E. Br. [= Plerandra osyana (Veitch ex Regel) Lowry, G. M. Plunkett & Frodin subsp. osyana].
- Plerandra A. Gray sect. Pentadiplandra Baill., Adansonia 12: 136. 1878. Type: Plerandra vieillardii Baill. [= Plerandra osyana (Veitch ex Regel) Lowry, G. M. Plunkett & Frodin subsp. osyana].
- Dizygotheca sect. Neodizygotheca R. Vig., Journal de Botanique (Morot) 19: 25. 1905. Type: Dizygotheca plerandroides R. Vig. [= Plerandra plerandroides (R. Vig.) Lowry, G. M. Plunkett & Frodin].
- Octotheca R. Vig., Annales des Sciences Naturelles, Botanique, IX, 4: 135. 1906. Type: Octotheca plerandroides (R. Vig.) R. Vig. [= Plerandra plerandroides (R. Vig.) Lowry, G. M. Plunkett & Frodin].

Leaves chartaceous or papyraceous to subcoriaceous or coriaceous, the base of the petiole clasping with a short ligulate stipule; secondary veins of leaflets typically widely spaced, rarely more than 3 per cm in median portion of central leaflet. Inflorescences paniculate-umbellate, the lateral axes with 1 to 3 median higher order axes borne singly, in pairs or in pseudo-whorls. Stamens 5 to 8 (10, 15 or 20 in *P. plerandroides*), anthers with 4 thecae. Carpels 5 to 10 (to 15 in some species), styles free or united partially or for their entire length to form a beak.

Diversity and distribution.—Plerandra subg. Dizygotheca comprises 19 species, eight of which remain to be described. It is centered in New Caledonia, where 16 species are endemic; three additional species are endemic to Vanuatu.

The genus *Dizygotheca* was distinguished primarily on the basis of having anthers with 4 thecae rather than 2 as found in most species. Some authors have recognized *Dizygotheca* as distinct from *Schefflera* (such as Viguier, 1905, 1909; Guillaumin, 1948; Hutchinson, 1967), while all others have regarded the generic name as a synonym. Baillon (1878) appears to be the only person previously to have associated species of *Dizygotheca* with *Plerandra*, having placed several (including the entity we now refer to as *P. osyana* subsp. *osyana*) in his *Plerandra* sect. *Pentadiplandra*.

 Plerandra actinostigma (A. C. Sm. & B. C. Stone) G. M. Plunkett, Lowry & Frodin, comb. nov. Schefflera actinostigma A. C. Sm. & B. C. Stone, Journal of the Arnold Arboretum 49: 486. 1968. Type: Vanuatu. Aneityum, Anelgauhat Bay, 60 m, 13 Feb 1929 (immat fr), S. F. Kajewski 758 (holotype: A [73322]; isotypes: K, LA, NY [238698], P).

*Distribution.*—Endemic to Vanuatu, where it is only known from the islands of Anei-tyum and Erromango.

Smith and Stone (1968) correctly described the inflorescence of *P. actinostigma* (as well as that of *P. tannae*), but failed to make the connection to the species of *Dizygotheca* from New Caledonia, suggesting instead a relationship with *P. costata* and *P. seemanniana* of Fiji.

8. Plerandra baillonii (R. Vig.) Lowry, G. M. Plunkett & Frodin, comb. nov. Dizygotheca baillonii R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 9: 398. 1909. Schefflera bailloniana Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 326. 2003 (publ. 2004), non Schefflera baillonii R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 4: 139. 1906, nom. illeg. = Polyscias cutispongia (Lam.) Lowry & G. M. Plunkett. Type: New Caledonia. Bois de montagne, Balade, without date, (fr), E. Vieillard 629 (lectotype, here designated: P [P00649509]; isolectotypes: P [P00649510, P00649511]).

# Distribution.-Endemic to New Caledonia.

Several syntypes of *Plerandra baillonii* are deposited at the herbarium in Paris, from

which we have selected the best preserved specimen as the lectotype.

- 9. Plerandra elegantissima (Veitch ex Mast.) Lowry, G. M. Plunkett & Frodin, comb. nov. Aralia elegantissima Veitch ex Mast., Gardeners' Chronicle (33) 1873: 782. 1873, ex E. Fourn., L'illustration Horticole 23: 9, pl. 229. 1876. Dizygotheca elegantissima (Veitch ex Mast.) R. Vig. & Guillaumin, Notulae Systematicae 2: 258. 1912. Schefflera elegantissima (Veitch ex Mast.) Lowry & Frodin, in Lowry, Miller & Frodin, Baileya 23: 9. 1989. Type: New Caledonia. Tonghoué, ca. 100 m, 5 Jun 1966 (fr), H. S. MacKee 15054 (neotype, here designated: P [mounted on 2 sheets: P00709383, P00709384]; isoneotypes: K, MO [mounted on 2 sheets: MO3398556, MO3398557], NOU [mounted on 2 sheets: NOU043017, NOU043018], NY, US).
- Schefflera faguetii Baill., Adansonia 12: 142. 1878. Dizygotheca faguetii (Baill.) R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 9: 397. 1909. Type: New Caledonia. Bosquets situés entre le Pont des Français et la Conception, Jun 1869 (fr), B. Balansa 2219a (lectotype, here designated: P [P00649534]; isolectotypes: BM, K, NY, P [P00649535]).
- Dizygotheca coenosa R. Vig., Journal de Botanique (Morot), sér. 2, 3: 93. 1910–1913 (publ. 1925).
  Schefflera coenosa (R. Vig.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 332. 2003 (publ. 2004). Type: New Caledonia.
  Bois sombres et fangeux, Calédonie et Ile des Pins, (bud), E. Pancher s.n. (lectotype, here designated: P [P00649550]; isolectotypes: P [P00649551, P00649553], K, MO [MO6332009], NY).

*Distribution.*—Endemic to New Caledonia, but widely cultivated for its juvenile foliage.

The protologue of *Aralia elegantissima* contains no reference to any specimens, we have found no material that could be regarded as original, and no illustration accompanied the protologue. We have therefore designated a neotype. Several syntypes are available for both *Schefflera faguetii* and *Dizygotheca coenosa*; in both cases we have selected the best preserved specimen as the lectotype.

- 10. Plerandra leptophylla (Veitch ex T. Moore) Lowry, G. M. Plunkett & Frodin, comb. nov. Aralia leptophylla Veitch ex T. Moore, Proceedings of the Royal Horticultural Society London 2: 318. 1862. Dizygotheca leptophylla (Veitch ex T. Moore) Hemsl., Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew 1893: 156. 1893. Sciadophyllum leptophyllum (Veitch ex T. Moore) Hemsl., Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew 1893: 156. 1893, pro. syn. Schefflera leptophylla (Veitch ex T. Moore) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 349. 2003 (publ. 2004). Type: New Caledonia. Upper Amoa River Valley, road from Col de Néûni (below Wâo Uni) to Plateau de Néûn, over ridge from Tchamba River Valley, edge of humid forest, non-ultramafic substrate, 20°59'57"S, 165°14'47"E, 480 m, 26 Apr 2002 (bud, fr), P. P. Lowry II et al. 5669 (neotype, here designated: P [mounted on 5 sheets: P00709385, P00709386, P00709387, P00709388, P00709389]; isoneotypes, A, K, MO [MO5938331-MO5938335], NOU [mounted on 2 sheets: NOU043160, NOU043161], NY, US).
- Dizygotheca polyantha Baker f., in A. B. Rendle et al., Journal of the Linnaean Society, Botany 45: 323. 1921. Type: New Caledonia. Paompai, forest margin, 1500 ft, 15 Sep 1914, R. H. Compton 1896 (holotype: BM).

Distribution.-Endemic to New Caledonia.

The protologue of *Aralia leptophylla* contains no reference to any specimens, we have found no material that could be regarded as original, and no illustration accompanied the protologue. We have therefore designated a neotype. A set of three specimens at Kew, collected at the Cambridge Botanic Garden in 1893, and which were examined by Hemsley for his note published the same year (Hemsley, 1893), are incorrectly marked as types.

11. Plerandra nono (Baill.) Lowry, G. M. Plunkett & Frodin, comb. nov. *Schefflera nono* Baill., Adansonia 12: 141. 1878. Type: New Caledonia. Forêts situées audessus de la Ferme-modèle, 300 m, 1870 (fr), *B. Balansa 3325* (lectotype, **here designated**: P [00649559]; isolectotype: P [P00649560, P00649561], BR, G, K, LA, MO [M06332010]).

- Schefflera cerifera Harms, Botanische Jahrbucher für Systematik, Pflanzengeschichte und Pflanzengeographie 39: 212. 1906. Type: New Caledonia. Baie du Sud (Forêt Nord), 300 m, Jan 1903 (fr), Cribs 1266 (holotype: B, presumably destroyed). Neotype. New Caledonia. Forêt Nord, ca. 200 m, 7 Jan 1982 (fr), J-M. Veillon 4806 (neotype, here designated: P [P00709390]; isoneotypes: MO [MO3397521], NOU [NOU043218]).
- Schefflera nono Baill. var. henriettae Baill. ex R. Vig., Journal de Botanique (Morot), sér. 2, 3: 68 1910–1913 (publ. 1925), nom. inval. (not effectively published).

### Distribution.-Endemic to New Caledonia.

Several syntypes of *Schefflera nono* are deposited in the Paris herbarium, from which we have selected the best preserved as the lectotype. The holotype of *S. cerifera* at Berlin (*Cribs 1266*) appears to have been destroyed, and as no isotype or any other original material has been located, we have designated as the neotype a collection gathered at the same locality as the holotype.

The name *Schefflera nono* var. *henriettae* appears in the page proofs of the final installment of Viguier's treatment of New Caledonian Araliaceae (Viguier 1910–1913). These pages are bound with the remainder of the volume in the copy deposited in the library of the Paris herbarium, but were never distributed. As a consequence, this name was not effectively published and is therefore invalid, and the collection cited, *Vieillard 2696* (BM, P [P00649567, P00649568, P00649569]), does not represent type material.

12. Plerandra osyana (Veitch ex Regel) Lowry, G. M. Plunkett & Frodin, comb. nov. Aralia osyana Veitch ex Regel, Gartenflora 17: 167. 1868. Schefflera osyana (Veitch ex Regel) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 361. 2003 (publ. 2004). Type: New Caledonia. Forêt Démazures, W of Col de Mouirange, dense humid forest along old logging road, ultramafic substrate, 22° 11'35"S, 166°37'40"E, 390 m, 7 Apr 2008 (fr), *P. P. Lowry II et al. 7044* (neotype, here designated: P [mounted on 2 sheets: P00709399, P00709400]; isoneotypes: MO [MO6332011], NOU).

The protologue of *Aralia osyana* contains no reference to any specimens, we have found no material that could be regarded as original, and no illustration accompanied the protologue. We have therefore designated a neotype, selecting a gathering in fruit collected concurrently with a juvenile specimen (*Lowry et al. 7045*, MO, P) that matches perfectly the plant illustrated as *Aralia osyana* in a plate published by Veitch and Sons (1870: 17) two years after the protologue.

*Plerandra osyana* is circumscribed here to comprise two subspecies, one of which includes material historically assigned to *Schefflera toto* Baill. While the distributions of these two entities are almost totally distinct, a few collections from the narrow area of overlap exhibit combinations of characters intermediate between them, which has prompted us to treat them as subspecies, following the approach adopted by Lowry (1986) for two New Caledonian species of *Delarbrea* (Myodocarpaceae).

# 12a. Plerandra osyana subsp. osyana.

- Plerandra vieillardii Baill., Adansonia 12: 136. 1878, non Schefflera vieillardii Baill. (1878). Dizygotheca vieillardii (Baill.) R. Vig., Journal de Botanique (Morot) 19: 21. 1905. Type: New Caledonia. Without precise locality or date, (bud), E. Pancher s.n. (lectotype, here designated: P [P00649585]; isolectotype: P [P00649586]).
- Aralia nilssonii Linden, Catalogue générale et prixcourant pour 1880 des plantes de serres des établissements d'horticulture et d'introduction 101: 54. 1880, nomen. Dizygotheca nilssonii Linden ex N. E. Br., Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew 1892: 197. 1892. Type: New Caledonia. From material received from Linden in 1880 and cultivated at Kew Gardens, England (lectotype, here designated: K, specimen dated 2 Nov 1891, without collector name or number, but with leaflet and portion of inflorescence; isolectotypes: one specimen dated 2 November 1891 bearing a leaf, and a second specimen dated 1 March and 7 May 1892 with two infructescence fragments).
- Dizygotheca ouveana Däniker, Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich 78 (Beibl. 19): 327. 1933. Octotheca ouveana (Däniker) Guillaumin, Bulletin du Muséum National d'Histoire Naturelle (Paris), sér. 2, 15: 450. 1943 (publ. 1944). Schefflera ouveana (Däniker) Frodin, in D. Frodin &

R. Govaerts, World Checklist and Bibliography of Araliaceae: 362. 2003 (publ. 2004). Type: New Caledonia, Loyalty Islands, Ouvéa, Chlo bei Wagatsch, 22 Aug 1923 (bud), *A. U. Däniker 2141* (holotype: Z).

# Distribution.-Endemic to New Caledonia.

*Plerandra vieillardii* was based on two collections representing different taxa: *Vieillard 628* is without question referable to *P. plerandroides*, but Baillon's description is clearly not of this entity as he indicates the presence of just 5 stamens. We have therefore selected *Pancher s.n.* as the lectotype as it more closely matches the protologue.

Of the three sheets in the Kew herbarium marked as types of *Aralia nilssonii* in the author's hand, we have selected the single sheet having both vegetative and reproductive material as the lectotype.

- 12b. Plerandra osyana subsp. toto (Baill.) Lowry, G. M. Plunkett & Frodin, comb. et stat. nov. Schefflera toto Baill., Adansonia 12: 140. 1878. Dizygotheca toto (Baill.) R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 9: 394. 1909. Type: New Caledonia. Forêt située sur les bords de la Néra à Bourail, Mar & Apr 1869 (fl, fr), B. Balansa 967 (lectotype, here designated: P [P00650337]; isolectotypes : BM, E, K, G, NY, P [P00650338]).
- Dizygotheca lecardii R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 9: 395. 1909. Type: New Caledonia. Les plus hauts sommets de la chaîne centrale, without date (bud), *T. Lécard s.n.* (lectotype, here designated: P [P00650341]; isolectotypes: BO, K, NOU, P [P00650339, P00650340]).

Distribution.—Endemic to New Caledonia.

The two collections on which *Schefflera* toto was based (*Balansa 967* and 2218) are of different taxa. We have selected a specimen of the first of these numbers as the lectotype because it is better preserved and fixes the name to the subspecies occurring in northern New Caledonia, with which it has long been associated. *Balansa 2218* is referred to the typical subspecies of *Plerandra osyana*.

Several syntypes of *Dizygotheca lecardii* are deposited at the Paris herbarium, from

which we have selected the most complete specimen as the lectotype.

 Plerandra plerandroides (R. Vig.) Lowry, G. M. Plunkett & Frodin, comb. nov. Dizygotheca plerandroides R. Vig., Journal de Botanique (Morot) 19: 24. 1905. Octotheca plerandroides (R. Vig.) R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 4: 135. 1906. Schefflera plerandroides (R. Vig.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 365. 2003 (publ. 2004). Type: New Caledonia. Bois de montagne, Balade, without date (fr), E. Vieillard 628"B" (lectotype, here designated: P [P00649590]; isolectotypes: P [P00649591, P00649592, P00649593], NOU).

#### Distribution.-Endemic to New Caledonia.

This species was at one time placed in the segregate genus *Octotheca*, described by Viguier (1906), which was distinguished on the basis of the moderate polymery exhibited by its androecium (with 10, 15 or 20 stamens) and gynoecium (with 10 to 15 carpels), features that indeed are distinctive among members of *Plerandra* subg. *Dizygotheca*. The placement of *P. plerandroides* within this group is supported by both molecular data (Plunkett & Lowry, 2012) and morphology, in particular the presence of a paniculate-umbellate inflorescence and of anthers with 4 thecae, which characterize the subgenus.

Several syntypes of *Plerandra plerandroides* are deposited at the Paris herbarium, from which we have selected the most complete specimen as the lectotype.

 Plerandra polydactylis (Montrouz.) Lowry, G. M. Plunkett & Frodin, comb. nov. Paratropia polydactylis Montrouz., Flore de l'île Art, Mémoires de l'Académie Royale de Science de Lyon, Sect. Sci. 10: 212. 1860. Schefflera polydactylis (Montrouz.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 366. 2003 (publ. 2004). Type: New Caledonia. Ile Art, plateau N, rebord E, 220 m, 9 Dec 1975 (staminate buds, fr), H. S. MacKee 30490 (neotype, here designated: P [mounted on 2 sheets: P00709394, P00709395]; isoneotypes: G [2 sheets], MO [mounted on 2 sheets: MO3755065, MO3397606], NOU [NOU043300]).

Distribution.-Endemic to New Caledonia.

Montrouzier (1860) indicated the type locality for *Paratropia polydactylis* as "*Ile Art, in montibus et sylvis*". Montrouzier's collections from Ile Art are deposited at LY and MPU, but no specimens corresponding to his *P. polydactylis* have been located, necessitating the designation of a neotype. We have chosen material that was likewise collected on Ile Art, where a small population of this distinctive species persists today.

- 15. Plerandra reginae (Hort. ex W. Richards) Lowry, G. M. Plunkett & Frodin, comb. nov. Aralia reginae Hort. ex W. Richards, Gardeners' Chronicle, n.s., 9: 440. 1878. Dizygotheca reginae (Hort. Linden ex W. Richards) Hemsl., Bulletin of Miscellaneous Information, Royal Botanic Gardens, Kew 1895: 181. 1895. Schefflera reginae (Hort. ex W. Richards) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 371. 2003 (publ. 2004). Type: New Caledonia. Monts Koghis, NE of Nouméa, trail from Auberge toward summit, edge of dense humid forest and transition to disturbed Melaleuca savanna, 22°10'51"S, 166°30'33"E, 530 m, 4 Apr 2008 (fr), P. P. Lowry II et al. 7034 (neotype, here designated: P [mounted on 3 sheets: P00709396, P00709397, P00709398]; isoneotypes: K, MO [MO6332012], NY, NOU [NOU053279, NOU053280], US).
- Dizygotheca harmsii R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 9: 398. 1909. Type: New Caledonia. Vallées, without date (hermaphrodite fl, staminate buds), Pancher 248 [= Mus. Néocal. 248] (lectotype, here designated: P [P00649597]; isolectotypes: NOU, P [P00649598, P00649599]).

Distribution.-Endemic to New Caledonia.

The protologue of *Aralia reginae* contains no reference to any specimens, we have found no material that could be regarded as original, and no illustration accompanied the protologue. We have therefore designated a neotype.

Several syntypes of *Dizygotheca harmsii* are deposited at the Paris herbarium, from which we have selected the most complete specimen as the lectotype.

Plerandra tannae (A. C. Sm. & B. C. Stone) G. M. Plunkett, Lowry & Frodin, comb. nov. Schefflera tannae A. C. Sm. & B. C. Stone, Journal of the Arnold Arboretum 49: 483. 1968. Type: Vanuatu. Tanna, Lenakel, 200 m, rainforest, 7 Mar 1928 (buds), S. F. Kajewski 131 (holotype: A; isotypes: BISH, BRI, K, LA, NY, P).

*Distribution.*—Endemic to Vanuatu, where it is restricted to the islands of Erromango and Tanna.

This species may represent the same entity as the one described earlier as *Aralia kerchoviana* (see Incompletely Known Taxa below), but the brief horticultural description provided for the latter name is not adequate to make a definitive determination.

- Plerandra veitchii (Hort. ex Carrière) Lowry, G. M. Plunkett & Frodin, comb. nov. Aralia veitchii Hort. ex Carrière, Revue Horticole 39: 300. 1867; Hibberd, Beautiful-leaved Plants, 141, 144, pl. 54. 1870. Schefflera veitchii (Hort. ex Carrière) Frodin & Lowry, in Lowry, Miller & Frodin, Baileya 23: 11. 1989. Type: New Caledonia. Nouméa, Montravel, Parc forestier, 50 m, 9 Apr 1965 (staminate fl, immat fr), H. S. MacKee 12409 (neotype, here designated: P [P00722266]; isoneotypes: K, G, MO [MO3395881], NOU [NOU019413], NY, P [P00709393], US).
- Schefflera apioidea Baill., Adansonia 12: 145. 1878. Dizygotheca apioidea (Baill.) R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 9: 393. 1909. Type: New Caledonia. Bourail, dans les forêts des collines schisto-feldspathiques, Apr 1869 (hermaphrodite fl, staminate buds), B. Balansa 968 (lectotype, here designated: P [P00650344]; isolectotypes: BM, K, MO [MO6332013], P [P00650345, P00650346]).
- Aralia parvifolia Pancher & Sebert, Revue Maritime Coloniale 40: 590. (Feb) 1874; Notice sur le Bois de la Nouvelle-Calédonie: 204. (Oct) 1874. Schefflera parvifolia (Pancher & Sebert) Baill., Adansonia 12: 144. 1878. Dizygotheca parvifolia (Pancher & Sebert) R. Vig., Annales des Sciences Naturelles, Botanique, sér. 9, 9: 396. 1909. Type: New

Caledonia. Commun dans les bois, sur les coteaux argilo-schisteux, *E. Pancher s.n.* (= *Mus. Néocal.* 247) (lectotype, **here designated**: P [P00650347]; isolectotypes : K, MO [MO6332014], NOU, NY, P [P00650348, P00650349]).

- Aralia tenuifolia Pancher, Adansonia 10: 372. 1873. Dizygotheca tenuifolia (Pancher) R. Vig., Ann. Sci. Nat. Bot., Sér. 9, 9: 392. 1909. The protologue contains a detailed description that clearly refers to the taxon now known as *Plerandra veitchii*, but the author made no reference to any specimens and did not provide an illustration, and we have not found any material that could be regarded as original. Since *Aralia tenuifolia* is clearly a synonym, we have refrained from designating a neotype.
- Aralia veitchii Hort. ex Carrière var. gracillima Linden ex E. Fourn., L'illustration Horticole 23: 113, t. 247. 1876. Aralia gracillima (Linden ex E. Fourn.) Rafarin, Revue Horticole 49: 38. 1877. Type: plate 247 (before p. 113) in E. Fourn., L'illustration Horticole 23.

*Distribution.*—Endemic to New Caledonia, but widely cultivated for its juvenile foliage.

The protologue of *Aralia veitchii* contains no reference to any specimens, we have found no material that could be regarded as original, and no illustration accompanied the protologue. We have therefore designated a neotype.

Several syntypes of *Schefflera apioidea* are deposited at the Paris herbarium, from which we have selected the most complete specimen as the lectotype. We have likewise selected a lectotype for *Aralia parvifolia* from among the syntypes at the Paris herbarium on the same basis.

No specimens were cited in the protologue of *Aralia veitchii* var. *gracillima* and none that could be regarded as original material appears to have been preserved. Under Art. 9.1 of the *International Code* of *Botanical Nomenclature* (McNeill et al. 2006), the illustration accompanying the protologue must therefore be regarded as the holotype.

VI. Plerandra A. Gray subg. Gabriellarum Lowry, G. M. Plunkett & Frodin, subg. nov. Type: *Plerandra gabriellae* (Baill.) Lowry, G. M. Plunkett & Frodin.

Hoc subgenus a *Plerandra* A. Gray subg. *Plerandra* foliolorum venis secundariis (3 vel) 4 vel plus (vs. 1 vel 2) per cm, lenticellis ad caules juvenes sicut petiolorum bases orbicularibus ellipticisve pustularibus pallidis (vs.

atratis vel absentibus) atque staminibus paucioribus (5 ad 7 vs. 15 ad 500) distinguitur.

Leaves chartaceous or papyraceous to subcoriaceous or coriaceous, the base of the petiole clasping with a short ligulate stipule; secondary veins of leaflets closely spaced (venation "calophyllous"), (3 or) 4 or more per cm in median portion of central leaflet. Inflorescences compound-umbellate. Stamens 5 to 7, anthers with 2 thecae. Carpels 5 to 13, styles united throughout their length to form a beak.

Diversity and distribution.—Plerandra subg. Gabriellarum has representatives in New Caledonia (2 species), Vanuatu (2 species, one of which remains to be described) and Fiji (1 species), all endemic to a single island or archipelago.

This subgenus comprises four described species, with one new species from the island of Santo in Vanuatu that will be published shortly (Lowry et al., in prep.). The name 'Gabriellae' was used informally for this group in several publications over the last decade (viz. Oskolski & Lowry, 2001; Lowry et al., 2004; Plunkett et al., 2005; Frodin et al., 2010).

- Plerandra gabriellae (Baill.) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera gabriellae Baill., Adansonia 12: 144.
   1878. Type: New Caledonia. Forêts humides, sols argilo-schisteux, without date, E. Pancher s.n. [= Mus. Néocal. 289] (lectotype, here designated: P [P00649541]; isolectotypes: BM, K, MO [MO6332015], NOU, P [P00649542, P00649543, P00709391, P00709392]).
- Schefflera golip Baill., Adansonia 12: 142. 1878. Type: New Caledonia. Without precise locality or date, (fr), E. Deplanche 26 (lectotype, here designated: P [P00649544]).
- Schefflera marcellana Baill., Adansonia 12: 140. 1878. Type: New Caledonia. Collines argilo-ferrugineuses situées entre le village Canaque de Néoua et le Mont Mi, 16 Mar 1869 (bud), *B. Balansa 971* (holotype: P [P00649549]).
- Schefflera affinis Baill., Adansonia 12: 141. 1878. Type: New Caledonia. Forêts situées au NE de la Conception, 400 m, Jun 1869 (fr), *B. Balansa 2217* (lectotype: here designated: P [P00649546]; isolectotypes : NOU, P [P00649547, P00649548]).

Distribution.—Endemic to New Caledonia.

Several syntypes of *Schefflera gabriellae* are deposited at the Paris herbarium, from which we have selected the most complete specimen as the lectotype. We have likewise selected a lectotype for *S. affinis* from among the syntypes at the Paris herbarium on the same basis. Finally, we have selected *Deplanche 26* as the lectotype of *S. golip* because it bears mature fruits whereas the other syntype, *Thiébault 283*, is sterile.

- Plerandra pancheri (Baill.) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera pancheri Baill., Adansonia 12: 143. 1878. Type: New Caledonia. Bois de montagnes, Balade, (fl, fr), E. Vieillard 634 (lectotype, here designated: P [P00649573]; isolectotypes: P [P00649574, P00649575]).
- Schefflera andraeana Baill., Adansonia 12: 141. 1878. Type: New Caledonia. Nouméa, près de la Ferme modèle, Sep-Oct 1868 (fr), *B. Balansa 642* "A" (lectotype, here designated: P [P00649576]; isolectotypes: P [P00649577, P00649578]).
- Schefflera andraeana Baill. var. costata Baill. ex R. Vig., Annales des Sciences Naturelles, Botanique, IX, 9: 373. 1909. Type: New Caledonia. Forêts au sud de Canala, 700 m, without date, *B. Balansa 2216* (lectotype, here designated: P [P00649579]; isolectotypes: BM, P [P00649580, P00649581]).
- Schefflera andraeana Baill. var. gracilis R. Vig., Journal de Botanique (Morot), sér. 2, 3: 69. 1910–1913 (publ. 1925), nom. inval. (not effectively published).

Distribution.-Endemic to New Caledonia.

Viguier (1909: 373) designated Vieillard 634 as the lectotype collection of Schefflera pancheri, and we have chosen the most complete sheet from among these as the sole lectotype, annotating the others as isolectotypes. On the same page, Viguier (1909: 373) implicitly designated Balansa 642 as the lectotype collection of S. andraeana by basing his description of S. andraeana var. costata on the other syntype gathering (Balansa 2216) and thus excluding it from the typical variety. Balansa 642 is, however, a mixed gathering that comprises young flowering material and leaves with ca. 7 larger leaflets that clearly belong to P. gabriellae, and fruits with leaves that have 3 to 5 smaller

leaflets referable to P. pancheri. This material is mounted on three sheets, as follows: Sheet 1 has an inflorescence with an attached petiole base and detached buds and leaflets of P. gabriellae, and an infructescence (with 2 fruits), 3 leaves (and 4 cut-off petioles) and detached fruits of P. pancheri; Sheet 2 has an inflorescence and leaf of P. gabriellae, along with an infructescence of P. pancheri; and Sheet 3 has an infructescence and a single attached upper leaf (with 2 leaflets) of P. pancheri. We have marked the portions of each specimen referable to P. pancheri as Balansa 642 "A" and the remainder as Balansa 642 "B". The material of Balansa 642"A" agrees better with the protologue, and we have therefore designated the specimen bearing the most complete material of this number as the lectotype.

The name *Schefflera andraeana* var. *gracilis* appears in the page proofs of the final installment of Viguier's treatment of New Caledonian Araliaceae (Viguier 1910–1913), which are bound with the remainder of the volume in the copy deposited in the library of the Paris herbarium, but were never distributed. As a consequence, this name was not effectively published and is therefore invalid, and the specimens cited (*Lécard s.n.*, P [P00649582, P00649583, P00649584]) do not represent types.

Several specimens at P were marked "*Schef-flera pancheri* var. *vieillardii*" in Baillon's hand, but this name was never published.

20. Plerandra seemanniana (A. C. Sm.) G. M. Plunkett, Lowry & Frodin, comb. nov. Schefflera seemanniana A. C. Sm., Bernice P. Bishop Museum Bulletin 141: 118. 1936, nomen novum, non Schefflera vitiensis (A. Gray) Seem. (1865) nec Plerandra vitiensis (Seem.) Baill. (1879). Agalma vitiense Seem., Flora Vitiensis 1: 116. 1866. Type: Fiji. Viti Levu, without precise locality or date, E. O. Graeffe 32 [originally cited erroneously as no. 38] (holotype: MEL; isotype: BM).

*Distribution.*—Endemic to Fiji, where it is known from several islands.

Smith and Stone (1968) suggested an affinity between *P. seemanniana* and two other species, *P. costata* (likewise from Fiji,

now placed in subg. *Costatae*) and *P. actino-stigma* (from Vanuatu, placed in subg. *Dizy-gotheca*), but they failed to make the connection to the New Caledonian species of subg. *Gabriellarum* known at the time.

 Plerandra vanuatua (Lowry) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera vanuatua Lowry, Bulletin du Muséum National d'Histoire Naturelle, Paris, 4<sup>e</sup> série, 11, 1989, sect. B, Adansonia 11: 129. 1989. Type: Vanuatu. Aneityum, entre Anelggauhat et l'Inrero, 400–500 m, 1976 (immat fr), R. Kichikichi 48 (holotype: P [P00650963], isotypes: K, NOU, PVNH).

*Distribution.*—Endemic to the island of Aneityum in Vanuatu.

This species was known only from the type collection and a single sterile gathering until an ample series of fertile collections was made in 2006.

#### V. Plerandra A. Gray subg. Plerandra

Leaves subcoriaceous, the base of the petiole clasping with a short ligulate stipule; secondary veins of leaflets widely spaced, fewer than 3 per cm in median portion of central leaflet. Inflorescences compound-umbellate (or umbels of strobiloid racemes). Stamens 15 to 500, anthers with 2 thecae. Carpels 5 to 19, stigmas typically sessile or forming short-conical protuberances on a raised disc (styles united to form a long beak in *P. pickeringii*).

Diversity and distribution.—Plerandra subg. Plerandra occurs in Fiji (9 species, all endemic, 2 of which remain to be described), Vanuatu (1 endemic species) and the Solomon Islands (4 species, 3 endemic, 1 still to be described), with one from the Solomons extending into the Bismarck Archipelago and New Guinea.

This subgenus corresponds to *Plerandra* sensu stricto, long recognized as a distinct genus, especially by those working in Fiji, where a majority of the 11 described species occur (see Smith, 1985). Members of this group are noteworthy for the high degree of polymery exhibited in the androecium of their flowers, which have

stamens that number in the hundreds in several taxa.

22. Plerandra bakeriana A. C. Sm., Bernice P. Bishop Museum Bulletin 141: 118. 1936. Bakeria vitiensis Seem., Journal of Botany, British and Foreign 2: 249. 1864, non Plerandra vitiensis (Seem.) Baill. (1879). Schefflera bakeriana (A. C. Sm.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 326. 2003 (publ. 2004), non Schefflera vitiensis (A. Gray) Seem. (1865). Type: Fiji. Viti Levu, Namosi Prov., probably near Namosi Village, Aug or Sep 1860, B. Seemann 209 (lectotype [designated by Smith & Stone, Journal of the Arnold Arboretum 49: 468. 1968]: K; isolectotype: GH [72123]; photographs of lectotype: BISH, US).

Distribution.-Endemic to Fiji.

**23.** Plerandra brassii Philipson, Bulletin of the British Museum (Natural History), Botany 1: 10. 1951. *Schefflera latianulata* Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 348. 2003 (publ. 2004), non *Schefflera brassii* Harms (1939). Type: Solomon Islands. San Cristobal, Star Harbour, hill rainforest, 27 Oct 1932 (fr), *L. J. Brass 3105* (holotype: A [72119]; isotype: BRI).

*Distribution.*—This species, as circumscribed here, occurs only on the island of San Cristobal in the Solomon Islands.

Populations previously assigned to *Plerandra brassii* from the islands of Malaita and Guadalcanal westwards represent a distinct, new species that will be described shortly.

24. Plerandra cabalionii (Lowry) Lowry, G. M. Plunkett & Frodin, comb. nov. Schefflera cabalionii Lowry, Bulletin du Muséum National d'Histoire Naturelle, Paris, 4<sup>e</sup> série, 11, 1989, sect. B, Adansonia 11: 125. 1989. Type: Vanuatu. Santo, crête direction Voutmélé, 1200 m, (fr), J.-M. Veillon 4031 "A", (holotype: P [P01817025]; isotype: NOU [mounted on 2 sheets: NOU078726, NOU078727, plus an unmounted infructescence branch]). *Distribution.*—Endemic to the island of Santo in Vanuatu.

This species was known only from the type collection and three other incomplete specimens until ample material in flower and fruit was gathered in 2006.

**25. Plerandra grandiflora** A. C. Sm., Bernice P. Bishop Museum Bulletin 141: 117. 1936. *Schefflera grandiflora* (A. C. Sm.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 341. 2003 (publ. 2004). Type: Fiji. Vanua Levu, Thakaundrove Prov., Mt. Kasi, Yanawai River region, 300–430 m, 10–11 May 1934 (buds, immat fr), *A. C. Smith* 1777 (holotype: BISH; isotypes: A [72124], BO, GH, K, NY, UC, US [no. 1676374]).

Distribution.—Endemic to Fiji.

26. Plerandra grayi Seem., Journal of Botany, British and Foreign 2: 242. 1864. Schefflera grayi (Seem.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 341. 2003 (publ. 2004). Type: Fiji. Viti Levu, probably Serua Prov., Jul 1860, B. Seemann 208 (holotype: K; isotypes: BM, GH [27125; erroneously labeled as Seemann 209]; photographs of holotype: BISH, US).

Distribution.-Endemic to Fiji.

Although Seemann provided no detailed locality data in the protologue of *Plerandra grayi*, the holotype bears the date "July 1860." According to Smith and Stone (1968: 473), in the early part of that month Seemann was in southern Viti Levu between the Navua River and the present town of Ngaola (*Viti*, pp. 95–117, 1862); during the rest of July he seems to have been in Ovalau, Mbau, and Tailevu, not primarily engaged in botanical work. On the basis of this information, Smith and Stone (1968) suggested that *Seemann 208* was likely collecting along the Serua coast.

 27. Plerandra insolita A. C. Sm., Journal of the Arnold Arboretum 33: 103. 1952. *Schefflera insolita* (A. C. Sm.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 346. 2003 (publ. 2004). Type: Fiji. Viti Levu, Mba Prov., southern slopes of Mt. Ndelainathovu, on the escarpment W of Nandarivatu, dense forest, 870–970 m, 26 Jun 1947 (buds, immat fr), *A. C. Smith 4922* (holotype: A [72126]; isotypes: A [72127], BISH, K, US [00126667, 00126668]).

Distribution.-Endemic to Fiji.

28. Plerandra pickeringii A. Gray, United States Exploring Expedition, Phanerogamia 1: 729. 1854. *Schefflera pickeringii* (A. Gray) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 365. 2003 (publ. 2004). Type: Fiji. Ovalau, without date, *U.S. Exploring Expedition s.n.* (holotype: US [00126669]; isotype: GH [72128, fragm.]).

Distribution.-Endemic to Fiji.

**29.** Plerandra solomonensis Philipson, Bulletin of the British Museum (Natural History), Botany 1: 10. 1951. *Schefflera solomonensis* (Philipson) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 376. 2003 (publ. 2004). Type: Solomon Islands. Bougainville, Kupei Gold Field, 950 m, rainforest, 8 Apr 1930, *S. F. Kajewski 1653* (holotype: A [72121]; isotypes: A [72122], BISH, BM, BO, BRI, P, SING).

Distribution.—Endemic to the Solomon Islands.

30. Plerandra stahliana Warb., Botanische Jahrbucher fur Systematik, Pflanzengeschichte und Pflanzengeographie 18: 203. 1894. Schefflera stahliana (Warb.) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 376. 2003 (publ. 2004). Type: New Guinea. Finschhafen [Huon Peninsula, E of Lae], im Uferwalde des zweiten Hafens, 8–10 m hoher Baum, 8 Jan 1888, F. C. Hellwig 220 (holotype: B, presumably destroyed; lectotype, here designated: K).

Plerandra hogkugu Harms, Notizblatt des Botanischen Gartens und Museums zu Berlin-Dahlem 15: 678. 1942.
 Type: New Guinea. Bougainville, Siwai, 15 Jan 1932, J.
 H. L. Waterhouse B 669 [= 001-Y] (holotype: B,

presumably destroyed; lectotype, **here designated**: WIS [labeled as *Waterhouse 001-Y*]). The holotype and other Waterhouse collections were on loan from Kew to Berlin when they were destroyed during World War II.

*Distribution.*—Solomon Islands, Bismarck Archipelago and New Guinea.

**31. Plerandra victoriae** Gibbs, Journal of the Linnaean Society, Botany 39: 150. 1909. *Schefflera victoriae* (Gibbs) Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 383. 2003 (publ. 2004). Type: Fiji. Viti Levu, Mba Prov., summit ridge of Mt. Victoria (= Mt. Tomanivi), 4000 ft (= 1220 m), Oct [cited as Sep in the protologue] 1907 (fl, immat fr), *L. S. Gibbs 784* (holotype: BM; photograph of holotype: US; isotype: K).

Distribution.-Endemic to Fiji.

32. Plerandra vitiensis (Seem.) Baill., Histoire de Plantes 7: 169. 1879. Nesopanax vitiensis Seem., Journal of Botany, British and Foreign 2: 249. 1864. Plerandra seemannii Benth. & Hook. f. ex Drake, Illustrationes Florae Insulae Maris Pacifici: 183. 1890, nom. illeg. Plerandra nesopanax Harms in H. G. A. Engler & K. A. E. Prantl. Die Natürlichen Pflanzenfamilien 3 (8): 29. 1894, nom. illeg. Schefflera nesopanax Frodin, in D. Frodin & R. Govaerts, World Checklist and Bibliography of Araliaceae: 360. 2003 (publ. 2004), non Schefflera vitiensis (A. Gray) Seem. (1865). Type: Fiji. Southern Ovalau, 1860 (buds, fr), B. Seemann 207 (lectotype [designated by Smith & Stone, Journal of the Arnold Arboretum 49: 472. 1968]: K [2 sheets]; isolectotypes: BM, GH; photographs of holotype: BISH, BM, GH [71285], US).

Distribution.-Endemic to Fiji.

According to Smith and Stone (1968: 472), the locality where the type material was gathered was originally cited as "Port Kinnaird," a name used at the time of Seemann's 1860 visit for the waters between Ovalau and Moturiki sheltered by the Yanutha Islands.

# VI. Plerandra A. Gray subg. Veilloniorum Lowry, G. M. Plunkett & Frodin, subg.

**nov.** Type : *Plerandra veilloniorum* Lowry, G. M. Plunkett & Frodin.

Hoc subgenus quoad folia ad basim stipula ligulata brevi persistente praedita, venas secundarias dissitas, inflorescentiam simpliciter compositeve umbellatam, stamina 5, antheras simplices thecis 2 etiam ovarium 2ad 5-carpellatum *Plerandrae* subg. *Canacoschefflerae* Frodin et al. simillimum, sed ab eo folioli mediani longitudinis cum latitudine proportione ut minimum (3.8–)4.2 atque stylis ominino connatis in fructu rostrum longum formantibus distinguitur.

Leaves subcoriaceous, the base of the petiole clasping with a short ligulate stipule; secondary veins of leaflets widely spaced, fewer than 3 per cm in median portion of central leaflet. Inflorescences compound-umbellate. Stamens 5, anthers with 2 thecae. Carpels (2 or)3, styles untied for their entire length, forming a beak in fruit.

*Diversity and distribution.—Plerandra* subg. *Veilloniorum* includes a single species endemic to New Caledonia.

Plerandra veilloniorum, the sole member of this subgenus, shares morphological characters with members of both subg. Canacoschefflera and Gabriellarum, and molecular studies reflect this ambiguity. Data based on nuclear rDNA spacers (ITS and ETS) leave P. *veilloniorum* unresolved in a large polytomy that includes representatives from the four remaining subgenera (Plunkett & Lowry, 2012). In an unpublished study (Plunkett et al. unpublished), plastid data place this species in a polytomy that includes only subgenera Canacoschefflera and Gabriella*rum*. In the same study, two copies of *rpb2*, a low-copy number nuclear gene, place P. veilloniorum either as sister to subg. Gabriellarum (copy A) or in a polytomy that includes both subgenera Canacoschefflera and. Gabriellarum (copy B). While these results may reflect a hybrid origin of P. veilloniorum (future studies are required to test this hypothesis), the results are compatible with recognizing this species as a distinct subgenus within *Plerandra*, an approach that also best reflects the available morphological evidence.

**33. Plerandra veilloniorum** Bernardi ex Lowry, G. M. Plunkett & Frodin, **sp. nov**. Type: New Caledonia. Ignambi, SW of



FIG. 1. *Plerandra veilloniorum*. A. Flowering branch with leaves. B. Secondary axis of infructescence. C. Flower at anthesis. D. Mature fruit, side view. E. Mature fruit, top view. (Drawn from *Lowry 3917*, MO.)

Tchambouenne, along trail just below summit on SW slope, dense humid forest, 20°27'34"S, 164°35'57"E, 1220 m, 3 May 2005 (fr), *P. P. Lowry II et al.* 5756 (holotype: P [P00649558]; isotypes: A, BISH, BR, BRI, G, K, MO [mounted on 2 sheets: MO5682090, MO5682089], NTBG, NOU [NOU019395], NY, US, Z) (Fig. 1)

Arbor andromonoica 4–18 m alta. Folia palmatim composita; foliola plerumque sessilia (3 ad 5 ad) 6 ad 9, subcoriacea, oblanceolata usque anguste elliptica, venatione vix manifesta, apice acuminato (acutove), margine integro minute revoluto, basi anguste cuneata. Inflorescentia ex umbella terminali composita constans, quoque axe secundario flores hermaphroditos atque axes tertiarios floribus staminatis praeditos gerente. Flos: calyx oram perhumilem dentibus apiculatis 5 ornatam formans; petala 5 anguste triangularia; stamina 5; ovarium (2- vel) 3-carpellatum, stylis (2 vel) 3 omnino connatis 0.5–0.8 mm longis. Fructus anguste ellipsoideus usque subovoideus,  $5-8 \times 4-4.5$  mm, in sicco costatus.

Andromonoecious trees 4-18 m tall, branched. Leaves palmately compound, 15-35 cm long (incl. petiole); leaflets (3 to 5 or)6 to 9, subcoriaceous, oblanceolate to narrowly elliptic,  $3-14.5 \times 0.4-2.8$  cm, glabrous, smooth, upper surface shiny (to dull), lower surface sometimes glaucous, the primary vein prominent, often raised on both surfaces, the secondary and tertiary veins obscure, the apex acuminate (to acute, sometimes broadly so), the margin entire, minutely revolute, the base

narrowly cuneate; petiolules sometimes to 0.8 cm long, usually leaflets sessile; petiole (5.5-)7-21 cm long, 1.5-3.5 mm diam., the base clasping, neither inflated nor lenticellate. Inflorescence a terminal, compound umbel of 4 orders, glabrous, obpyramidal with a rounded top, primary axis 1-3 cm long, the secondary axes 5 to 12, occasionally 1 borne below the others, 6.5-11.5 cm long, each terminating in 0 to 6 (to 8) hermaphroditic flowers and 8 to 12 tertiary axes bearing (4 to) 6 to 8 staminate and/or hermaphroditic flowers, inflorescence bracts persistent, broadly triangular, 1–1.5 mm long, pedicels of hermaphroditic flowers 3-5 mm long, 0.8-1 mm diam., subtended by persistent, broadly triangular bracts ca. 0.5 mm long. Calyx forming a very shallow rim or ridge, 0.2-0.5 mm tall, 2-3 mm wide, the rim with 5 apiculate teeth. Corolla conical with a rounded apex in bud, the petals 5, narrow triangular,  $2 \times 1$  mm in bud. Stamens 5, filament in bud 0.2 mm long, anther 1.2 mm long. Ovary (2- or)3-carpellate, narrowly obconic in flower, 3.5-5 mm long, disc elevated above calyx rim, low conical, 2-2.5 mm diam., styles (2 or)3, united for their entire length, 0.5-0.8 mm long. Fruit terete (triangular to rarely somewhat laterally compressed when dry), narrowly ellipsoid to slightly ovoid, 5-8 mm long, 4-4.5 mm diam., base rounded, occasionally broadly cuneate, ribbed when dry.

Distribution.-Endemic to New Caledonia.

*Conservation status.*—While *Plerandra veilloniorum* has an Area of Occupancy (AOO) of ca. 70 km<sup>2</sup> and an Extent of Occurrence (EOO) of about 525 km<sup>2</sup>, one of the 6 known subpopulations occurs within a protected area (Mt. Panié) and none of them appear to be under threat, leading us to assign this species a provisional threat status of Least Concern (LC) based on application of the IUCN Red List criteria (IUCN 2001).

*Etymology.*—The species name, originally noted by Luciano Bernardi on a sterile collection at the herbarium in Nouméa (NOU), honors Jean-Marie Veillon and his wife, Ghislaine. Jean-Marie, who worked for the *Institut de Recherche pour le Développement* (IRD, formerly IFO and then ORS-TOM) almost continuously from 1964 until his retirement in 1999, devoted his entire professional career to the study of New Caledonia's flora. Through his rich personal experience acquired during extensive time spent in the field, the many collections he made throughout the territory, and his unwavering willingness to share his rich knowledge, Jean-Marie has made a unique and lasting contribution to our understanding and appreciation of New Caledonia's native plants.

Additional specimens examined [geo-coordinates in square brackets calculated post facto]. NEW CALE-DONIA. Province Nord: Mont Colnett, sat frequens in nemore montana, [20°30'S, 164°43"E], 800-950 m, 19 Apr 1968 (fr), Bernardi 12813 (G, K, MO, NOU, NSW, NY, P, US); Mont Colnett, [20°30'S, 164°43"E], 900-950 m, 19 Apr 1968 (fr), Bernardi 12813 bis (G, P, MO); Mt. Panié, along trail, low forest, 1150 m, 28 Nov 1983 (ster), Lowry 3316 (MO, NOU, P); Roches d'Ouaïème, above village of Ouenguip, NW of Hienghène, along trail from village, along summit ridge line over the Rivière Ouaïème, dense forest, 750 m, 7 Dec 1985 (bud, fl, fr), Lowry 3917 (A, BISH, BRI, CANB, G, K, MO [4 sheets], NOU, NY, P [2 sheets], US, Z); Roche de Ouaïème (Massif de Ton-Non), dense forest on ridge along trail to E summit from village of Ouenguip, 20° 38'40"S, 164°51'42"E, 955 m, 15 Dec 1996 (b), Lowry et al. 4774 (MO, P): Roches de Ouaïème (Massif de Ton-Non), dense forest on ridge along trail to E summit from Village of Ouenguip, 20°38'29"S, 164°52'15", 650 m, 15 Dec 1996 (b), Lowry et al. 4784 (MO, P); Mt. Panié massif, La Guen, above Ouaïème River, E of village of Haut Coulna, NW and above Refuge Blaffart, forest on slope, non-ultramafic substrate, 20°37'03"S, 164° 46'40"E, 845 m, 22 Nov 2010 (b), Lowry et al. 7267 (MO, NOU, P); Mt. Panié massif, La Guen, above Ouaïème River, E of village of Haut Coulna, above Refuge Blaffart, along trail toward summit or Mt. Panié, low forest along ridge, non-ultramafic substrate, 20° 36'48"S, 164°46'34"E, 950 m, 24 Nov 2010 (ster), Lowry et al. 7270 (MO, P); Roche Ouaïème (Massif de Ton-Non), maquis dense humide sur schistes, [20° 38'35"S, 164°51'36"E], 800-900 m, 18 Apr 1968 (immat fr, fr), MacKee 18682 (MO, P [2 sheets]); Mt. Panié, above Haut Coulna, on SW forested slopes, 20° 36'49"S, 164°44'24"E, 970-1060 m, 29 Oct 1999 (bud), McPherson & van der Werff 17801 (MO, NOU, P); Mt. Colnett, forested E slopes, 20°30'00"S, 164°42'52"E, 1000 m, 29 Oct 2003 (b), McPherson et al. 19029 (MO, P); Ignambi, flanc N, forêt altimontaine, [20°28'S, 164° 36'E], 1000-1100 m, 30 Nov 1969 (ster), Schmid 2472 (NOU); Inédète, forêt basse subsommitale, [20°50'S, 165°11'E], ca. 650 m, 24 Jun 1969 (ster), Schmid 2851 (NOU, P); Tipindjé, Mt. Cantaloupaï, face S, [20°50'S, 165°00'E], 900-1000 m, 16 Sep 1983 (ster), Suprin 2273 (NOU, P); Roches d'Ouaïème, sentier dans la forêt ouverte de crête, 20°38'19"S, 164°52'03"E, 681 m, 10 Jan 2003 (ster), Tronchet 717 (MO, P); Houaïlou, partie sommitale du Sphynx, maquis paraforestier d'altitude, roches ultramafiques, [21° 15'S, 165°25'E], ca. 850 m, 22 Oct 1998 (juv fol), Veillon 8154 (leg. Suprin) (P).

Plerandra veilloniorum, collected for the first time in 1968, is restricted to northeastern Grande Terre (New Caledonia's main island), where it occurs in humid forest, sometimes on ridges, ranging from Inédète in the south to Ignambi in the north, at elevations between 650 and 1220 m. Its affinities were initially thought to be with the New Caledonian members of Plerandra subg. Gabriellarum, primarily because of the presence of fully united styles, but its overall morphology does not closely correspond to any of the other taxa in the territory, an observation that is consistent with its relatively isolated phylogenetic position as indicated by molecular data (Plunkett & Lowry, 2012).

## Incompletely known taxon

Aralia kerchoveiana Veitch ex W. Richards, Gardeners' Chronicle, n.s., 9: 430. 1878.
Dizygotheca kerchoveiana [as kerchoviana] (Vietch ex W. Richards) N. Taylor, in L. H. Bailey, Standard Cyclopedia of Horticulture., ed. 2, 2: 1062. 1914. Schefflera kerchoveiana (Veitch ex W. Richards) Frodin & Lowry, in Lowry, Miller & Frodin, Baileya 23: 9 (1989). This name almost certainly refers to a taxon from Vanuatu (Lowry et al. 1989), but no type is cited, no original material has been located, and the protologue is inadequate to determine its identity.

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LA, MEL, MO, NOU, NSW, NY, P, PVNH, S, SING, SUVA, UC, US, W, WIS, Z (acronyms as given by Thiers 2010). Financial support was provided by the U.S. National Science Foundation (DEB 9981641, 0613728, 0614152 and 0743355), the National Geographic Society (5793–96), the John D. and Catherine T. MacArthur Foundation, and the Andrew W. Mellon Foundation.

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