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# New Combinations and Names in *Peponidium* and *Pyrostria* (Rubiaceae, Vanguerieae)

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**ABSTRACT.** The newly circumscribed dioecious group (sensu Razafimandimbison et al.) of tribe Vanguerieae in the subfamily Ixoroideae (Rubiaceae) comprises over 200 species classified in four morphologically distinct genera: *Cyclophyllum* Hooker f., *Peponidium* (Baillon) Arènes, *Pyrostria* Commerson ex Jussieu, and one new genus affined to species of *Canthium* subg. *Bullockia* Bridson. Here, we present a total of 37 new combinations, 20 of which are in *Peponidium*: *P. alleizettei* (Dubard & Dop) Razafimandimbison, Lantz & B. Bremer, *P. andringitrense* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. ankaranense* (Arènes ex Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. anoveanum* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. arenesianum* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. blepharodon* (Arènes ex Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. boinense* (Arènes ex Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. bosseri* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. buxifolium* (Baker) Razafimandimbison, Lantz & B. Bremer (lectotypified here), *P. cystiporon* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. decaryi* (Homolle ex Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. humbertianum* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. latiflorum* (Homolle ex Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. mandarense* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. marojejense* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. sahafaryense* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. subevenium* (K. Schumann) Razafimandimbison, Lantz & B. Bremer, *P. tamatavense* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. venulosum* (Boivin ex Baillon) Razafimandimbison, Lantz & B. Bremer, and *P. viguieri* (Homolle ex Cavaco) Razafimandimbison, Lantz & B. Bremer.

The other 17 new combinations are in *Pyrostria*: *P. ambongensis* (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, *P. ampioroensis* (Arènes) Razafimandimbison, Lantz & B. Bremer, *P. ankaranensis* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. antsalovensis* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. asosa* (Arènes) Razafimandimbison, Lantz & B. Bremer, *P. capuronii* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. ixorifolia* (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, *P. longiflora* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. neriifolia* (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, *P. oleifolia* (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, *P. perrieri* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. revoluta* (Balfour f.) Razafimandimbison, Lantz & B. Bremer, *P. richardiae* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. sambarensis* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. suarezensis* (Cavaco) Razafimandimbison, Lantz & B. Bremer, *P. tulearensis* (Cavaco) Razafimandimbison, Lantz & B. Bremer, and *P. verdcourtii* (Cavaco) Razafimandimbison, Lantz & B. Bremer. Finally, three new names, *Peponidium sakalarensis* Razafimandimbison, Lantz & B. Bremer, *Pyrostria antsirananaensis* Razafimandimbison, Lantz & B. Bremer, and *Pyrostria lourelii* Razafimandimbison, Lantz & B. Bremer, are published here.

**Key words:** *Peponidium*, *Pyrostria*, Rubiaceae, Vanguerieae.

Recent molecular phylogenetic studies have been conducted by Razafimandimbison et al. (in press) based on sequence data from the nuclear external and internal transcribed spacer regions and the chloroplast *trnT-F* region. This work supports the establishment of largely new generic circumscriptions for the mostly dioecious group of the Paleotropical tribe Vanguerieae in the subfamily Ixoroideae s.l. (Rubiaceae). The dioecious group sensu Razafimandimbison et al. (in press) presently contains over 200 species classified in four morphologically distinct genera: an Afro-Malagasy new genus affined to the species of *Canthium* subg. *Bullockia* Bridson (Bridson, 1987), the Pacific and Australian *Cyclophyllum* Hooker f., the Malagasy-Comorian *Peponidium* (Baillon) Arènes (including all Comorian and Indian Ocean *Canthium* Lamarck species), and the Paleotropical *Pyrostria* Commerson ex Jussieu, including *Dinocanthium* Bremekamp (1933), *Leroya* Cavaco (1970), *Neoleroya* Cavaco (Cavaco, 1971), *Pseudopeponidium* Homolle ex Arènes (Arènes, 1960), and *Scyphochlamys* Balfour f. (Balfour, 1877). Here, we present 37 new combinations, of which 20 are in *Peponidium* and the other 17 in *Pyrostria*.

#### NEW COMBINATIONS AND NAME IN *PEPONIDIUM*

*Peponidium* comprises 47 species, all of which (except the Comorian *P. comorense* Arènes and *P. venulosum* (Boivin ex Baillon) Razafimandimbison, Lantz & B. Bremer) are endemic to Madagascar. The genus is diagnosed by its deciduous, small cupular bracts, which are located at the base of the peduncles and never enclose the young inflorescences. Twenty new combinations are presented below. The replacement *sakalavense* is necessary for *Canthium tsaratananense* Homolle ex Cavaco, as the name already exists as *Peponidium tsaratananense* Arènes (Arènes, 1960) for another species.

1. ***Peponidium alleizettei*** (Dubard & Dop) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pyrostria alleizettei* Dubard & Dop, as "P. Alleizetti," J. Bot., Sér. 2, 3: 24. 1925. *Canthium alleizettei* (Dubard & Dop) Cavaco, Adansonia, Sér. 2, 7: 358. 1967. TYPE: Madagascar. "Forêt de la Mandraka," C. Alleizette 3–12 (holotype, P 00093493; isotypes, P not seen, photos, P 00093494, P 00093495).
2. ***Peponidium andringitrense*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium andringitrense* Cavaco, Portugaliae Acta Biol., Sér. B, Sist. 11: 239. 1970–1971 [1972]. TYPE: Madagascar. "Massif de l'Andringitra (Iratsy), Vallées de la Riambava et de l'Antsifotra," H. Humbert 3764 (holotype, P

not seen, photo P 00093499; isotype, P 00093500).

3. ***Peponidium ankaranense*** (Arènes ex Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium ankaranense* Arènes ex Cavaco, Bull. Mus. Hist. Nat. (Paris), Sér. 2, 39: 1018. 1967 [1968]. TYPE: Madagascar. "Collines et plateaux de l'Ankarana (Province de Diégo-Suarez), forêt tropophile à l'Ouest d'Ambondrofe," 300 m, H. Humbert 18958 (holotype, P not seen, photo P 00093502; isotype, P 00093503).
4. ***Peponidium anoveanum*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium anoveanum* Cavaco, Portugaliae Acta Biol., Sér. B, Sist. 11: 220. 1970–1971 [1972]. TYPE: Madagascar. "Rocailles, torrents, bords de la Rivière Anove," 200 m, H. Perrier de la Bâthie 3972 (holotype, P not seen, photo P 00093505; isotype, P 00093506).
5. ***Peponidium arenesianum*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium arenesianum* Cavaco, Bull. Mus. Hist. Nat. (Paris), Sér. 2, 39: 1015. 1967 [1968]. TYPE: Madagascar. "Silve à lichens, Mt. Tsaratanana," 2200 m, H. Perrier de la Bâthie 16147 (holotype, P not seen, photo P 00093508; isotype, P 00093509).
6. ***Peponidium blepharodon*** (Arènes ex Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium blepharodon* Arènes ex Cavaco, Adansonia, Sér. 2, 7: 358. 1967. TYPE: Madagascar. "Massif du Manongarivo," H. Perrier de la Bâthie 3855 (holotype, P 00518172; isotype, P 00518171).
7. ***Peponidium boinense*** (Arènes ex Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium boinense* Arènes ex Cavaco, Bull. Mus. Hist. Nat. (Paris), Sér. 2, 39: 1019. 1967 [1968]. TYPE: Madagascar. s. loc., H. Perrier de la Bâthie 3697 (holotype, P 00518188).
8. ***Peponidium bosseri*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium bosseri* Cavaco, Portugaliae Acta Biol., Sér. B, Sist. 11: 224. 1970–1971 [1972]. TYPE: Madagascar. "Androranga, versant NE," H. Perrier de la Bâthie 3664 (holotype, P not seen, photo P 00518165; isotype, P 00518166).
9. ***Peponidium buxifolium*** (Baker) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Plectronia buxifolia* Baker, J. Linn. Soc., Bot. 21: 411. 1885. *Pyrostria buxifolia* (Baker) Hochreutiner, Annuaire Conserv. Jard. Bot. Genève 11: 99. 1908. *Canthium buxifolium* (Baker) Cavaco,

nom. illeg., *Adansonia*, Sér. 2, 7: 358. 1967. TYPE: Madagascar. s. loc., *R. Baron* 3137 (lectotype, designated here, P 00518164; isotype, K not seen).

While describing *Plectronia buxifolia*, Baker (1886: 411) cited six syntypes (*Baron* 274, K not seen; *Baron* 969, K not seen; *Baron* 1019, K not seen; *Baron* 2177, K not seen; *Baron* 2213, K not seen; and *Baron* 3137, K not seen) without designating the type specimen of his new species.

- 10. *Peponidium cystiporon*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium cystiporon* Bynum ex Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 229. 1970–1971 [1972]. TYPE: Madagascar. Nossi-bé, “Forêt de Loucoubé,” *L. H. Boivin* 2051/4 (holotype, P 00518159; isotype, P 00518160).
- 11. *Peponidium decaryi*** (Homolle ex Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium decaryi* Homolle ex Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 221. 1970–1971 [1972]. TYPE: Madagascar. “Vallée de l’Ikopa, au nord-ouest d’Ankazobe,” *R. Decary* 7562 (holotype, P 00518155).
- 12. *Peponidium humbertianum*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium humbertianum* Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 222. 1970–1971 [1972]. TYPE: Madagascar. “Massif du Kalambanitra (centre-sud): Mt. Beanavidy,” *H. Humbert* 12047 (holotype, P 00518153; isotypes, P not seen, photos, P 00518151, P 00518152).
- 13. *Peponidium latiflorum*** (Homolle ex Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium latiflorum* Homolle ex Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 221. 1970–1971 [1972]. TYPE: Madagascar. “Analama Mazaotra,” *H. Perrier de la Bâthie* 4001 (holotype, P not seen, photo P 00518147; isotype, P 00518148).

- 14. *Peponidium mandrarensense*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium mandrarensense* Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 238. 1970–1971 [1972]. TYPE: Madagascar. “Bassin de réception de la Mananara, affluent du Mandrare, pentes occidentales des montagnes entre l’Andohahela et l’Elakelaka, au Vatazo (S. d’Imonty),” 900–950 m, *H. Humbert* 14062 (holotype, P not seen, photo P 00518140; isotype, P 00518141).
- 15. *Peponidium marojejyense*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov.

Basionym: *Canthium marojejyense* Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 227. 1970–1971 [1972]. TYPE: Madagascar. “Pentes occidentales du Massif de Marojejy (nord-Est), bassin de la Lokoho, à l’Est d’Ambalamanaasy II, District d’Andapa, forêt ombrophile sur latérite de gneiss,” 450–800 m, *H. Humbert* 22140 (holotype, P not seen, photo P 00518142; isotype, P 00518143).

- 16. *Peponidium sakalavense*** Razafimandimbison, Lantz & B. Bremer, nom. nov. Replaced name: *Canthium tsaratananense* Homolle ex Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 230. 1970–1971 [1972], non *Peponidium tsaratananense* Arènes, *Not. Syst. (Paris)* 16: 38. 1960. TYPE: Madagascar. “Forêt à sous-bois herbacé, Massif de Tsaratanana,” 1200 m, *H. Perrier de la Bâthie* 15379 (holotype, P 00518030; isotypes, P not seen, photos, P 00518028, P 00518029).

The specific epithet “*tsaratananense*” cannot be used in combination with *Peponidium*, as it would be a later homonym of *Peponidium tsaratananense* Arènes (Arènes, 1960). The replacement *sakalavense* refers to the name of the native tribe Sakalava, which occupies most of the Sambirano region (including Tsaratanana Mountain).

- 17. *Peponidium sahafaryense*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium sahafaryense* Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 225. 1970–1971 [1972]. TYPE: Madagascar. “Forêt Analafondro, au pied Sud-Est du Plateau de Sahafary (bassin inférieur du Rodo),” *Service Forestier* 24513 (holotype, P not seen, photo P 00518036; isotype, P 00518037).
- 18. *Peponidium subevenium*** (K. Schumann) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Plectronia subevenia* K. Schumann, *Bot. Jahrb. Syst.* 28: 78. 1899. *Pyrostria subevenia* (K. Schumann) Hochreutiner, *Annaire Conserv. Jard. Bot. Genève* 11–12: 99. 1908. TYPE: Madagascar. s. loc., *J. Hildebrandt* 3917 (holotype, P 00518110).

- 19. *Peponidium tamatavense*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium tamatavense* Cavaco, *Portugaliae Acta Biol.*, Sér. B, Sist. 11: 225. 1970–1971 [1972]. TYPE: Madagascar. Tamatave, “Vohimarangitra,” *Réserves Naturelles (Rakotonanaina)* 2438 (holotype, P not seen, photo P 00518035; isotypes, P 00518033, P 00518034).
- 20. *Peponidium venulosum*** (Boivin ex Baillon) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium venulosum* Boivin ex

Baillon, Adansonia 12: 221. 1878. TYPE: Mayotte. “Bords de ruisseau de Moussa Péré, dans les bois au pied de la cascade,” *L. H. Boivin* s.n. (holotype, P not seen, photo P 00209480).

21. **Peponidium viguieri** (Homolle ex Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium viguieri* Homolle ex Cavaco, Portugaliae Acta Biol., Sér. B, Sist. 11: 227. 1970–1971 [1972]. TYPE: Madagascar. “Forêt d’Analamazaotra,” 800 m, *H. Perrier de la Bâtie* 6939 (holotype, P 00498791; isotype, P not seen, photo P 00518027).

#### NEW COMBINATIONS AND NAMES IN PYROSTRIA

*Pyrostria* comprises at least 70 species, of which 42 species plus at least 10 new undescribed species are restricted to Madagascar (Davis & Bridson, 2003; Razafimandimbison et al., in press), 14 species confined to mainland Africa (Bridson, 1987), and eight species endemic to the Mascarenes (Verdcourt, 1983). The number of species of the Southeast Asian *Pyrostria* group B sensu Bridson (1987) is currently unknown. We present 17 new combinations below; replacements are necessary for *Leroya madagascariensis* Cavaco (Cavaco, 1970) and *Pseudopeponidium analamazaotrense* Cavaco (Cavaco, 1966) because names already exist as *Pyrostria madagascariensis* Lecomte (Lecomte, 1922) and *P. analamazaotrensis* Arènes ex Cavaco (Cavaco, 1967), both of which coincidentally pertain to different Malagasy species.

1. **Pyrostria ambongensis** (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium ambongense* Homolle ex Arènes, Not. Syst. (Paris) 16: 23. 1960. TYPE: Madagascar. Sohanina, “sous-bois calcaires près de la mer,” *H. Perrier de la Bâtie* 3599 (holotype, P 00093803; isotype, P not seen, photo P 00093804).
2. **Pyrostria ampijoroensis** (Arènes) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium ampijoroense* Arènes, Not. Syst. (Paris) 16: 24. 1960. TYPE: Madagascar. [Ouest], “Jardin botanique #4, Ampijoroa-Marovoay,” *Service Forestier* 7877 (holotype, P 00093807; isotype, P not seen, photo P 00093808).
3. **Pyrostria ankaranensis** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium ankaranense* Cavaco, Adansonia, Sér. 2, 7: 361. 1967. TYPE: Madagascar. “Plateau de l’Ankarana, rochers et lapiaz calcaires dominantes la rive droite de la Rivière d’Andranonakoho (P. k. 103 de la route Diego-
- Ambilobe),” *Service Forestier* 23176 (holotype, P 00093817; isotypes, P 00093818, P 00093819).
4. **Pyrostria antsalovensis** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium antsalovense* Cavaco, Adansonia, Sér. 2, 7: 42. 1967. TYPE: Madagascar. [Ouest], “Forêt et savoka sur sables et grès de Tsimembo vers Tsaranandakana, Ankilomioky et Ambohery (Sud-ouest d’Antsalova),” *J. Léandri* 2291 (holotype, P not seen, photo P 00518075; isotypes, P 00518176, P 00518177).
5. **Pyrostria antsiranensis** Razafimandimbison, Lantz & B. Bremer, nom. nov. Replaced name: *Leroya madagascariensis* Cavaco, Adansonia, Sér. 2, 10: 337. 1970, non *Pyrostria madagascariensis* Lecomte, Bull. Mus. Hist. Nat. 28: 376. 1922. TYPE: Madagascar. [Ouest], “Secteur Nord, au P. k. 10 de la route Diégo Suarez-Orangea,” *Service Forestier* 22946 (holotype, P 00259370).
- The Malagasy genus *Leroya* was originally spelled as “*Leroyia*” by Cavaco (1970). However, the author changed the original spelling to “*Leroya*” when describing his new genus *Neoleroya* (Cavaco, 1971). The replacement *antsiranensis* is based on the name of the northern province of Madagascar, to which the species is restricted.
6. **Pyrostria asosa** (Arènes) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium asosa* Arènes, Not. Syst. (Paris) 16: 22. 1960. TYPE: Madagascar. [Sud-Est], “Haniliha-Fort-Dauphin,” *Réserves Naturelles* 6741 (holotype, P 00259381).
7. **Pyrostria capuronii** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium capuronii* Cavaco, Adansonia, Sér. 2, 7: 359. 1967. TYPE: Madagascar. [Extrême limite orientale], “Pentes moyennes et supérieures (entre 300 et 500 m) du Massif du Vohitsiandriana (au sud-ouest de Fort-Dauphin),” *Service Forestier* 22390 (holotype, P not seen, photo P 00518071; isotype, P 00518072).
8. **Pyrostria ixorifolia** (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium ixorifolium* Homolle ex Arènes, Not. Syst. (Paris) 16: 22. 1960. TYPE: Madagascar. s. loc., *R. Baron* 6619 (holotype, P 00518182).
9. **Pyrostria longiflora** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium longiflorum* Cavaco, Bull. Mus. Hist. Nat., Sér. 2, 38: 701. 1966. TYPE: Madagascar. “Fort-Dauphin, Réserves Naturelles,” *Réserves Naturelles* 7480 (holotype, P 00518183; isotype, P 00518184).

- 10. *Pyrostria louvelii*** Razafimandimbison, Lantz & B. Bremer, nom. nov. Replaced name: *Pseudopeponidium analamazaotrense* Cavaco, Bull. Mus. Hist. Nat., Sér. 2, 38: 700. 1966, non *Pyrostria analamazaotrensis* Arènes ex Cavaco, Bull. Mus. His. Nat., Sér. 2, 39: 1018. 1967 [1968]. TYPE: Madagascar. "Forêt d'Analamazaotra," *M. Louvel* 133 (holotype, P 00518181).
- The new epithet *louvelii* honors Modeste Louvel, a French forester based in Madagascar for nearly 40 years (1901–1939) (Dorr, 1997) who collected the type specimen.
- 11. *Pyrostria nerifolia*** (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium nerifolium* Homolle ex Arènes, Not. Syst. (Paris) 16: 23. 1960. TYPE: Madagascar. [Ouest], "Environs de Majunga," *H. Perrier de la Bâthie* 1661 (holotype, P 00518218; isotype, P 00518219).
- 12. *Pyrostria oleifolia*** (Homolle ex Arènes) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium oleifolium* Homolle ex Arènes, Not. Syst. (Paris) 16: 24. 1960. TYPE: Madagascar. Prov. Diégo-Suarez, "Analamerana," 50–400 m, *H. Humbert* 19146 (holotype, P 00518086).
- 13. *Pyrostria perrieri*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Canthium perrieri* Cavaco, Portugaliae Acta Biol., Sér. B, Sist. 11: 240. 1970–1971 [1972]. TYPE: Madagascar. "Forêt d'Analamazaotra," 800 m, *H. Perrier de la Bâthie* 6890 (holotype, P 00518131; isotypes, P not seen, photos, P 00518132, P 00518133, P 00518134).
- 14. *Pyrostria revoluta*** (Balfour f.) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Scyphochlamys revoluta* Balfour f., J. Linn. Soc., Bot. 16: 14–15. 1877. TYPE: Rodrigues. *I. Balfour* s.n. (lectotype, designated by Verdecourt, 1983: 567, K; isotype, S).
- The inclusion of *Scyphochlamys revoluta* in *Pyrostria* is based on its phylogenetic position within *Pyrostria* according to Razafimandimbison et al. (in press). In addition, the presence of an involucre in this species is interpreted as a further development of the persistent and basally connate, long-acuminate, paired bracts subtending the inflorescences of other *Pyrostria* species.
- 15. *Pyrostria richardiae*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Leroya richardiae* Cavaco, Kew Bull. 28: 349–350. 1973. TYPE: Madagascar. [Western region], "Ampijoroa, Ankrafantsika, Jardin botanique," *A. Richard* 800 (holotype, K).
- 16. *Pyrostria sambavensis*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium sambavense* Cavaco, Adansonia, Sér. 2, 9: 45. 1969. TYPE: Madagascar. [Nord-Est], "Forêt littorale, sur sable, au Sud de Sambava," Service Forestier 24925 (holotype, P 00518178; isotypes, P not seen, photos, P 00498793, P 00518179).
- 17. *Pyrostria suarezensis*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium suarezense* Cavaco, Adansonia, Sér. 2, 9: 45. 1969. TYPE: Madagascar. [Nord], Diégo-Suarez, s. loc., Service Forestier 6206 (holotype, P 00518180).
- 18. *Pyrostria tulearensis*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Pseudopeponidium tulearensense* Cavaco, Adansonia, Sér. 2, 9: 43. 1969. TYPE: Madagascar. "Région de Tuléar, Ankazoabo," *R. Decary* 16266 (holotype, P 00518177).
- 19. *Pyrostria verdcourtii*** (Cavaco) Razafimandimbison, Lantz & B. Bremer, comb. nov. Basionym: *Neoleroya verdcourtii* Cavaco, Adansonia, Sér. 2, 11: 122. 1971. TYPE: Madagascar. [Ouest], "Secteur Nord, entre Antsakaoabe et Anivorano-Nord (au P. k. 67 de la route de Diégo-Suarez-Ambilobe)," Service Forestier 23115 (holotype, P 00259372; isotypes, P not seen, photos, P 00518189, P 00518190).

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#### Literature Cited

- Arènes, J. 1960. A propos de quelques genres Malgaches de Rubiacées (Vanguériées et Gardeniéas). Not. Syst. 16: 6–41.
- Baker, J. G. 1886. Flora of Madagascar. J. Linn. Soc., Bot. 21: 411.
- Balfour, I. B. 1877. Phanerogamic vegetation of Rodriguez. J. Linn. Soc., Bot. 16: 14–15.
- Bremekamp, C. E. B. 1933. New or otherwise noteworthy plants from Northern Transvaal. Ann. Transvaal Mus. 15: 259.
- Bridson, D. 1987. Studies in African Rubiaceae–Vanguerieae: A new circumscription of *Pyrostria* and a new subgenus, *Canthium* subgen. *Bullockia*. Kew Bull. 42: 611–639.
- Cavaco, A. 1966. Contribution à l'étude des Vanguériées de Madagascar. Bull. Mus. Hist. Nat., Sér. 2, 38: 700–702.

- \_\_\_\_\_. 1967 [1968]. Espèces nouvelles de Rubiacées de Madagascar. Bull. Mus. Hist. Nat., Sér. 2, 39: 1015–1019.
- \_\_\_\_\_. 1970. *Leroyia*, nouveau genre de Rubiaceae. Adansonia 10: 333–337.
- \_\_\_\_\_. 1971. *Neoleroya*, nouveau genre de Rubiaceae—Vanguerieae. Adansonia 11: 119–123.
- Davis, A. & D. Bridson. 2003. Introduction in the Rubiaceae. Pp. 431–434 in S. M. Goodman & J. P. Benstaed (editors), The Natural History of Madagascar. Univ. Chicago Press, Chicago and London.
- Dorr, L. J. 1997. Plant Collectors in Madagascar and the Comoro Islands. Royal Botanic Gardens, Kew.
- Lecomte, H. 1922. Sur une Rubiacée arborescente de Madagascar. Bull. Mus. Hist. Nat., Paris 28: 376–377.
- Razafimandimbison, S. G., H. Lantz, A. Mouly & B. Bremer. Further disintegration of *Canthium* s.l., testing morphological concepts of *Pyrostria*, and a new genus *Bullockia* in Vanguerieae (Rubiaceae). Ann. Missouri Bot. Gard. (in press).
- Verdcourt, B. 1983. Notes on Mascarenes Rubiaceae. Kew Bull. 37: 567.



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