



Scientific note

Formal validation of two taxa of Neotropical Myrtaceae

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The purpose of this paper is to rectify the erroneous proposition of one new status and one new name in *Psidium* L. and *Myrceugenia* O.Berg, respectively, by following the rules and recommendations of the International Code of Nomenclature for Algae, Fungi and Plants (Shenzhen Code) (Turland et al., 2018). In our publication of *Psidium* sect. *Psidium* subsect. *Albotomentosa*, the full reference to the basionym, along with the page number, was missing, therefore making the new combination invalid according to article 41.5 of the Shenzhen Code. *Myrceugenia alpigena* var. *virgata* was not validly published because, although the publication was cited, the page number on which the taxon appeared in the original publication was not cited.

Taxonomic Treatment

1. *Psidium* L.

In 2022, three of us (A.C.T., C.E.B.P. & E.J.L.), along with several other authors (Proença et al., 2022), proposed new status for *Psidium* sect. *Albotomentosa* O.Berg (1857: 402). In our publication, the full reference to the basionym, along with the page number, was missing, therefore making the new combination invalid according to article 41.5 of the Shenzhen Code (Turland et al., 2018). The rectified new status is included below:

***Psidium* sect. *Psidium* subsect. *Albotomentosa* (O.Berg) Tuler & Proença, stat. nov.** based on *Psidium* sect. *Albotomentosa* [*Albo-tomentosa*] O.Berg in C.F. von Martius (Ed.), *Flora Brasiliensis* 14(1): 402. 1857. Type species: *P. grandifolium* Mart. ex DC.

Type: —BRAZIL. *In campis ad urbem Ypanema* in prov. S. Pauli, October 1817, Martius, s.n. (Type M! bar-

code M-0032375).

Taxonomic notes: *Psidium* sect. *Psidium* subsect. *Albotomentosa* (O.Berg) Tuler & Proença has been typified by *Psidium grandifolium* Mart. ex DC. for the following reasons: 1) It was one of the 10 original species that Berg put into this section; 2) six of the species of the section have been synonymized to *P. grandifolium* (Landrum, 2005); 3) four species that Berg put in the section are currently considered accepted; 4) *P. laruotteanum* Cambessèdes (1829) has been shown to belong to *Psidium* sect. *Apertiflora*. Thus, only three species are possible candidates for type species of the section and only the type specimen *P. grandifolium* was unequivocally seen and annotated by Berg, making it the best species to designate as type for his subsection. It is based upon single specimen, a Martius collection made 'ad Ypanema prov. S. Pauli' (currently Sorocaba, state of São Paulo, Brazil) deposited in Munich in the Staatliche Naturwissenschaftliche Sammlungen Bayerns (barcode M 0032375), making the type status of the species type unequivocal (Figure 1).

2. *Myrceugenia* O.Berg

In 2002, the first author of this paper (C. E. Proença, 2002) published the new combination *Myrceugenia alpigena* var. *virgata* (Gardner) Proença (2002: 312). The original publication was cited, but the page number on which the basionym was published was not cited (only the first and last page of the publication itself were cited), therefore making the new combination invalid according to article 41.5 of the Shenzhen Code (Turland et al., 2018). The rectified new combination is included below:

***Myrceugenia alpigena* (DC.) Landrum var. *virgata* (Gardner) Proença, nov. comb.**, based on *Eugenia virgata* Gardner, London Journal of Botany 4: 102. 1845.

Type: Brazil, Rio de Janeiro, Serra dos Orgãos, c. 3,000 ft, by the sides of streams, March 1841, *Gardner 5713* (Holotype BM 000953791!, Isotypes OXF! K! IAN, W!).

Berg (1857: 313) treated this species as *Eugenia*, and it is not treated in the monograph of *Myrceugenia* (Lan-

drum, 1981). An isotype was discovered in 2002 by the first author of this paper in the Oxford herbarium and recognized as a member of *Myrceugenia*; the holotype (Figure 2) is in the Natural History Museum London (barcode BM000953791).



Figure 1: Type of *Psidium grandifolium* O.Berg deposited in the M herbarium (copyright Staatliche Naturwissenschaftliche Sammlungen Bayerns)



Figure 2: Holotype of *Myrceugenia virgata* Gardner deposited in the BM herbarium (copyright Natural History Museum London)

References

- Berg, O. (1857). Myrtaceae. In C. F. P. von Martius (Ed.), *Flora brasiliensis* (pp. 1–656, Vol. 14, pt. 1). <https://doi.org/10.5962/bhl.title.454>
- Cambessèdes, J. (1829). *Flora brasiliae meridionalis: Myrtaceae* (Vol. 2). Parisiis, Apud A. Belin, 1825–1833. <https://doi.org/10.5962/bhl.title.45474>
- Gardner, G. (1845). Contributions towards a Flora of Brazil, being the distinctive Characters of a Century of New Species of Plants from the Organ Mountains. *London Journal of Botany*, 4, 97–136.
- Landrum, L. R. (1981). *A monograph of the genus Myrceugenia (Myrtaceae)* (Vol. 29). New York Botanical Garden Press on behalf of Organization for Flora Neotropica.
- Landrum, L. R. (2005). A revision of the *Psidium grandifolium* complex (Myrtaceae). *SIDA, Contributions to Botany*, 1335–1354.
- Proença, C. E. (2002). Types of Myrtaceae cited in Flora Brasiliensis in the Oxford Fielding Druce Herbarium. *Bradea*, 8, 311–317.
- Proença, C. E. B., Tuler, A. C., Lucas, E. J., Vasconcelos, T. N. d. C., de Faria, J. E. Q., Staggemeier, V. G., de-Carvalho, P. S., Forni-Martins, E. R., Inglis, P. W., da Mata, L. R., & da Costa, I. R. (2022). Diversity, phylogeny and evolution of the rapidly evolving genus *Psidium* L. (Myrtaceae, Myrteae). *Annals of Botany*, 129(4), 367–388. <https://doi.org/10.1093/aob/mcac005>
- Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Kusber, W. H., Li, D.-Z., Marhold, K., et al. (2018). *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Koeltz Botanical Books. <https://doi.org/10.12705/Code.2018>



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