

NOMENCLATURAL NOTES ON
AMOMYRTUS, *CAMPOMANESIA*, AND *PSIDIUM* (MYRTACEAE)

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ABSTRACT

In this paper a neotype is chosen for *Myrtus luma*, a name first proposed by J.I. Molina in 1782 and the basionym of the currently used name, *Amomyrtus luma*; the illegitimate name *Campomanesia sessiliflora* var. *lanuginosa* is formalized with a new description and type; a new variety is described, *Psidium striatulum* var. *rondoniense*; and lectotypes are chosen for *Psidium cattleyanum* var. *coriaceum* and *Psidium thea*.

KEY WORDS: *Amomyrtus luma*, Argentina, Bolivia, Brazil, *Campomanesia*, Chile, lectotype, Molina, Myrtaceae, neotype, *Psidium*, South America

RESUMEN

En este trabajo se selecciona el neotipo para *Myrtus luma*, un nombre propuesto por primera vez por J.I. Molina en 1782 y el basiónimo del nombre utilizado actualmente, *Amomyrtus luma*; el nombre ilegítimo *Campomanesia sessiliflora* var. *lanuginosa* se formaliza con una nueva descripción y nuevo tipo. Se describe una nueva variedad, *Psidium striatulum* var. *rondoniense*; y se eligen lectotipos para *Psidium cattleyanum* var. *coriaceum* y *Psidium thea*.

Over the years I have accumulated various nomenclatural tasks to be completed that can conveniently be brought together in this paper.

A Neotype for *Myrtus luma* Molina

“Luma” is a common name most frequently applied to *Amomyrtus luma* (Molina) D. Legrand & Kausel, a species endemic to the temperate forests of southwestern South America. Found mainly in Chile, it was first given a Latin binomial *Myrtus luma* by the Chilean J.I. Molina in 1782. Molina, born in 1740 and raised in Chile, became a Jesuit priest and was a keen observer of natural history. In 1767 the Jesuits were expelled from the Spanish territories when Molina was still a young man (Biblioteca Nacional de Chile 2021). In Italy he described several Chilean plant and animal species, apparently mainly from memory since no specimens have been found. Some of his names are difficult to identify with actual species, but Molina’s brief description of *Myrtus luma* indicates the common name and includes characteristics of the wood and berries and their uses that indicate he was describing the species now known as *Amomyrtus luma*. Molina’s Italian description (Molina 1782) and an approximate English translation are provided here.

Differise dal mirto ordinario per le sue foglie quasi rotonde e per la sua elevazione, che è di più di quaranta piedi. Il suo legno è il più adattato, che si conosca per la manifattura delle carrozze e perciò se ne imbarca tutti gli anni una gran quantità pel Peru. Gli Indiani fanno colle sue bacche un vino gustoso e stomacale.

It differs from ordinary myrtle by its nearly round leaves and its height, which is more than forty feet. Its wood is the most useful, known for making carriages and therefore a large quantity is shipped every year to Peru. The Indians make a wine with the berries that is tasty and good for the stomach.

In a footnote on the same page Molina provides the following short description in Latin: “*Myrtus flor solitariis, fol. suborbiculatis.*”

Legrandia concinna (R.A. Philippi) Kausel, a superficially similar species as to trunk and bark, is sometimes called “luma” (Kausel 1944) and the common name may occasionally be used for other species, but by

far the most frequent use is for *Amomyrtus luma*. And no other species of Chilean Myrtaceae is known for both its hard wood, and berries suitable for fermentation.

Taxonomic treatments of Chilean and Argentinian Myrtaceae (Barneud 1847; Reiche 1897; Kausel 1947; Landrum 1988; Rotman 2000) have all accepted *Myrtus luma* as the first name of the species now called *Amomyrtus luma*.

Asa Gray (1854) named a genus *Luma* because he thought it would be an appropriately short name for a Chilean genus. In Gray's view it included several Chilean species; these are now separated in three genera (*Myrceugenia* O. Berg, *Luma*, *Blepharocalyx* O. Berg [= *Temu* O. Berg]); but Gray's genus did not include *Amomyrtus*. This anomalous situation may cause confusion.

Names without types are subject to misinterpretation. *Amomyrtus luma* is similar to the only other species in the genus, *A. meli* (R. A. Philippi) Legrand & Kausel, and sometimes confused with it.

The two differ in characteristics of bark, twig pubescence, leaf size, seed size and color, hypanthium size and glandularity, aroma, calyx lobe shape, and habitat; they are compared in Landrum (1988) and Landrum & Salywon (2004). Perhaps the best way to distinguish them at any stage in the field or herbarium is by the calyx lobes: in *A. luma* they are linear, linear oblong, or narrowly triangular; in *A. meli* they are approximately triangular and slightly wider than long.

Amomyrtus luma is a name that is commonly used in the literature of various fields: economic botany (Muñoz et al. 1981), chemistry (Weyerstahl et al. 1992), forestry (Donoso 2015), and taxonomy (Rodríguez et al. 2018). Therefore, to minimize the chances for confusion for this scientifically and economically important name, a neotype is chosen here. No type specimen was found.

Myrtus luma Molina, *Saggio sulla storia naturale del Chili*, ed. 1. 173. 1782. (**Fig. 1**). TYPE: CHILE. Region X [Los Lagos]: Osorno, Parque Nacional Puyehue, at cabins at Aguas Calientes (ca. 40.75°S, 72.3333°W [more accurately 40.7354°S, 72.3081°W]), 9 Nov 1993, L.R. Landrum & S.S. Landrum 8060 (NEOTYPE designated here: CONC; ISONEOTYPES: ASU, MO). [Neotype collection made with a permit from Corporación Nacional Forestal, Chile].

Formalizing the name *Campomanesia sessiliflora* var. *lanuginosa*

Chodat and Hassler (1907) published numerous names of Myrtaceae, as a list with minimal, repetitive descriptions, attributing them to Barbosa Rodrigues and stating that they would be the subject of a future publication by that author. Barbosa Rodrigues died in 1909 and the names were never published with longer descriptions but have appeared in indexes such as *Index Kewensis* and some publications (e.g., Landrum 1986) with the authorship cited as Barbosa Rodrigues or Barbosa Rodrigues ex Chodat & Hassler.

In the opinion of Perret (1999) these names were never validly published and should be considered *nomina nuda*. In consultation with colleagues, I have come to accept this opinion, but in previous publications I have accepted them as valid. Although the descriptions are minimal and perhaps were never meant to be considered as true descriptions, the specimens cited with each name are in general very good and indicate clearly the identity of the entities named by Barbosa Rodrigues.

In 1984 I published a new combination, *Campomanesia sessiliflora* var. *lanuginosa* (Barbosa Rodrigues ex Chodat & Hassler) Landrum, *Brittonia* 36(3):241, using as the basionym of this taxon, *C. rugosa* var. *lanuginosa* Barbosa Rodrigues ex Chodat & Hassler. Because my new combination was based a name that was not validly published (because no true description was provided by Chodat and Hassler), and because I did not provide a Latin description (which was required in 1984), the combination has never been validly published. In order that this entity continue to have the same name, I hereby formally publish it. The original collection, Hassler 7678, is available at G only. I have chosen instead a specimen, H. S. Irwin et al. 10827, available in Brazil at UB, as the holotype. An isotype, available at NY, has been photographed and can be seen at <http://sweetgum.nybg.org/images3/2106/812/00818302.jpg>. Both specimens were annotated by me in 1983.

Campomanesia sessiliflora var. **lanuginosa** Landrum, var. nov. (**Fig. 2**). TYPE: BRAZIL. Goiás: Serra dos Pirineus, 16°S, 49°W, ca. 15 km S of Corumbá de Goiás, elev. 1000 m, H.S. Irwin, R. Souza, & R. Reis dos Santos 10827 (HOLOTYPE: UBI; ISOTYPE: NY!).



FIG. 1. Neotype of *Myrtus luma* Molina [= *Amomyrtus luma* (Molina) D. Legrand & Kausel], Landrum & Landrum 8060 at CONC. Image kindly provided by Alicia Marticorena of the La Universidad de Concepción.



FIG. 2. Isotype of *Campomanesia sessiliflora* (O. Berg) Mattos var. *lanuginosa* Landrum at NY.



FIG. 3. Isotype of *Psidium striatulum* var. *rondoniense* Landrum at NY.

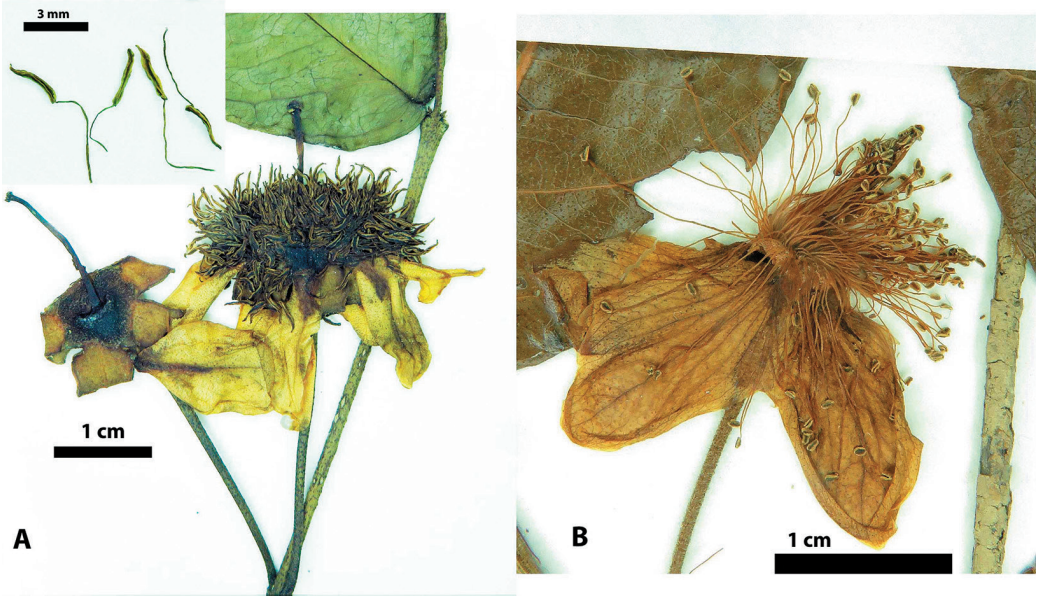


FIG. 4. Comparison of the flowers of: **A.** *Psidium striatum* var. *rondoniense*, from Rondônia, Brazil and **B.** *P. striatum* var. *striatum*, from Guyana. A from J.L. Zaruchi et al. 2722, the isotype at NY. B from A.R.A. Görts et al. 336 at ASU.

Diagnosis.—*Campomanesia sessiliflora* var. *lanuginosa* is distinguished from the other varieties of the species by having a combination of bullate leaves with the veins strongly raised beneath and the lower leaf surface covered with hairs. The lower surface of the leaves in the other two varieties (var. *sessiliflora* and var. *bullata*) are glabrous to sparsely covered with hairs and the leaves are bullate with strongly raised veins only in var. *bullata*.

I recognize *Campomanesia sessiliflora* as a species of three varieties and have previously compared them (Landrum 1986, page 61).

New variety of *Psidium striatum* DC.

Psidium striatum is a species that ranges from Venezuela and Guyana to Bahia and Mato Grosso do Sul in Brazil. Collections from Rondônia, Brazil and northeastern Santa Cruz, Bolivia, have distinctive stamens with filaments and anthers of about equal length, the anthers being up to 3 mm long, elongate and narrowly sagittate. Typical stamens of *P. striatum* have the filaments much longer than the anthers, the anthers being about 0.5 to 1 mm long and oblong to orbicular. I propose that this geographically and morphologically distinct group of Rondônia and Bolivia be recognized as a new variety.

***Psidium striatum* var. *rondoniense* Landrum, var. nov. (Figs. 3, 4A).** TYPE. BRAZIL, RONDÔNIA: Mineração Campo Novo, ca. 100 km SW of Ariquemes, forest on terra firma, 10°34'S, 63°37'W, 16 Oct 1979 (fl), J.L. Zaruchi, M.G. Viera, R.H. Petersen, C.D. Mota, & J.F. Ramos 2722 (HOLOTYPE: INPA (seen as image); ISOTYPES: MICH!, MO, NY!, RI, US!).

Diagnosis.—This variety differs from the typical variety by its stamens: the filaments are 1.5–3 times as long as the anthers (versus ca. 10 times as long); the anthers are elongate and narrowly sagittate (versus oblong), and 2–3.5 mm long (versus 1–1.5 mm long).

In Fig. 4 the two varieties are contrasted. This seems to be the only variety found in Bolivia.

Lectotypification of *Psidium cattleyanum* var. *coriaceum*

In his Enum. Myrt. bras. Kiaerskou proposed the name *Psidium cattleyanum* var. *coriaceum* (O. Berg) Kiaerskou, Enum. Myrt. bras. 28. 1893, intending it to be a new combination based on Berg's *P. coriaceum* Mart. ex O. Berg, in Martius, Fl. bras. 14(1):401. 1857.



FIG. 5. Lectotype of *Psidium cattleianum* var. *coriaceum* Kiaerskou, Glaziou 6538 at C. Image reproduced with permission of the Natural History Museum of Denmark. Image kindly provided by Olof Ryding.



FIG. 6. Upper and lower portions of lectotype of Griseb., Lorentz 377 at GOET. Images from JSTOR Global Plants, used with permission of curators of GOET herbarium.

The basionym, *Psidium coriaceum*, of this new combination was illegitimate, being superfluous, because Berg cited another older name (*Psidium humile* Vell., Fl. Flumin. 211, 1829) as a synonym. Under the International Code of Nomenclature (Turland et al. 2018) article 58.1, “If there is no obstacle under the rules, the final epithet in an illegitimate name may be re-used in a different name, at either the same or a different rank ... the resulting name is then treated either as a replacement name with the same type as the illegitimate name or as the name of a new taxon with a different type.”

In making his new combination Kiaerskou cites three collections at C, none of which were cited by Berg, that are syntypes: “Blumenau, Bugrebach, prov. S Catharina m. Octb. c. flor. 1866,” Schenck 895; “Ad São Christovão m. Aug. 1893 florentem,” Glaziou 6538; “In cacumine campiformi Serra do mar ad Santos,” Lund

s.n. Olof Ryding, Collections Manager at C, kindly found and sent images of two of these (*Glaziou 6538* and *Lund s.n.*) plus an unnumbered Raben collection that might be a duplicate of *Raben 752* cited by Berg. *Glaziou 6538* is the better of the two collections cited by Kiaerskou and is here selected as lectotype of *Psidium cattleianum* var. *coriaceum* Kiaerskou.

Psidium cattleianum* var. *coriaceum Kiaerskou, Enum. Myrt. bras. 28. 1893. (Fig. 5). TYPE. BRAZIL: “Ad São Christovão m. Aug. 1893 florentem,” *Glaziou 6538* (SYNTYPE: C [seen as image], here designated as LECTOTYPE); “Blumenau, Bugrebach, prov. S Catharina m. Octb. c. flor. 1866,” *Schenck 895* (SYNTYPE: C, not found); “In cacumine campiformi Serra do mar ad Santos,” *Lund s.n.* (SYNTYPE: C [seen as image]).

Lectotypification of *Psidium thea*

When revising the *Psidium salutare* (Kunth) O. Berg complex (Landrum 2003) I could not choose a lectotype for *P. thea* Grisebach (a synonym of *P. salutare* var. *mucronatum* [Cambess.] Landrum) because I had not seen any original specimens. Now images of two syntypes at GOET and isosyntypes at CORD are available on JSTOR Global Plants. One specimen at GOET, *Lorentz 377*, includes good locality data and drawings of the seed and embryo, descriptions of which are included in the published protologue. Thus, it is a good choice to designate as the lectotype.

Psidium thea Griseb., Pl. Lorentz. 91. 1874, and in Goett. Abh. 19:139. 1874. (Fig. 6). TYPE. ARGENTINA: “Cordoba, in monte Cerro negro pro. San Bartolo,” *Lorentz 377* [Feb 1871] (SYNTYPE: GOET-007309, here designated as LECTOTYPE; ISOLECTOTYPE: CORD-00005688) and “Tucuman, in sylvis primaevae,” *Lorentz 63* [May 1872] (SYNTYPE: GOET-007310; ISOSYNTYPE: CORD-00005687).

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