



Additional taxonomic and nomenclatural notes on New Caledonian Eugenia (Myrtaceae)

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Additional taxonomic and nomenclatural notes on New Caledonian *Eugenia* (Myrtaceae)

Neil Snow, John W. Dawson†, Jérôme Munzinger & Martin W. Callmander

Abstract

SNOW, N., J.W. DAWSON†, J. MUNZINGER & M.W. CALLMANDER (2022). Additional taxonomic and nomenclatural notes on New Caledonian *Eugenia* (Myrtaceae). *Candollea* 77: 71–79. In English, English and French abstracts. DOI: <http://dx.doi.org/10.15553/c2022v771a6>

Ongoing taxonomic studies on *Eugenia* L. (Myrtaceae) in New Caledonia revealed a number of taxonomic and nomenclatural issues in need of clarification. A new synonymy is proposed: *Schizocalyx neocaledonica* Brongn. & Gris is reduced to synonymy under *Eugenia ovigera* Brongn. & Gris. A new name *E. pubiflora* N. Snow & Callm. is proposed for the illegitimate name *E. calycorectoides* Guillaumin. Lectotypes are proposed for 15 names: *E. bullata* Pancher ex Guillaumin, *E. daenikeri* Guillaumin, *E. ericoides* Guillaumin, *E. horizontalis* Pancher ex Brongn. & Gris, *E. huerlimannii* Guillaumin, *E. kaalensis* Guillaumin, *E. littoralis* Pancher ex Brongn. & Gris, *E. littoralis* var. *deplanchei* Brongn. & Gris, *E. magnifica* Brongn. & Gris, *E. paludosa* Pancher ex Brongn. & Gris, *E. stricta* Pancher ex Brongn. & Gris, *Jambosa canalensis* Guillaumin, *Myrtus poimbailensis* Guillaumin, *Schizocalyx neocaledonica* Brongn. & Gris, and *Xanthomyrtus pergracilis* Diels. A neotype is also designated for *Eugenia gacognei* Montrouz.

Résumé

SNOW, N., J.W. DAWSON†, J. MUNZINGER & M.W. CALLMANDER (2022). Notes additionnelles sur la taxonomie et la nomenclature du genre *Eugenia* (Myrtaceae) en Nouvelle Calédonie. *Candollea* 77: 71–79. En anglais, résumés anglais et français. DOI: <http://dx.doi.org/10.15553/c2022v771a6>

Des études taxonomiques en cours sur *Eugenia* L. (Myrtaceae) en Nouvelle-Calédonie ont révélé un certain nombre de problèmes taxonomiques et nomenclaturaux nécessitant des éclaircissements. Une nouvelle synonymie est proposée: *Schizocalyx neocaledonica* Brongn. & Gris est placé en synonymie sous *Eugenia ovigera* Brongn. & Gris. Un nom nouveau *E. pubiflora* N. Snow & Callm. est proposé pour le nom illégitime *E. calycorectoides* Guillaumin. Des lectotypes sont désignés pour 15 noms: *E. bullata* Pancher ex Guillaumin, *E. daenikeri* Guillaumin, *E. ericoides* Guillaumin, *E. horizontalis* Pancher ex Brongn. & Gris, *E. huerlimannii* Guillaumin, *E. kaalensis* Guillaumin, *E. littoralis* Pancher ex Brongn. & Gris, *E. littoralis* var. *deplanchei* Brongn. & Gris, *E. magnifica* Brongn. & Gris, *E. paludosa* Pancher ex Brongn. & Gris, *E. stricta* Pancher ex Brongn. & Gris, *Jambosa canalensis* Guillaumin, *Myrtus poimbailensis* Guillaumin, *Schizocalyx neocaledonica* Brongn. & Gris et *Xanthomyrtus pergracilis* Diels. Un néotype est finalement désigné pour *Eugenia gacognei* Montrouz.

Keywords

MYRTACEAE – *Eugenia* – New Caledonia – Nomenclature – Taxonomy

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Introduction

The most recent focused research on *Eugenia* L. of New Caledonia commenced beginning about 1990 by the second author (JWD), more or less concurrent with related works in *Myrtaceae* (DAWSON, 1992, 1999). Dawson passed the revisionary work for *Eugenia* and the other baccate genera of *Myrtaceae* to the first author (NS), who with collaborators continue research on this diverse and often challenging genus (SNOW et al., 2016a, 2016b). The genus comprises at least sixty-five species in New Caledonia, including fifteen new species currently in the process of being described (Snow et al., unpubl. data). The earliest descriptions date from the 1860s (e.g. MONTROUZIER, 1860; BRONGNIART & GRIS, 1865), and the present authors have proposed several more species in recent years (SNOW et al., 2016a, 2016b; GÂTEBLÉ et al., 2018). However, members of the genus have been summarized (only in part) over one hundred years ago (GUILLAUMIN, 1916) and more recently by GUILLAUMIN (1938) in his review of baccate members of *Myrtaceae*, which focused mostly on the description of new taxa. More undescribed species of *Eugenia* beyond the fifteen in preparation are known but require additional fertile material before they can be described confidently. As a result of an ongoing taxonomic revision of *Eugenia* in New Caledonia for the *Flore de Nouvelle-Calédonie* series, we here propose several taxonomic and nomenclatural clarifications. Fifteen lectotypes and a neotype are designated, in addition to proposing a new name and a new synonymy.

Taxonomy and nomenclature

Eugenia bullata Pancher ex Guillaumin in Not. Syst. (Paris) 2: 233. 1911 (Fig. 1A, B).

Lectotypus (designated here): NEW CALEDONIA: sine loco, s.d., fl., *Lécart 160-147* (P [P05094218]!). **Syntypi**: NEW CALEDONIA: sine loco, s.d., fl., fr., *Petit 117* (P [P05094205, P05094206]!); **Prov. Sud**: bords de la Oya, 2.VIII.1881, fr., *Brousmitche 516* (P [P05094181, P05094183]!); Bourail, s.d., *Pennel 115* (P); ibid loco, *Pennel 116bis* (P); île des Pins, s.d., fr., *Pancher 35* (P [P05094209]!).

Notes. – *Eugenia bullata* Pancher ex Guillaumin was first introduced by GUILLAUMIN (1911a: 152) as a nomen nudum in synonymy of *E. magnifica* Brongn. & Gris. GUILLAUMIN (1911b: 234) later recognized that specimens cited under *E. magnifica* belonged to two different species and validated *E. bullata* based on several syntypes. *Lécart 160-147* [P05094218] is designated here as the lectotype because it is the only collection in flower among the syntypes first cited by GUILLAUMIN (1911a: 152) minus the ones excluded in GUILLAUMIN (1911b: 234).

Eugenia bullata can be recognized by its relatively large, strongly bullate leaves (Fig. 1A), and relatively large

cauliflorous flowers bearing white petals and greatly exerted stamens (Fig. 1B). As presently understood, it differs from the morphologically similar *E. grisiana* Guillaumin (see below) by its densely velutinous hypanthium (vs. glabrous to sericeous in *E. grisiana*) and longer stamens in anthesis (≥ 3 cm vs. < 3 cm).

Eugenia daenikeri Guillaumin in Bull. Soc. Bot. France, sér. 5, 85: 637. 1939 [nom. nov.] (Fig. 1C, D).

= *Eugenia quaternifolia* Guillaumin in Not. Syst. (Paris) 3: 262. 1916 [nom illeg., non Cambess. 1833].

Lectotypus (designated here): NEW CALEDONIA: **Prov. Sud**: sine loco, 1868–1870, fl., *Balansa 1513* (P [P06670073]!); isolecto-: P [P04680994, P04680995]!. **Syntypus**: “coteaux pierreux argilo-schisteux”, 1861, ster., *Pancher 28b* (P [P00696292]!).

Notes. – *Eugenia quaternifolia* Guillaumin was described based on two syntypes: *Balansa 1513* and *Pancher 28b* by GUILLAUMIN (1916: 262). We designate here as the lectotype the specimen of *Balansa 1513* with the best-preserved fertile material, since Balansa numbered his specimens in ascending order as is currently practiced widely, and unlike Pancher, who designated numbers for his species. Three Pancher collections deposited in P may represent duplicates of the original material but none are labeled with a collection number [P02428361, P00543868, P00696291].

Eugenia daenikeri Guillaumin can be distinguished from other species by its often (but not always) whorled (3–5 per node), narrowly elliptic to narrowly obovate leaves (Fig. 1C), and ramiflorous or cauliflorous, pedicellate flowers in fascicles with distinct (not-tearing) calyx lobes (Fig. 1D).

Eugenia ericoides Guillaumin in Bull. Soc. Bot. France, sér. 5, 85: 637. 1939.

Lectotypus (designated here): NEW CALEDONIA: **Prov. Nord**: montagnes de Gatope, 1861–1867, fr., *Vieillard 2607* (P [P06670044]!). **Syntypus**: **Prov. Nord**: presqu’île Poume, IV.1861, ster., *Balansa 3266* (P [P00637583, P00543895, P00543896]!).

Notes. – The designated lectotype includes fruiting material in the fragment packet, whereas the three remaining syntypes of *Balansa 3266* are sterile.

Eugenia ericoides Guillaumin can be distinguished by its linear leaves with $> 10:1$ length/width ratio and cauliflorous inflorescence.

Eugenia gacognei Montrouz. in Mém. Acad. Roy. Sci. Lyon, Sect. Sci. 10: 208. 1860 (Fig. 1E, F).

Holotypus: NEW CALEDONIA. **Prov. Nord**: île Art, 12.?, *Montrouzier 68* (LYJB†).



Fig. 1. – *Eugenia bullata* Pancher ex Guillaumin (Goro, Yaté, 30.VII.2011): A. Leaves; B. Inflorescence. *Eugenia daenikeri* Guillaumin: C. Leaves (presqu'île Porokoé, 28.I.2006); D. Flowers (presqu'île Koumourou, 13.XI.2006). *Eugenia gacognei* Montrouz. (Tontouta, 4.XI.2004); E. Leaves; F. Flowers.

[Photos: A, B: B. Henry; C, D: R. Amice; E, F: D. & I. Létocart]

Neotypus (designated here): **NEW CALEDONIA. Prov. Nord:** [île] Baaba, secteur SO (Tiomatch), 30–130 m, 6.I.1971, fr., *MacKee 23195* (P [2-part specimen: P00918813, carpo.]!); isoneo-: BISH, KSP [KSP038185]!, MO, NOU [NOU073425] image!, NSW, P [P00919166]!, TNS).

= *Eugenia littoralis* var. *deplanchei* Brongn. & Gris in Bull. Soc. Bot. France 12: 178. 1865. **Lectotypus** (designated here): **NEW CALEDONIA. Prov. Nord:** bois à Balade, 1855–1860, fl., *Vieillard 478* (P [P00637573]!); isolecto-: P [P00543892, P00543893, P00543894]!). **Syntyp:** sine loco, 1861–1863, fr., *Deplanche 529* (K [K000821566]!, P [P00543890, P00637574]!); sine loco, 1861–1863, fr., *Deplanche 529bis* (P [P00543891, P00637575]!).

Notes. – No specimen was cited in the protologue by MONTROUZIER (1860: 208). GUILLAUMIN & BEAUVISAGE (1914: 92) found a single specimen in LYJB (*Montrouzier 68* from île Art, no longer extant). Montrouzier collections were deposited in four herbaria: G, LYJB, MPU, P (GUILLAUMIN & BEAUVISAGE, 1914) but the LYJB collections disappeared between 1955 and 1970 (MORAT, 2010; BARRABÉ et al., 2013). Another search in G, MPU, and P also failed to find original material. A neotype is therefore designated here from île Baaba, which is near île Art and is well distributed among herbaria.

Eugenia littoralis var. *deplanchei* Brongn. & Gris was described based on three syntypes: *Deplanche 529, 529bis*, and *Vieillard 478* (BRONGNIART & GRIS, 1865: 179). The best-preserved material is designated here as lectotype, *Vieillard 478* [P00637573], which Dawson indicated as such on an annotation label in 2008. Two Vieillard collections deposited in A [A00071545] and K [K000821565] bearing the collection number “478” are labeled as originating from “Kanala” instead of “Balade”, and are therefore not considered here as original material.

Eugenia littoralis var. *deplanchei* already has been considered as a synonym of *E. gacognei* Montrouz. by previous authors (e.g. GUILLAUMIN & BEAUVISAGE, 1914; GUILLAUMIN, 1939).

Eugenia gacognei can be distinguished by its subcordate, sessile, stiff leaves (Fig. 1E) and sessile flowers (Fig. 1F).

Eugenia grisiana Guillaumin in Not. Syst. (Paris) 3: 261. 1916 [nom. nov.].

= *Eugenia magnifica* Brongn. & Gris in Bull. Soc. Bot. France, sér. 2, 12: 178. 1865 [nom. illeg., non Spreng ex Mart. 1837].

Lectotypus (designated here): **NEW CALEDONIA. Prov. Sud:** bois à Kanala, 1861, fl., *Vieillard 480* (P [P06138876]!); isolecto-: P [P00543899, P00543900, P02428360]!). **Syntypus:** **NEW CALEDONIA:** sine loco, ster., *Deplanche 539* (P [P00543897, P00543898]!).

Notes. – *Eugenia grisiana* Guillaumin was published as a new name for the illegitimate later homonym *E. magnifica* Brongn. & Gris described on three syntypes: *Deplanche 539, Pancher s.n.* [anno 1861], and *Vieillard 480* (BRONGNIART & GRIS, 1865: 178). The best-preserved fertile material, *Vieillard 480* [P06138876], is designated here as the lectotype.

One of the duplicate collections of *Vieillard 480* [P02428360], which was determined by Dawson in 2011 as *Eugenia grisiana* and labeled “type” using standard type labels by an unknown worker, is mounted on much newer paper than that being used at P about the time the specimen was collected. However, although its label information and style match those of the lecto- and isolectotypes, it is excluded from the type material because two different types of flowers are attached. The element on that sheet in the upper left consists of a c. 12 cm slice of bark with attached cauliflorous flowers bearing a glabrous hypanthium, which contrasts with the (otherwise similar) flowers in the fragment packet, which are densely sericeous. It is unlikely both kinds of flowers came off the same specimen. In fact, the glabrous flowers resemble those commonly seen in the widespread species *E. brongniartiana* Guillaumin. The hypanthia of the lectotype have only the silvery sericeous indumentum.

Eugenia grisiana shares with *E. bullata* relatively large bullate leaves and cauliflorous flowers, but the flowers are much smaller, the hypanthium glabrous to silvery sericeous (vs. ferruginous in *E. bullata*), and the stamens are much shorter and far less exerted.

Eugenia horizontalis Pancher ex Brongn. & Gris in Bull. Soc. Bot. France, sér. 2, 12: 179. 1865.

Lectotypus (designated here): **NEW CALEDONIA. Prov. Sud:** Port-de-France [Nouméa], 1855–1860, fl., *Vieillard 512* (P [P00637576]!); isolecto-: P [P00543870]!). **Syntyp:** **NEW CALEDONIA. Prov. Nord:** bois de Balade, 1855–1860, fl., *Vieillard 513* (P [P00637577]!); sine loco, 1862, bud, fl. & fr., *Pancher s.n.* (P [P00543871, P00696289, P00696290, P06670059]!).

Notes. – The lectotype designated here, *Vieillard 512* [P00637576], was annotated as such by Dawson in March 2008. Several of Pancher’s collections in P bear typical Pancher blue labels with the number 51. This number is not a Pancher collection number but refers to the wood collection of the “Musée colonial”. Two sheets of *Vieillard 512* in A [A00069857] and G [G00341407] labeled as “Pic des monts à Kanala” are not considered original material.

Eugenia horizontalis Pancher ex Brongn. & Gris is a common, low-growing shrub of two meters or less, often with long, prostrate horizontal branches, and with opposite (not whorled) narrowly obovate to narrowly elliptic, epunctate leaf blades less than 3 cm long. It can be diagnosed further from



Fig. 2. – *Eugenia huerlimannii* Guillaumin (Creek Pernod): A. Flowers; B. Fruits. *Eugenia kaalensis* Guillaumin: C. Leaves (Ouaco/Onajiele, 3.X.2009); D. Buds and flower (Taom sud Kaala-Gomen, 23.X.2015). [A: Munzinger 2571; B: Munzinger 2691] [Photos: A, B: J. Munzinger; C, D: H. Vandrot]

congeners in New Caledonia by its small, solitary, lax and long-pedicellate flowers with whitish petals.

Eugenia huerlimannii Guillaumin in Mém. Mus. Natl. Hist. Nat., B, Bot. 8: 293. 1962 (Fig 2A, B).

Lectotypus (designated here): NEW CALEDONIA. **Prov. Sud:** Montagne des Sources, 28.XII.1950, fl., *Hürlimann 453* (Z [Z-000016079] image!; isolecto-: P [P02428358]!). **Syntypus:** île des Pins, creek au SO du Pic N'Ga, 30.V.1950, fr., *Baumann-Bodenheim 13796* (G [G00227758]!, P [P06670057]!, Z [Z-000092711] image!).

Notes. – GUILLAUMIN (1962: 293) cited two collections in the protologue: *Baumann-Bodenheim 13796* and *Hürlimann 453*. He further cited a third collection (*Baumann-Bodenheim 14225*) as “peut-être [perhaps]”. The latter collection was definitely not included in his species concept and is therefore not treated as syntypus here, and it was re-identified subsequently

by JM as *Medicosma leratii* (Guillaumin) T.G. Hartley (*Rutaceae*).

Guillaumin described only the flowers in 1962 and the only collection in flower is the Z duplicate of *Hürlimann 453* [Z-000016079] annotated in Guillaumin's hand in 1958: “*Eugenia Hurlimannii* Guillaumin”. This specimen is designated here as the lectotype. The isolectotype in P [P02428358] is sterile. The remaining syntype, *Baumann-Bodenheim 13796*, also is sterile in P [P06670057] and Z [Z-000092711]) but in fruit in G [G00227758].

Eugenia huerlimannii Guillaumin occurs near the southern end of Grande Terre, but as indicated above, most specimens examined are sterile. It differs from its congeners in New Caledonia by its sessile, glabrous flowers, pruinose or glaucous young leaf blades, and an upper midvein that protrudes near the base of the blade (Fig. 2A, B).

The species also was the first one in New Caledonia on which the fruit pest *Coscinoptycha improbana* Meyrick (Australian Guava moth) was discovered (MILLE et al., 2012).

Eugenia kaalensis Guillaumin in Guillaumin & Viro in Mém. Mus. Natl. Hist. Nat., B, Bot. 4: 34. 1953 (Fig. 2C, D).

Lectotypus (designated here): NEW CALEDONIA. **Prov. Nord:** base des versants O du Mont Kaala, c. 20 m, 10.XI.1943, fl., *Viro* 1305 (P [P04722709]!); isolecto-: NOU [NOU073462] image!, P [P06670042]!). **Syntypi:** Gomen, ch. menant au sommet S, Mont Kaala, c. 1000 m, 1.XI.1943, ster., *Viro* 1292 (P [P04722711]!); pentes S, Mont Kaala, 200 m, 2.XI.1943, fr., *Viro* 1335 (P [P04722707]!); sine loco, s.d., ster., *Mueller* 23 (P [P04722705]!).

Notes. – Guillaumin in GUILLAUMIN & VIROT (1953: 34) cited three syntypes in the protologue of *Eugenia kaalensis* Guillaumin: *Viro* 1292, 1305, and 1335. *Viro* 1305 is designated here as the lectotype because it is well preserved and has fertile material. Two collections in P have exactly the same locality and date on the label but are numbered *Viro* 1303 [P00500658, P00500657]. These two sheets may represent original material, as Guillaumin cited the number “1305” twice for the locality “base des versants O du Mont Kaala” collected on November 10, 1943, in error for “1303”.

Eugenia littoralis Pancher ex Brongn. & Gris in Bull. Soc. Bot. France, sér. 2, 12: 178. 1865.

Lectotypus (designated here): NEW CALEDONIA: “plages sableuses”, fr., 1860–1861, *Pancher s.n.* (P [P04680903]!); probable isolecto-: A [A00071544] image!, K [K000821570] image!, MEL [MEL2394907] image!, P [P04722692, P04722693]!).

Notes. – BRONGNIART & GRIS (1865: 178) cited only “Pancher 1860–1861” in the protologue. The only fertile specimen of *Pancher s.n.* at P that matches the description and date in the protologue is a re-mounted specimen designated here as the lectotype [P04680903].

Dawson (unpubl. data) intended to treat *Eugenia littoralis* Pancher ex Brongn. & Gris as a synonym of *E. gacognei*. However, *E. littoralis* typically has an irregularly contoured, crisped leaf margin, whereas *E. gacognei* has a smooth or only slightly sinuous margin, and more subcordate and sessile or subsessile leaves. In addition, *E. gacognei* occurs in the northwest or northeast on ultramafics, whereas *E. littoralis* occurs at low elevations over calcareous substrates near the south-central coast.

Eugenia mouensis Baker f. in J. Linn. Soc. Bot. 45: 313. 1921.

Holotypus: NEW CALEDONIA. **Prov. Sud:** Mt. Mou, c. 180 m, 13.III.1914, fl., *Compton* 554 (BM [BM000053518]!).

= *Jambosa canalensis* Guillaumin in Bull. Soc. Bot. France, sér. 5, 85: 642. 1939. **Lectotypus** (designated here): NEW CALEDONIA. **Prov. Nord:** Canala, 1872, fr., *Balansa* 3402 (P [P00500670]!); isolecto-: P [P00696295, P06670064]!).

Notes. – Three sheets of the original material of *Jambosa canalensis* Guillaumin are deposited at P and none are indicated as “type” in Guillaumin’s hand. The best-preserved material of *Balansa* 3402 [P00500670] with abundant fruiting material is designated here as the lectotype.

Of particular note, however, is P06670064, which shows two distinct classes of leaf sizes on the same branchlet. The specimen has shorter and narrower leaves proximally and distinctly longer and broader leaves distally. This specimen was critical in assessing Dawson’s unpublished manuscript name “*Eugenia povilaensis*”, which he had intended to describe based in part on shorter leaves, and which he indicated as being “probably closest to *E. mouensis*”. So, as currently understood, *Eugenia mouensis* Baker f. can have leaves of variable length, and that “*Eugenia povilaensis*” will not be recognized as being distinct.

Jambosa canalensis has been considered as a synonym of *Eugenia mouensis* by GOVAERTS et al. (2008) and this synonymy is followed here.

Eugenia ovigera Brongn. & Gris in Bull. Soc. Bot. France, sér. 2, 12: 179. 1865.

= *Calycorctes ovigera* (Brongn. & Gris) Guillaumin in Bull. Mus. Natl. Hist. Nat. 25: 503. 1919. = *Stereocaryum ovigerum* (Brongn. & Gris) Burret in Notizbl. Bot. Gart. Berlin-Dahlem 15: 547. 1941.

Lectotypus (designated by SNOW et al., 2016a: 78): NEW CALEDONIA. **Prov. Sud:** bord de la Rivière d’Unia, 1855–1860, fr., *Vieillard* 473 (P [P00402692]!); isolecto-: P [P00402773, P00402774]!).

= *Schizocalyx neocaledonica* Brongn. & Gris in Ann. Sci. Nat. Bot., sér. 5, 13: 382. 1871. = *Stereocaryum neocaledonicum* (Brongn. & Gris) A.J. Scott in Kew Bull. 34: 496. 1980, **syn. nov. Lectotypus** (first step designated by SCOTT, 1980: 486; second-step designated here): NEW CALEDONIA. **Prov. Nord:** vallée du mouillage, Ile Tanlé, 1861–1867, fl., *Deplanche* 360 (P [P00637570]!); isolecto-: K [K000821587, K000821588] image!, P [P00402701, P02428352]!). **Syntypus:** sine loco, 1870, fl. & fr., *Pancher s.n.* (P [P00637571]!).

Notes. – SCOTT’S (1980) mention of *Deplanche* 360 in P as the holotype effectively lectotypified the name. However, a second-step is needed given that three sheets are deposited in P. The best-preserved material of *Deplanche* 360 [P00637570] is designated here as the second-step lectotype.

Dawson (unpubl. data) indicated that material previously described as *Stereocaryum neocaledonicum* (Brongn. & Gris) A.J. Scott, from northwestern New Caledonia on or near Ile Tanlé, might be a distinct taxon, given somewhat larger leaves and flowers on average than those of *Eugenia ovigera* Brongn.

& Gris. However, in comparing the range of variation of those few specimens with the more widely-ranging *E. ovigera*, it appears the latter can easily accommodate specimens previously determined as *Stereocaryum neocaledonicum*.

Eugenia paludosa Pancher ex Brongn. & Gris in Bull. Soc. Bot. France, sér. 2, 12: 178. 1865.

Lectotypus (designated here): **NEW CALEDONIA.**
Prov. Nord: Balade, 1855–1860, bud & fl., *Vieillard 479* (P [P05094122]!).

Notes. – BRONGNIART & GRIS (1865: 178) cited two syntypes in the protologue: *Vieillard 479* and *Pancher s.n.* [anno 1861]. A single specimen of *Vieillard 479* is deposited in P and designated here as the lectotype. The Pancher collections from Kanala deposited in P [P06670065, P06670066, P05094125] are excluded and otherwise identified as *Eugenia mouensis*.

Dawson (unpubl. data) considered *Eugenia pachycremastra* Guillaumin to be conspecific with *E. paludosa* Pancher ex Brongn. & Gris, but we are maintaining them as distinct pending further study.

Eugenia poimbailensis (Guillaumin) J.W. Dawson & N. Snow in Candollea 71: 79. 2016 (Fig. 3A).

= *Myrtus poimbailensis* Guillaumin in Bull. Soc. Bot. France, sér. 5, 85: 633. 1939. = *Austromyrtus poimbailensis* (Guillaumin) Burret in Notizbl. Bot. Gart. Berlin-Dahlem 15: 505. 1941.

Lectotypus (designated here): **NEW CALEDONIA.**
Prov. Nord: Poinbail à Wagap, 1861–1867, fr., *Vieillard 2605* (P [P00632556]!); isolecto-: K [K000800515]!, P [P06670055]!).

Notes. – SNOW et al. (2016a: 79) considered the sheet P00632556 as the holotype. However, two sheets of *Vieillard 2605* are deposited in P and this is rectified here with the designation of a lectotype on P00632556, which also has fruiting material.

Eugenia poimbailensis (Guillaumin) J.W. Dawson & N. Snow is characterized by its sprawling, densely branching shrubby habit, leaf blades < 2 cm long having faintly visible secondary veins below, its glabrous hypanthium, and sessile white flowers.

Eugenia pubiflora N. Snow & Callm., **nom. nov.** (Fig. 3B).

= *Eugenia calycorectoides* Guillaumin in Bull. Mus. Natl. Hist. Nat., sér. 2, 20: 364. 1948. [nom. illeg., non O. Berg 1858]

Holotypus: **NEW CALEDONIA. Prov. Sud:** Sébertville, zone maritime, XII.1904[3?], fl., *Cribs 1496* (P [P00637580]!); iso-: (P [P01155900, P04021529]!).

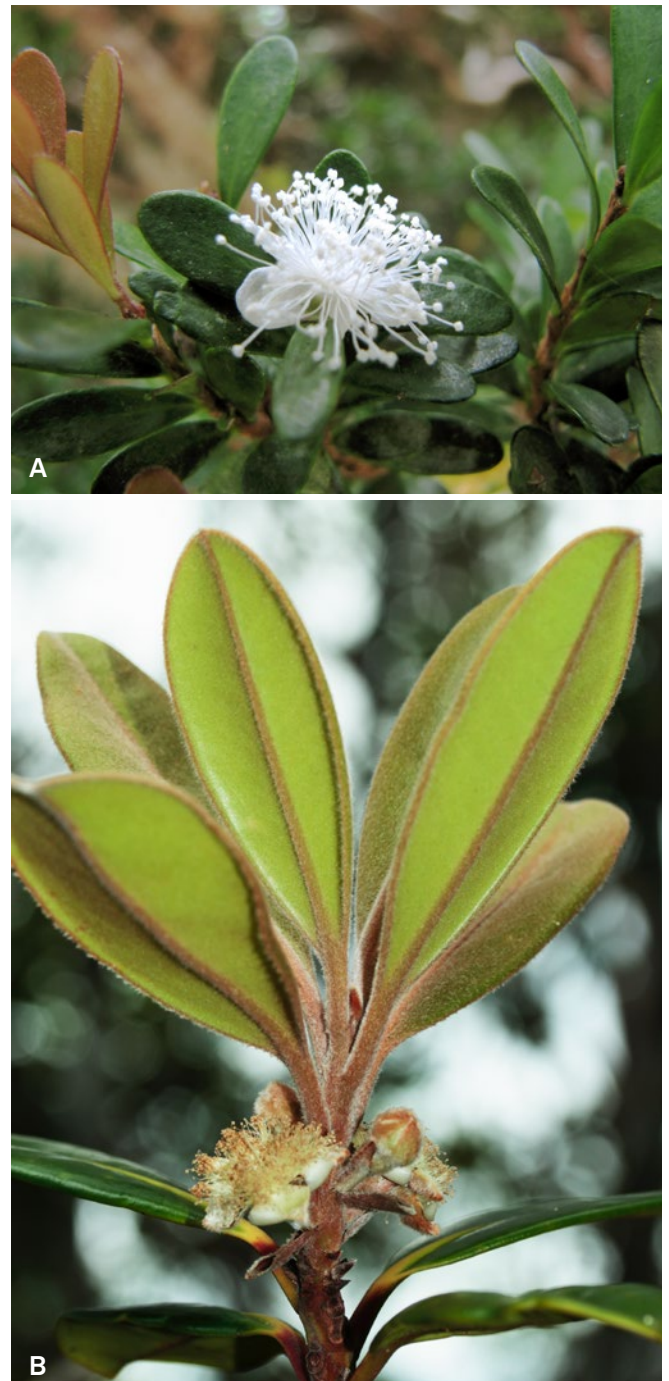


Fig. 3. – A. *Eugenia poimbailensis* Guillaumin (Tipindjé, 19.XI.2011); B. *Eugenia pubiflora* N. Snow & Callm. (Bois du Sud, 19.XII.2018). [Photo: H. Vandrot]

Notes. – Although three duplicates of *Cribs 1496* are deposited in P, only P00637580 has the species name and type annotation in Guillaumin's hand. We consider this sheet as the holotype because the two other sheets at P have clearly not been studied by Guillaumin.

The locality on the label initially indicated the year 1904, but the number “4” was crossed out and replaced with a “3”. The word “Sébertville” on the label refers to the Sebert Camp of the 1870s, which later became Prony.

A new name is proposed for the later homonym *Eugenia calycorectoides* Guillaumin. The epithet *pubiflora* alludes to the dense pubescence on the inflorescence axis, hypanthium, and calyx lobes.

Eugenia pubiflora N. Snow & Callm. differs from its congeners by its densely, grayish pubescence on emerging leaf blades, young pedicels, and hypanthium (Fig. 3B).

Eugenia sarasinii Guillaumin in Sarasin & Roux in Nova Caled., Bot. 1: 189. 1921.

= *Xanthomyrtus sarasinii* (Guillaumin) Guillaumin in Bull. Soc. Bot. France, sér. 5, 85: 630. 1939.

Holotypus: NEW CALEDONIA. **Prov. Nord:** vallée de Negropo, 3.III.1912, fl., Sarasin 573 (P [P00835843]!).

= *Xanthomyrtus pergracilis* Diels in Bot. Jahrb. Syst. 57: 362. 1922. **Lectotypus** (designated here): NEW CALEDONIA. **Prov. Nord:** “auf den Bergen bei Ou-Hinna”, 900 m, 4.I.1903, fr., Schlechter 15629 (P [P00835846]!); isolecto-: K [K000821575] image!, M [M0137514] image!, P [P00835847, P00835848]!. **Holotypus:** B†.

Notes. – The holotype material of *Xanthomyrtus pergracilis* Diels was destroyed in B (НІЕРКО, 1987). The best preserved duplicate at P [P00835846] is designated here as the lectotype.

Xanthomyrtus pergracilis has been considered as a synonym of *Eugenia sarasinii* Guillaumin by GOVAERTS et al. (2008), which is followed here.

Eugenia stricta Pancher ex Brongn. & Gris in Bull. Soc. Bot. France, sér. 2, 12: 179. 1865.

= *Austromyrtus stricta* (Pancher ex Brongn. & Gris) Burret in Notizbl. Bot. Gart. Berlin-Dahlem 15: 505. 1941.

Lectotypus (designated here): NEW CALEDONIA: “coteaux ferrugineux”, 1860–1862, fr., Pancher s.n. [748] (P [P00637587]!); isolecto-: G [G00341390]!, P [P00637586, P05094557]!).

Notes. – The protologue indicates “Habitat in Novae Caledoniae montibus ferrugineis” and “Pancher, [anni] 1860–62” as collector. Three sheets collected by Pancher at P bear on the label “coteaux ferrugineux”. The best-preserved specimen is designated here as the lectotype. Two additional specimens collected by Pancher [K000821576, P05094559] seem to represent a separate gathering and are not considered as original material.

Eugenia stricta Pancher ex Brongn. & Gris is one of the most widely distributed and abundant species of the genus

in New Caledonia. Its (1–)2–5 cm long, obovate leaves with a (usually) retuse apex, coupled typically with solitary terminal or axillary flowers, make it easily recognizable.

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References

- BARRABÉ, L., A. MOULY & J. FLORENCE (2013). Psychotriacae (Rubiaceae) neocaledonicarum specierum nomenclator. *Adansonia*, sér. 3, 35: 281–357. DOI: <http://dx.doi.org/10.5252/a2013n2a6>
- BRONGNIART, A. & J.A.A. GRIS (1865). Observations sur les Myrtacées sacrocarpées de la Nouvelle-Calédonie et sur le nouveau genre Piliocalyx. *Bull. Soc. Bot. France*, sér. 2, 12: 174–187.
- DAWSON, J.W.D. (1992). Myrtaceae: Leptospermoideae. In: MORAT, P. (ed.), *Fl. Nouvelle-Calédonie et Dépendances* 18.
- DAWSON, J.W.D. (1999). Myrtaceae: Myrtoideae (I): Syzygium. In: MORAT, P. (ed.), *Fl. Nouvelle-Calédonie et Dépendances* 23.
- GÂTEBLÉ, G., L. BARRABÉ, G. MCPHERSON, J. MUNZINGER, N. SNOW & U. SWENSON (2018). One new endemic plant species on average per month in New Caledonia, including eight more new species from Île Art (Belep Islands), a major micro-hotspot in need of protection. *Aust. Syst. Bot.* 31: 448–480. DOI: <https://doi.org/10.1071/SB18016>
- GOVAERTS, R., M. SOBRAL, P. ASHTON, F. BARRIE, B.K. HOLST, L.L. LANDRUM, K. MATSUMOTO, F. FERNANDA MAZINE, E. NIC LUGHADHA, C. PROENÇA, L.H. SOARES-SILVA, P.G. WILSON & E. LUCAS (2008). *World Checklist of Myrtaceae*. Kew Publishing, Kew.
- GUILLAUMIN, A. (1911a). Catalogue des plantes phanérogames de la Nouvelle Calédonie et Dépendances (îles des Pins et Loyalty). *Ann. Mus. Colon. Marseille*, sér. 2, 9: 77–290.
- GUILLAUMIN, A. (1911b). Remarques sur la synonymie de quelques plantes néo-calédoniennes (VIII). *Not. Syst. (Paris)* 2: 229–235.

- GUILLAUMIN, A. (1916). Révision des *Eugenia* cauliflores de Nouvelle-Calédonie. *Not. Syst. (Paris)* 3: 260–263.
- GUILLAUMIN, A. (1939). Matériaux pour la flore de la Nouvelle-Calédonie. LIII. Révision des Myrtacées à fruit charnu précédée de quelques notes supplémentaires sur les Myrtacées à fruit sec. *Bull. Soc. Bot. France*, sér. 5, 85: 626.
- GUILLAUMIN, A. & G. BEAUVISAGE (1914). Species Montrouzieranae seu enumeration plantarum in Nova Caledonia terrisque adjacentibus A. R. P. Montrouzier lectarum. *Ann. Soc. Bot. Lyon* 38: 75–132.
- GUILLAUMIN, A. & R. VIROT (1953). Contributions à la Flore de la Nouvelle-Calédonie CII. Plantes récoltées par M. R. Virot. *Mém. Mus. Natl. Hist. Nat., B, Bot.* 4: 1–82.
- HIЕPKO, P. (1987). The collections of the Botanical Museum Berlin-Dahlem (B) and their history. *Englera* 7: 219–252.
- MILLE, C., J. MUNZINGER & H. JOURDAN (2012). First record of the fruit pest *Coscinoptycha improbana* Meyrick, the Australian Guava Moth, (Lepidoptera: Carposinidae) in New Caledonia: Implication for quarantine and biosecurity surveys in insular territories. *J. Asia Pac. Entomol.* 15: 283–285. DOI: <https://doi.org/10.1016/j.aspen.2012.02.005>
- MONTROUZIER, X. (1860). Flore de l'île Art (près de la Nouvelle-Calédonie). *Mém. Acad. Roy. Sci. Lyon, Sect. Sci.* 10: 173–254.
- MORAT, P. (2010). Les botanistes récolteurs en Nouvelle-Calédonie de 1774 à 2005. *Adansonia*, sér. 3, 32: 159–216. DOI: <http://dx.doi.org/10.5252/a2010n2a1>
- SCOTT, A.J. (1980). Notes on Myrtaceae in the Mascarenes with some recombinations for taxa from Aldabra, Malaya, New Caledonia. *Kew Bull.* 34: 473–498.
- SNOW, N., J.W. DAWSON, M.W. CALLMANDER, K. GANDHI & J. MUNZINGER (2016a). New species, new combinations, and lectotypifications in New Caledonian *Eugenia* L. (Myrtaceae). *Candollea* 71: 67–81. DOI: <https://doi.org/10.15553/c2016v711a9>
- SNOW, N., J. MUNZINGER & M.W. CALLMANDER (2016b). Novitates neocaledonicae V: *Eugenia plurinervia* N. Snow, Munzinger & Callm. (Myrtaceae), a new threatened species with distinct leaves. *Candollea* 71: 211–215. DOI: <http://dx.doi.org/10.15553/c2016v712a7>