



Taxonomic novelties in *Myrcia guianensis* and allied species (Myrtaceae: Myrteae), including mass-typification in a large and taxonomically challenging group

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Summary. The ‘*Myrcia guianensis* group’, or Guianensis clade, comprises c. 30 species distributed mainly in the Cerrado and Atlantic Forest biomes of Brazil. The group is currently being monographed and during this process, type collections have been analysed and a thorough literature search completed; 36 new synonyms are recognised, and 95 lectotypifications and five neotypifications are made.

Key Words. Lectotypification, neotypification, nomenclature, Otto Berg, synonymy.

Introduction

Myrcia s.l. is a monophyletic group including three often currently accepted genera, *Myrcia* DC., *Marlierea* Cambess. and *Calyptanthes* Sw. (Lucas *et al.* 2011) and totalling more than 700 species (Govaerts *et al.* 2016). This group can be divided into nine monophyletic informal subgroups supported by molecular and morphological data (Lucas *et al.* 2011; Staggemeier *et al.* 2015). Based on this phylogenetic hypothesis, a formal subgeneric classification is in preparation (Lucas *et al.* 2017) in tandem with monographic revision of many of these subgeneric groups.

The Guianensis clade (clade 4 *sensu* Lucas *et al.* 2011) includes c. 30 species distributed throughout the Neotropics, mainly in the Cerrado and Atlantic Forest biomes of Brazil (Lucas *et al.* 2017, BFG 2015). *Myrcia guianensis* gives its name to the group and, in its broadest circumscription encompasses vast morphological variation. Multiple forms of this taxon have been described as new species or varieties since the publication of its basionym in 1828 and have resulted in unstable nomenclature and often unusable taxonomy. Nowadays, most of these names are treated as synonyms of *M. guianensis* (BFG 2015; Govaerts *et al.* 2016), producing an unusually high number of synonyms. Despite this confusion, the nomenclature and taxonomy of *Myrcia guianensis* and its allied names and species have never been studied as a whole.

During the preparation of a complete taxonomic revision of the Guianensis clade, names cited by an

author based on more than one gathering were commonly found, as were situations where holotype material had been lost or destroyed. The 95 lectotypifications and five neotypifications required in these cases are provided here along with 36 new synonyms. Additional notes are provided for some species.

Materials and Methods

The following herbaria were visited: BM, BR, C, G, G-DC, HBR, K, P, SP, SPF, R, RB, U, UB and W (acronyms follow Thiers 2016); additional type images from other herbaria were seen online through JSTOR Global Plants (<http://plants.jstor.org/>) or on the websites of individual herbaria. All specimens interpreted as duplicates are listed as isotypes or isolectotypes, even when the material is a fragment such as frequently found in F. Cited specimens indicated ‘[photo]’ denotes that digital images were viewed. In these cases, the selected lecto- or neo-type is the real specimen, not its image. Unless specified as ‘n.v.’, all specimens listed were seen and analysed, either personally or virtually. Although LE was not visited and many of its types were not available, possible holotypes from this herbarium are reported as ‘n.v.’ instead of designating a lectotype. Remaining syntypes are available in the protologues or on request from the first author. Lectotypes are designated even when an apparent holotype appears obvious following the recommendations of McNeill

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et al. (2012) who highlighted the uncertainty that a specimen at the author's institution might have been the only material examined by that author at the time. Synonym lists include only names being lecto- or neotypified and new synonyms. Other relevant observations and synonyms of particular common usage with their respective authorities are reported in 'General notes' at the end of the synonym list of each species. Complete synonym lists can be found in Govaerts *et al.* (2016) and BFG (2015) or on request from the first author. All illegitimate names and nomina nuda are reported for each accepted name or synonym dealt with here. Following McNeill *et al.* (2012), 'nom. illegit.' signifies either names based on the same type as an earlier legitimate name (here listed within the same paragraph, indicating homotypes) or that an earlier published epithet is repeated (here listed with the correct name, when available, within square brackets). To avoid repetition in the text, a general explanation of the rationale applied to names published by the most common authors of the group (Berg, de Candolle, Cambessèdes and Kiaerskou) is given below with specific cases discussed under each name.

Otto Berg provided most Guinaensis clade names during or after his treatment of Myrtaceae for *Flora Brasiliensis* (1857–1859). Several of these require lectotypification after destruction of the holotype in the B herbarium during WWII (Stafleu & Cowan 1976), or because Berg cited more than one gathering and/or herbarium in the protologue as syntypes. In each case the lectotype selected is the specimen bearing Berg's handwriting that best matches the protologue. Alternatively, Berg described new species with two or more varieties and multiple syntypes, but without citing which of them is the typical variety and without linking the syntype to its respective taxon. In these cases, the typical variety is assumed to be the one with a more complete description, usually the first presented (designated by Berg by 'α'). It is generally possible to recognise the likely type of each variety through Berg's handwriting on the labels of the herbarium sheets.

According to Stafleu & Cowan (1976), de Candolle's types are housed at G-DC. However, de Candolle cited Martius' herbarium ('v. s. in h. Mart.') in the protologues of his *Prodomus* (1828). Although after his death most of Martius's herbarium was sent to BR, his Brazilian collections remained in M (Stafleu & Cowan 1981). Thus, we consider the holotypes housed in M and the isotypes in G-DC. When there is more than one specimen in M, material bearing de Candolle's handwriting is chosen as lectotype.

Cambessèdes based his treatment of Myrtaceae for *Flora Brasiliae Meridionalis* (1832) on Saint-Hilaire's collections. According to Stafleu & Cowan (1976), Cambessèdes' types are housed at MPU, but many duplicates bearing Cambessèdes' handwriting are in P, indicating that he studied both duplicates. In such cases, lectotypification is necessary; the material se-

lected as lectotype is the duplicate that best matches the protologue.

Kiaerskou's types are in C (Stafleu & Cowan 1979). When lectotypification was considered necessary because of the presence of more than one duplicate, the lectotype selected is the one that best matches the protologue, often with an illustration of the leaf made by Kiaerskou attached to the herbarium sheet.

New typifications

1. *Myrcia citrifolia* (Aubl.) Urb. (Urban 1919: 150), non (Aubl.) D. Legrand (1961: 297). *Myrtus cotini-folio* Plum. (Plumier 1703: 19) **nom. nud.** *Myrtus citrifolia* Aubl. (Aublet 1775a: 513 [description], 1775b: 20 [name, #4]). *Myrtus acris* var. b Sw. (Swartz 1788: 79) **nom. illegit.** *Myrtus coriacea* Vahl (1791: 59) **nom. illegit.** *Myrtus cotinifolia* J. F. Gmel. (Gmelin 1791: 792) **nom. illegit.**, non (Jacq.) Spreng. (Sprengel 1825: 481) [= *Eugenia cotinifolia* Jacq.], nec Poir. (Poiret 1798: 410) [= *Pimenta racemosa* (Mill.) J. W. Moore]. *Myrcia coriacea* (Vahl) DC. (de Candolle 1828: 243) **nom. illegit.** *Aulomyrcia coriacea* (Vahl) O. Berg (1855: 70) **nom. illegit.** *Myrcia coriacea* var. *swartziana* Griseb. (Grisebach 1860: 234) **nom. illegit.** *Aulomyrcia citrifolia* (Aubl.) Amshoff (1948: 531). Type: Plumiers.n. (specimen unknown). Plate in *Pl. Amer., Fasc.* 9: 203, t. 208, fig. 2 (Plumier 1759) (lectotype selected by McVaugh 1969).

Eugenia paniculata Jacq. (Jacquin April 1789: 108), non Lam. (Lamarck October 1789: 199) **nom. illegit.** [= *Syzygium borbonicum* J. Guého & A. J. Scott], nec Sieber ex C. Presl (1828: 274) **nom. invalid.** [= *Myrcia ferruginea* G. Don], nec Cambessèdes in Saint-Hilaire *et al.* 1832: 338) **nom. illegit.** [= *Martiera eugenoides* (Cambess.) D. Legrand], nec Bello (1881: 271) **nom. illegit.**, nec (Gaertn.) Britten (1899: 247) **nom. illegit.** [= *Syzygium paniculatum* Gaertn.]. *Aulomyrcia jacquiniana* O. Berg (1855: 69) **nom. illegit.** *Myrcia coriacea* var. *jacquiniana* (O. Berg) Griseb. (Grisebach 1860: 234) **nom. illegit.** *Myrcia paniculata* (Jacq.) Krug & Urb. (Urban 1895: 577). *Myrcia paniculata* var. *jacquiniana* (O. Berg) Duss (1896: 263). *Myrcia citrifolia* var. *jacquiniana* (O. Berg) Stehlé & Quentin (1949: 57). Type: [Martinique] 'Martinica', s.d., *Aquart* s.n. (lectotype W 0032556, selected here).

NOTES. Jacquin described *Eugenia paniculata* without citing the herbarium, however his types are at BM, LINN and W (D'Arcy 1970; Stafleu & Cowan 1979). Berg (1855) described *Aulomyrcia jacquiniana*, an illegitimate name based on the same type of *E. paniculata*, indicating a single specimen, *Aquart* s.n., in W ('herb. Vindob.', W0032556). McVaugh (1969) mentioned this collection in W as a possible type of *E. paniculata*, observing that it is illustrated in Jacquin's work (Tab. 5, Fig. 1). The W collection was the only one found and is selected as lectotype.

Eugenia acetosans Poir. (Poirot in Lamarck 1813: 125). *Myrtus acetosans* (Poir.) Spreng. (Sprengel 1825: 488). *Aulomyrcia acetosans* (Poir.) O. Berg (1861: 662). Type: [French Guiana, Cayenne] 'dans la Guiane', s.d., Richard s.n. (lectotype P 00547167, selected here; isolectotypes P 00798851, P 00798852, P 00798853, F 0065060 [photo]). **NOTES.** Poirot cited Richard s.n. as type of *Eugenia acetosans*, therefore housed in P (Stafleu & Cowan 1983), where a sheet of four gatherings was found, each with its own label and barcode. The material selected as lectotype is the more complete of these numbers, with leaves and inflorescences, and more information on its label.

Aulomyrcia triflora O. Berg (1855: 79). Type: [British Guiana] 'Habitat prope Roraima, in Guiana Anglica', 1843, Schomburgk 978 (holotype B†; lectotype K 000342677, selected here). **NOTES.** McVaugh (1969) proposed *Aulomyrcia triflora* as synonym of *Myrcia citrifolia*, although Govaerts *et al.* (2016) and BFG (2015) do not synonymise the name. The synonymy is maintained here as the diagnostic characters of *A. triflora* fall into the morphological range of *M. citrifolia*. McVaugh (1969) provided further discussion.

Myrcia coriacea var. *imrayana* Griseb. (Grisebach 1860: 234). *Myrcia paniculata* var. *imrayana* (Griseb.) Duss (1896: 264). *Myrcia citrifolia* var. *imrayana* (Griseb.) Stehlé & Quentin (1949: 57). Type: Dominica, s.d., Imray 364 (lectotype K 000261747, selected here; isolectotypes GH 00071066 [photo], GOET 007312 [photo]). **NOTES.** The type of *Myrcia coriacea* var. *imrayana*, as well as other types of Grisebach's *Flora of the British West Indian Islands* (1860) are deposited in K and GOET (Stafleu & Cowan 1976). The more complete K specimen is chosen as lectotype. In addition to *M. coriacea* var. *imrayana*, *M. coriacea* var. *swartziana* and *M. coriacea* var. *jacquiniana*, Grisebach also described *M. coriacea* var. *reticulata* Griseb. (Grisebach 1860: 182) and *M. coriacea* var. *acutifolia* Griseb. (Grisebach 1866: 86), all cited as synonyms of *M. citrifolia* by Govaerts *et al.* (2016). While the first three varieties are indeed synonyms of *M. citrifolia*, the last two are based on Wright's collections from Cuba and comprise mixed collections here recognised as *M. maestrensis* (Urb.) Alain, *Pimenta racemosa* (Mill.) J. W. Moore and *Calyptanthes* sp.

GENERAL NOTES. The following names are also synonyms of *Myrcia citrifolia*: *Eugenia marginata* Jacq., *Aulomyrcia coriacea* var. *parvifolia* Pers., *Myrcia vernicosa* DC. and *E. saviiifolia* Alain (BFG 2015; Govaerts *et al.* 2016). Further discussion of the nomenclature, typification and synonyms of *Myrcia citrifolia* (as *Myrtus cotini folio*) can be found in Veldkamp (2013: 120).

2. *Myrcia glabra* (O. Berg) D. Legrand (1961: 298). *Aulomyrcia glabra* O. Berg (in Martius *et al.* 1857: 119). Type: [Brazil, São Paulo] 'Habitat in fruticetis prov. S. Pauli', s.d., Sellow s.n. (holotype B†; lectotype BR 0000005280605, selected here; isolectotypes F 0064720 [photo], K 000343995, LE 00007071 [photo], P 00163069, P 00163070, W 0032599).

Aulomyrcia acrantha O. Berg (in Martius *et al.* 1857: 71).

Type: [Brazil] 'Habitat ad ripas prope Santo-Antonio-da-Patrolha in prov. Rio Grande do Sul', s.d., Sellow s.n. (holotype B†). Brazil, Rio Grande do Sul, Porto Alegre, May 1899, Reineck & Czermak 393 (neotype P 05291402, selected here; isoneotype P 05291403). **NOTES.** The holotype of *Aulomyrcia acrantha* was destroyed in B and no duplicates were found in other herbaria. The holotype is assumed to have been of fruiting material since flowers are not mentioned in the protologue. *A. acrantha* is recognisable by the puberulous young leaves which are glabrescent in maturity, coriaceous, oval-oblong, acute apex, attenuate base, flat midveined on the adaxial surface, short petioles, and compressed glabrous inflorescences; these features easily fit the circumscription range of *Myrcia glabra*. No further named material of *A. acrantha* was found, nor fruiting material with these features. Of the specimens identified as *M. glabra*, two flowering duplicates in P match the protologue of *A. acrantha* allowing one (Reineck & Czermak 393) to be specified as the neotype. The collection localities of the holotype of *A. acrantha* and Reineck & Czermak 393 are very close, with similar vegetation.

Aulomyrcia laxiflora var. *latifolia* O. Berg (in Martius *et al.* 1857: 114), **synon. nov.** Type: [Brazil, São Paulo] 'Prope villam Mogi das Cruzes in prov. S. Pauli', s.d., Saint-Hilaire 654 (lectotype P 00161408, selected here; isolectotype P 00161407). **NOTES.** Berg described *A. laxiflora* var. *latifolia* based only on the description of the unnamed variety *beta* (β) of Cambessèdes (1832: 319). However, the type Saint-Hilaire 654 was probably not seen by Berg and does not match the morphology of the quite distinct *Myrcia laxiflora*; it does however match the collection of *Myrcia glabra* so justifying its synonymisation.

Myrcia citrifolia (Aubl.) D. Legrand (1961: 297), non (Aubl.) Urb. (Urban 1919: 150). **NOTES.** Legrand (1961) created a later isonym of *Myrcia citrifolia* and treated plants from southern Brazil as such. In 1969, the same author corrected the mistake and synonymised his *Myrcia citrifolia* under *M. glabra* (Legrand & Klein 1969).

3. *Myrcia guianensis* (Aubl.) DC. (de Candolle 1828: 245). *Eugenia guianensis* Aubl. (Aublet 1775a: 506). *Myrtus guianensis* (Aubl.) Ham. (Hamilton 1825: 45).

- Aguava guianensis* (Aubl.) Raf. (Rafinesque 1838: 107). Type: [British Guiana] 'Habitat in silvis propè montem Serpent dictum', s.d., *Aublet* s.n. (holotype BM 000953654; isotype LINN HS883-22 [photo]).
- Myrcia elegans* DC. (de Candolle 1828: 251). *Calyptromyrcia elegans* (DC.) O. Berg (1855: 34). *Myrcianthes elegans* (DC.) Mattos (2009: 2). Type: [Brazil, Pará] 'In Brasiliae prov. Paraensi', s.d., *Martius* s.n. (lectotype M 0136868 [photo], selected here; isoelectotype M 0136867 [photo]).
- Myrcia exsucca* DC. (de Candolle 1828: 247). *Aulomyrcia exsucca* (DC.) O. Berg (1855: 79). *Myrcia queimadensis* Mattos (2006: 4) **nom. superfl.** Type: [Brazil, Minas Gerais] 'In Brasiliae campestribus desertis' (in the protologue), s.d., *Martius* s.n. (lectotype M 0136858 [photo], selected here; isoelectotypes G-DC, M 00136859 [photo]).
- Myrcia lauriflora* DC. (de Candolle 1828: 252). *Aulomyrcia lauriflora* (DC.) O. Berg (1855: 64). Type: [Brazil] 'In Brasiliae prov. Pará', s.d., *Martius* s.n. (lectotype M 0136962 [photo], selected here; isoelectotypes G-DC, M 00136961 [photo], M 00136963 [photo]).
- Myrcia leucadendron* DC. (de Candolle 1828: 251). *Aulomyrcia leucadendron* (DC.) O. Berg (in *Martius et al.* 1857: 115). Type: [Brazil, São Paulo] 'In Brasilia', s.d., *Martius* s.n. (lectotype M 0136958 [photo], selected here; isoelectotypes M 00136957 [photo], M 00136959 [photo]).
- Myrcia myoporina* DC. (de Candolle 1828: 246). *Aulomyrcia glandulosa* var. *obovata* O. Berg (in *Martius et al.* 1857: 139) **nom. illegit.** *Myrcia glandulosa* var. *obovata* (O. Berg) N. Silveira (1985a: 67) **nom. illegit.** Type: [Brazil] 'Brasilia', s.d., *Martius* s.n. (lectotype W-Rchb. 1889-0342000, selected here; isoelectotype P 00161186). **NOTES.** De Candolle (1828) described flowers and fruits in the protologue of *Myrcia myoporina*, based on *Martius*' collection in M. A single flowering gathering identified as such by himself exists in M, however this specimen is a misidentified *Eugenia*. Berg (1857) noted this confusion when describing the illegitimate *Aulomyrcia glandulosa* var. *obovata*, based on the same type specimen of *M. myoporina*. No fruiting material of *M. myoporina* was found in M or elsewhere. Two other *Martius*' collections with flowers were found at W and P; they match the diagnosis of *M. myoporina* well and are respectively selected as lecto and isoelectotype.
- Myrcia crassicaulis* Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 311). *Aulomyrcia crassicaulis* (Cambess.) O. Berg (1855: 74). Type: [Brazil, Minas Gerais] 'In campis prope pagum Curaçao de Jesus in parte accidentali desertaque provinciae Minas Geraes quam vocant Certoó', s.d., *Saint-Hilaire* 1944 (lectotype MPU 011015 [photo], selected here; isoelectotypes F 0076585 [photo], P 00735115, P 00735116).
- Myrcia hiemalis* Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 332). Type: [Brazil, Minas Gerais] 'In campis prope praedium S. Bento in parte deserta occidentalisque provinciae Minas Geraes', s.d., *Saint-Hilaire* 1935 (lectotype P 00161436, selected here; isoelectotypes F 0065494 [photo], MPU 011038 [photo], P 00161437).
- Myrcia microcarpa* Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 324). *Aulomyrcia microcarpa* (Cambess.) O. Berg (in *Martius et al.* 1857: 81). Type: [Brazil, São Paulo] 'In campis prope Capivarhy in provincia Sancti Pauli', s.d., *Saint-Hilaire* 1336 (lectotype P 00161401, selected here; isoelectotypes F 0065528 [photo], MPU 010946 [photo], P 00161400, P 00161402).
- Myrcia suaveolens* Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 315). *Aulomyrcia suaveolens* (Cambess.) O. Berg (1855: 78). Type: [Brazil, Minas Gerais and Goiás] 'In campis provinciarum Minas Geraes et Goyaz haud infrequens', s.d., *Saint-Hilaire* 908 (lectotype MPU 010967 [photo], selected here; isoelectotypes F 0065576 [photo], P 00161364, P 00161365, P 00161366, P 00161367, P 00161368).
- Aulomyrcia conduplicata* O. Berg (1855: 76). Type: [British Guiana] 'Habitat in savannis Guianae Anglicae', s.d., *Schomburgk* 393 (holotype B†). British Guiana, Basin of Rupununi R., Yupukari, lat. about 3°40'N, 15 Oct. 1937, *Smith* 2274 (neotype K 000343168, selected here). **NOTES.** The holotype of *Aulomyrcia conduplicata* was destroyed in B and no duplicates have been found. Diagnostic characters of the species fit into the variation of *Myrcia guianensis*. Of the collections from British Guiana studied by us, *Smith* 2274 at K is chosen as neotype. This specimen is a good match for the description of *A. conduplicata*, presenting its main characteristics: obovate to oblong and conduplicate leaves, glabrous when mature, with obtuse to rounded apices and cuneate bases. *Smith* 2274 was also collected in savannah vegetation, as was the destroyed holotype.
- Aulomyrcia dichroma* O. Berg. (1855: 65). Type: [British Guiana] 'Habitat ad ripas fluminis Moracca in Guiana Anglicae', s.d., *Schomburgk* 1491 (holotype B†; lectotype LE 00007052 [photo], selected here).
- Aulomyrcia obtusa* var. *longipes* O. Berg (1855: 67). Type: [Surinam] 'Habitat in Guiana Batava, in arenosis prope Mariepaston', s.d., *Kegel* s.n. (lectotype GOET 008252 [photo], selected here).
- Aulomyrcia obtusa* var. *panicularis* O. Berg (1855: 67). Type: [Surinam] 'Habitat in Guiana Batava, in arenosis prope Mariepaston', s.d., *Kegel* s.n. (lectotype GOET 008251 [photo], selected here).
- Aulomyrcia obtusa* var. *pauciflora* O. Berg (1855: 67). Type: [Surinam] 'Habitat in Guiana Batava, in arenosis prope Mariepaston', s.d., *Kegel* s.n. (lectotype GOET 008249 [photo], selected here). **NOTES.** Berg created five varieties when transferring *Myrcia*

obtusa to *Aulomyrcia*. For *Aulomyrcia obtusa* var. *tenuifolia*, *A. obtusa* var. *pauciflora*, *A. obtusa* var. *panicularis* and *A. obtusa* var. *longipes* he cited *Kegel* collections in 'hb. Kegel.', now at GOET (Stafleu & Cowan 1979). The types of these varieties are recognisable in GOET through Berg's handwriting on the labels. Berg used the holotype of the basionym *Myrcia obtusa* (*Kegel* 1308) as type of *A. obtusa* var. *tenuifolia*; this therefore is the typical variety. There are no collection numbers on the other sheets and they differ slightly in their morphology. Each specimen bearing Berg's identification matches the protologue closely and is selected as lectotype of the respective varieties.

Aulomyrcia angustifolia O. Berg (in Martius *et al.* 1857: 135). *Myrcia angustifolia* (O. Berg) Nied. (Niedenzu in Engler & Prantl 1893: 76), non Glaz. (Glaziou 1908: 210) **nom. nud.** Type: [Brazil, Minas Gerais] 'Habitat ad montes Serra do Lenheiro prov. Minarum prope S. João del Rey', s.d., *Sellow* s.n. (holotype B†; lectotype K 000342611, selected here; isoelectotypes BR 0000005236305, LE 00007021 [photo], P 00161484, P 00161485, W 0033192).

Aulomyrcia biformis O. Berg (in Martius *et al.* 1857: 141) **synon. nov.** Type: [Brazil, Minas Gerais] 'Habitat in montibus Serra de Itambé prov. Minarum', s.d., *Pohl* s.n. (holotype BR [no barcode]). **NOTES.** *Aulomyrcia biformis* is an unplaced name in *Myrcia* based on a single collection from the Brazilian state of Minas Gerais. The author suggested similarities to *A. vacciniifolia*, previously synonymised under *Myrcia guianensis*. Analysis of the type and protologue shows that *A. biformis* fits into the morphological variation of *M. guianensis* and the synonymisation is here proposed.

Aulomyrcia bimarginata O. Berg (in Martius *et al.* 1857: 115) **synon. nov.** Type: [Brazil, Minas Gerais] 'Habitat ad Piedade prov. Minarum', s.d., *Pohl* 1031 (lectotype W 0032578, selected here; isoelectotypes F 0064684 [photo], K 000342630, K 000342631, W 0032579). **NOTES.** *Aulomyrcia bimarginata* is another unplaced name based on a single collection and recognised mainly by the two marginal veins instead of the usual single one in species of the Guianensis clade. Despite this, branches, leaves, inflorescences and flowers match the morphological variation of *Myrcia guianensis*. The type of *A. bimarginata* is from Minas Gerais, Brazil, where many forms of *M. guianensis* occur. We have not found further material with the features of *A. bimarginata*. The duplicate marginal vein appears simply to add to the huge morphological foliar plasticity of *M. guianensis*.

Aulomyrcia cassinioides var. *glabrata* O. Berg (in Martius *et al.* 1857: 129). Type: [Brazil, Minas Gerais] 'Habitat ad flumen Rio S. Francisci prov. Minarum',

s.d., *Martius* s.n. (lectotype M 0136770 [photo], selected here; isoelectotype M 0136769 [photo]).

Aulomyrcia clauseniana O. Berg (in Martius *et al.* 1857: 118) **synon. nov.** Type: [Brazil] 'Rio de Janeiro, in M. Serra de Tinguá', s.d., *Schott* 1032 (lectotype W 0032558, selected here; isoelectotypes F 0064701 [photo], K 000342685, K 000342686, W 0032557).

NOTES. *Aulomyrcia clauseniana* is based on *Schott* 1032 from Rio de Janeiro and *Claussen* 532 from Minas Gerais, Brazil. The leaves and inflorescences of the types are very similar to other names from the same geographical region already synonymised under *Myrcia guianensis*, such as *M. fastigiata*. Again, the characters used to distinguish *A. clauseniana* fit easily into the circumscription of *M. guianensis*.

Aulomyrcia decrescens O. Berg (in Martius *et al.* 1857: 135). *Myrcia decrescens* (O. Berg) Mattos (2008: 4). Type: [Brazil, Minas Gerais] 'Habitat ad Rio Preto et Caldas do Frey Raynaldo prov. Minarum', s.d., *Pohl* 2003 (lectotype W 0032618, selected here; isoelectotype F 0064706 [photo], W 0032617).

Aulomyrcia fragilis O. Berg (in Martius *et al.* 1857: 117). Type: [Brazil, Bahia] 'Habitat ad urbem Jacobina prov. Bahiensis', s.d., *Blanchet* 3587 (lectotype LE 00007063 [photo], selected here; isoelectotypes BM 000953617, BM 000953618, BR 0000005236633, F 0064713 [photo], G 00222301, K 000018553, MICH 1109833 [photo], NY 00386663 [photo], NY 00386664 [photo], P 00161339, P 00163086, P 00163087, P 00163088, P 00163089, P 00697224, U 0005129, W 0032595, W 0032596).

Aulomyrcia gardneriana O. Berg (in Martius *et al.* 1857: 129), non *Myrcia gardneriana* O. Berg (in Martius *et al.* 1857: 184). *Aulomyrcia gardneriana* var. *virescens* O. Berg (in Martius *et al.* 1857: 130). *Myrcia renatoana* (O. Berg) Mattos (1966: 62). Type: [Brazil] 'Habitat in provinciis Ceará et Piauhy', s.d., *Gardner* 1625 (lectotype W 0032530, selected here; isoelectotypes BM 001191669, BR 0000005269976, F 0064718 [photo], F 0064719 [photo], G 00222415, GH 00071095 [photo], K 000018492, K 000018493, MICH 1109831 [photo], NY 00386666 [photo], P 00163080, P 00163081, S 05-2437 [photo], W 1889-0116299).

Aulomyrcia gardneriana var. *caerulescens* O. Berg (in Martius *et al.* 1857: 130). Type: [Brazil] 'Habitat in provinciis Ceará et Piauhy', s.d., *Gardner* 1621 (lectotype W 0032529, selected here; isoelectotypes F 0064714 [photo], F 0064715 [photo], G 00222440, G 00222441, GH 00071094 [photo], NY 00386665 [photo], P 00163077, P 00163078, P 00163079, S 05-2436 [photo], US 00117778 [photo], W 1889-0116290).

Aulomyrcia glandulosa O. Berg (in Martius *et al.* 1857: 139). *Aulomyrcia glandulosa* var. *elliptica* O. Berg (in Martius *et al.* 1857: 139). *Myrcia glandulosa* (O. Berg)

- Kiaersk. (Kiaerskou 1893: 83). Type: [Brazil, Minas Gerais] 'In Morro da Tapanhoacanga, in prov. Minarum', s.d., *Sellow* s.n. (lectotype K 000343097, selected here; isolectotypes LE 00007072 [photo], P 00161261).
- Aulomyrcia glandulosa* var. *longifolia* O. Berg (in Martius *et al.* 1857: 139). Type: [Brazil, Goiás] 'Montes Serras dos Montes Claros, in prov. Goyaz', s.d., *Pohl* 5764 (lectotype W 0032600, selected here).
- Aulomyrcia hepatica* O. Berg (in Martius *et al.* 1857: 132). *Myrcia hepatica* (O. Berg) Kiaersk. (Kiaerskou 1893: 86). Type: [Brazil, Minas Gerais] 'Habitat ad villam do Presidio de S. João Baptista prov. Minarum', 1837, *Pohl* 1074 (lectotype W 0032526, selected here; isolectotypes F 0064723 [photo], K 000343355, K 000343356, W 0032531).
- Aulomyrcia lingua* O. Berg (in Martius *et al.* 1857: 130). *Aulomyrcia lingua* var. *glabrata* O. Berg (in Martius *et al.* 1857: 130). Type: [Brazil, Minas Gerais] 'In campis ad Colonel Gerealdo in prov. Minarum', s.d., *Sellow* s.n. (holotype B†). Brazil, Minas Gerais, Jardim, 13 Nov. 1845, *Widgren* 795 (neotype BR [no barcode], selected here). **NOTES.** The apparently only gathering of the type of *Aulomyrcia lingua* was destroyed in B. The neotype selected, *Widgren* 795 in BR, presents Berg's identification on its label as *Aulomyrcia lingua* var. *rufa* but it is a good match for the typical variety *A. lingua* var. *glabrata* as the varieties are poorly distinguished.
- Aulomyrcia masoni* O. Berg (in Martius *et al.* 1857: 121). *Myrcia masoni* (O. Berg) N. Silveira (1985b: 1). Type: [Brazil, Mato Grosso] 'Habitat prope urbem Cuyabá in prov. Matto Grosso', s.d., *Manso & Lhotzki* 46 (holotype B†; lectotype HAL 0089700 [photo], selected here; isolectotype G 0022243).
- Aulomyrcia nigropunctata* O. Berg (in Martius *et al.* 1857: 116). *Myrcia nigropunctata* (O. Berg) N. Silveira (1985b: 1). Type: [Brazil] 'Habitat ad Rio de Janeiro prope Fazenda Lopez', s.d., *Pohl* 1029 (lectotype W 0032474, selected here; isolectotype W 0032473).
- Aulomyrcia obscura* O. Berg (in Martius *et al.* 1857: 132). *Myrcia obscura* (O. Berg) N. Silveira (1985a: 66). Type: [Brazil] 'In Brasilia meridionali', s.d., *Sellow* s.n. (holotype B†). Brazil, s.d., *Claussen* 163A (neotype BR [no barcode], selected here). **NOTES.** The type of *Aulomyrcia obscura* was destroyed in B and no duplicates have been found. The neotype selected, *Claussen* 163A, matches the protologue exactly.
- Aulomyrcia obtecta* O. Berg (in Martius *et al.* 1857: 117). *Myrcia obtecta* (O. Berg) Kiaersk. (Kiaerskou 1893: 89). Type: [Brazil, São Paulo] 'Habitat in campis et fruticetis ripariis prov. S. Pauli', s.d., *Sellow* s.n. (holotype B†; lectotype BR 0000005236961, selected here). **NOTES.** The holotype of *Aulomyrcia obtecta*, *Sellow* s.n., was destroyed in B. *Sellow*'s collections have been found in many other herbaria (BR, F, G, K, LE, P, W, U) identified as *A. obtecta* by Berg. However, they do not seem to be duplicates due to their morphological dissimilarities. The numbers on their labels, perhaps the herbarium numbers, are also mixed. The specimen deposited in BR is the best match for the protologue and is chosen as lectotype.
- Aulomyrcia plumbea* O. Berg (in Martius *et al.* 1857: 142). *Myrcia plumbea* (O. Berg) Mattos (2008: 4). Type: [Brazil] 'Habitat in Minas Geraes', s.d., *Pohl* 1085 (lectotype W 0037137, selected here; isolectotypes BR 0000005230518, F 0064752 [photo], K 000344063, K 000344064, W 0037138, W 0037139).
- Aulomyrcia pusilla* O. Berg (in Martius *et al.* 1857: 140). *Myrcia pusilla* (O. Berg) Mattos (2008: 2). Type: [Brazil, Minas Gerais] 'Habitat inter Rio Jequetahi et Munda Fonza (?) prov. Minarum', s.d., *Pohl* 1084 (lectotype W 0027991, selected here; isolectotypes F 0064759 [photo], K 000344083, W 0027990).
- Aulomyrcia rotundifolia* O. Berg (in Martius *et al.* 1857: 123). *Myrcia rotundifolia* (O. Berg) Kiaersk. (Kiaerskou 1893: 89) **synon. nov.** Type: [Brazil] 'Habitat in prov. Alagoas', s.d., *Gardner* 1300 (holotype W 0037124; isotypes K 000018589, OXF 00067826T). **NOTES.** The morphotype of *Aulomyrcia rotundifolia* is widely distributed in *restingas* from northeastern Brazil. In that region, this species is poorly distinguished from *Myrcia guianensis* based on the ovate to orbicular leaves in *A. rotundifolia* (vs generally elliptic in *M. guianensis*). Many individuals however, present both leaf-shapes and other differences between these species are barely perceptible. Previous works have informally treated *A. rotundifolia* under *M. guianensis* (Lourenço & Barbosa 2012; Proença *et al.* 2013).
- Aulomyrcia scrobiculata* O. Berg (in Martius *et al.* 1857: 137), non *Myrcia scrobiculata* O. Berg (1861: 668). Type: [Brazil] 'Habitat in campis prov. Rio Grande do Sul', s.d., *Sellow* 5297 (holotype B†; lectotype K 000344358 selected by Sobral *et al.* 2010). **NOTES.** Sobral *et al.* (2010) incorrectly indicated *Aulomyrcia scrobiculata* as basionym of *M. scrobiculata*. Berg described both species based on different types: *Sellow* s.n. from Rio Grande do Sul as *A. scrobiculata* and *Claussen* s.n. from Minas Gerais as *M. scrobiculata*. The descriptions of these species are completely different, indicating that they are not the same taxon. Although the type of *M. scrobiculata* has not been located, its description suggests that the species does not belong to the Guianensis clade (M. Sobral pers. comm.). As such, we maintain only *A. scrobiculata* in the synonymy list of *M. guianensis*.
- Aulomyrcia suffruticosa* O. Berg (in Martius *et al.* 1857: 136) **synon. nov.**, non *Myrcia suffruticosa* O. Berg (1857: 189). *Myrcia paracatuensis* Kiaersk. (Kiaerskou 1893: 99). Type: [Brazil, Goiás] 'Habitat ad montem Serras dos Cristaes in prov. Goyaz', s.d., *Pohl* 817 (holotype W 0040179). **NOTES.** Sobral *et al.* (2010) proposed

- Aulomyrcia suffruticosa* as synonym of *Myrcia parnahibensis* (O. Berg) Kiaersk., but the analysis of the type material suggested that the species are morphologically different. *A. suffruticosa* has longer petioles, raised adaxial midvein, larger buds and 3-locular ovaries. In turn, *M. parnahibensis* has shorter pinkish petioles, channelled adaxial midvein, delicate inflorescences and 2-locular ovaries, not 3-locular as indicated in its protologue (verified in the holotype in W). Moreover, molecular data show clearly that *M. parnahibensis* and other 2-locular species emerge out of the Guianensis clade (Lima *et al.* in prep.). There is no consistent difference between *A. suffruticosa* and the very variable *M. guianensis*, despite the tendency for narrower leaves in the former. Leaf width varies greatly along the distribution of *M. guianensis*; other species with narrow leaves (i.e. *A. angustifolia*, *A. cymosa*, *A. torta*) have already been synonymised under *M. guianensis*. *A. suffruticosa* is here added to that list.
- Aulomyrcia bracteata* O. Berg (in Martius *et al.* 1859: 554). *Myrcia didrichseniana* Kiaersk. (Kiaerskou 1893: 82). Type: [Brazil] ‘Habitat in collibus siccis prope S. Domingo, prov. Rio de Janeiro’, Feb. 1822, *Riedel* 749 (lectotype LE 00007028 [photo], selected here; isoelectotypes F 0093807 [photo], F 0093808 [photo], G 00222575, G 00222575, K 000342830, LE 00007029 [photo], LE 00007030 [photo], LE 00007031 [photo], M 0136777 [photo], P 00546179, P 00546180, S 05-2408 [photo], U 0005104, W 0033245).
- Aulomyrcia cymosa* O. Berg (in Martius *et al.* 1859: 552). *Myrcia cymosa* (O. Berg) Nied. (Niedenzu in Engler & Prantl 1893: 76), non (O. Berg) Nied. (Niedenzu in Engler & Prantl 1893: 76) **nom. illegit.** [= *Calyptromyrcia cymosa* O. Berg]. Type: [Brazil, Minas Gerais] ‘Habitat ad ripam rivulorum in montibus Serra da Lapa prov. Minarum’, Nov. 1824, *Riedel* 973 (lectotype LE 00007045 [photo], selected here; isoelectotypes F 0064705 [photo], G 00222529, GH 00071086 [photo], K 000342775, LE 00007046 [photo], LE 00007047 [photo], NY 00386658 [photo], P 00161293, P 00161294, P 00161295, U 0252956, W 0033251). **NOTES.** When transferring *Aulomyrcia* and *Calyptromyrcia* species to *Myrcia*, Niedenzu (1893) created the same name *Myrcia angustifolia* for both *Aulomyrcia angustifolia* and *Calyptromyrcia angustifolia*. This case of homonyms of equal priority was clearly explained and resolved by Nic Lughadha (1994) who accepted *Myrcia cymosa* (= *Aulomyrcia cymosa*) and rejected *M. cymosa* (= *Calyptromyrcia cymosa*) following the recommendations of the ICBN.
- Aulomyrcia desertorum* O. Berg (in Martius *et al.* 1859: 556). *Myrcia desertorum* (O. Berg) N. Silveira (1985b: 1). Type: [Brazil, Minas Gerais] ‘Habitat in deserto inter Alegres et Andrequecé prov. Minarum’, Sept. 1834, *Riedel* 2575 (lectotype LE 00007049 [photo], selected here; isoelectotypes G, LE 00007048 [photo]).
- Aulomyrcia jequitinhonhensis* var. *glauca* O. Berg (in Martius *et al.* 1859: 560). Type: [Brazil, Minas Gerais] ‘In campis siccis prope S. Luzia prov. Minarum’, Oct. 1824, *Riedel* s.n. (lectotype LE 0007077 [photo], selected here).
- Aulomyrcia maritima* O. Berg (in Martius *et al.* 1859: 553). Type: [Brazil] ‘Habitat in silvaticis arenosis maritimis prov. Rio de Janeiro’, Oct. 1832, *Riedel* 1019 (lectotype LE 00007096 [photo], selected here; isoelectotypes F 0064739 [photo], G, K 000344009, LE 00007097 [photo], P 00163100, P 00163101, U 0005132).
- Aulomyrcia obscura* var. *genuina* O. Berg (in Martius *et al.* 1859: 556). Type: [Brazil, Minas Gerais] ‘In silvis prope Barra do Jequitiba’, s.d., *Riedel* 828 (lectotype LE 00007105 [photo], selected here; isoelectotypes G, K 000343992, LE 00007106 [photo], P 00161180, P 00161181, U 0005128).
- Aulomyrcia obscura* var. *longipes* O. Berg (in Martius *et al.* 1859: 556). *Myrcia obscura* var. *longipes* (O. Berg) N. Silveira (1985a: 66). Type: [Brazil, Minas Gerais] ‘In collibus siccis umbrosis prope Caetitê prov. Minarum’, Oct. 1824, *Riedel* 617 (lectotype LE 00007008 [photo], selected here; isoelectotypes LE 00007007 [photo], LE 00007009 [photo], P 00161182).
- Aulomyrcia regeliana* O. Berg (in Martius *et al.* 1859: 557). *Aulomyrcia regeliana* var. *oppositifolia* O. Berg (in Martius *et al.* 1859: 557). *Myrcia camapuanensis* Mattos (2006: 2). Type: [Brazil] ‘Habitat in campis arenosis prope Camapuan prov. Mato Grosso’, Oct. 1826, *Riedel* 634 (lectotype LE [no barcode] [photo], selected here).
- Aulomyrcia regeliana* var. *sparsifolia* O. Berg (in Martius *et al.* 1859: 557). Type: [Brazil] ‘Habitat in campis arenosis prope Camapuan, prov. Mato Grosso’, Oct. 1826, *Riedel* 634 (lectotype LE [no barcode] [photo], selected here). **NOTES.** Berg based *Aulomyrcia regeliana* and its varieties on *Riedel* collections in LE. Two specimens of *Riedel* 634 that match *A. regeliana* were found in LE. These specimens bear Berg’s handwritten identification as *A. camapuanensis*, a name which was never published. One of the sheets bears the complete locality (‘in campis arenosis p. Camapuan’) and morphological notes (‘suff. erectus et procumbus. Fol. glabr. Florib. terminalib. albis’), reproduced exactly as in the protologue of the typical variety *A. regeliana* var. *oppositifolia*. This specimen was selected as lectotype of the latter variety. The second sheet bears only ‘Brasilia: Camapuan’ on its labels, but matches the description of *A. regeliana*

var. *sparsifolia* well; it is therefore designated as lectotype of this variety.

Aulomyrcia androsaemoides O. Berg (1861: 661). *Myrcia androsaemoides* (O. Berg) Krug & Urb. (Urban 1895: 579). Type: [French Guiana] 'Habitat in Insula Cayenne', s.d., Richard s.n. (lectotype P 00163123, selected here; isolectotype P 00163124).

Aulomyrcia buxizans O. Berg (1861: 664). Type: [British Guiana] 'Habitat in ripis inundatis fluvii Kourou Guyanae Gallicae', s.d., Richard 50 (lectotype P 00163121, selected here; isolectotypes F 0064691 [photo], F 0064692 [photo], P 00163122).

Myrcia cymosopaniculata Kiaersk. (Kiaerksou 1893: 90). Type: Brazil, Rio de Janeiro, Corcovado, 26 Sept. 1880, Glaziou 11986 (lectotype C 10015838, selected here; isolectotypes A 00071087 [photo], ASU 0019287 [photo], BM 000953626, BR 0000005239184, BR 0000005238866, C 10015839, F 0065473 [photo], F 0065474 [photo], G 00222570, K 000342776, K 000342777, LE [photo], P 00161287, P 00161288, P 00161289, R 000008994).

Myrcia fastigiata Kiaersk. (Kiaerksou 1893: 92). Type: Brazil, Rio de Janeiro, Alto Macahé, 22 Sept. 1888, Glaziou 17677 (lectotype C 10015842, selected here; isolectotypes C 10015843, F 0065483 [photo], F 0065484 [photo], F 0065508 [photo], G 00222407, LE 00007157 [photo], P 00161265, P 00161266).

Myrcia yungasensis Rusby (1893: 27). Type: Bolivia, Yungas, 1890, Bang 293 (lectotype NY 00405494 [photo], selected here; isolectotypes BM 001191677, BR 0000008551993, E 00433030 [photo], G 00222413, GH 00071139 [photo], K 000261049, M 0136973 [photo], MIN 1001840 [photo], NY 00405493 [photo], PH 00018867 [photo], US 00048596 [photo], US 00048597 [photo], WIS v0255104 [photo]). **NOTES.** Rusby did not cite a herbarium in the protologue of *Myrcia yungasensis*, however his types are mainly housed in NY and MICH (Stafleu & Cowan 1983). Two duplicates were found in NY, and the most representative is selected as lectotype.

Myrcia androsaemoides var. *parvifolia* Krug & Urb. (Urban 1895: 579). Type: [Trinidad and Tobago] Trinidad, in sylvis ad Caroni, Nov. 1883, Eggers & Rensch 1137 (lectotype P 00161252, selected here; isolectotypes P 00161251, P 05259079). **NOTES.** The authors of *Myrcia androsaemoides* var. *parvifolia* cited the syntypes Eggers & Rensch 1137 and Eggers & Toepffer 1096. Types of the flora of the West Indies studied by Krug and Urban were deposited in B (Stafleu & Cowan 1979) and destroyed. The most complete remaining duplicate is designated as lectotype.

Myrcia lehmannii Hieron. (Hieronymus 1895: 65) **synon. nov.** Type: [Colombia] Columbia: crescit in silvis camporum sabanas dictorum prope Frontino, civitatis Antioquia, alt. s.m. 1200 – 1700 m., s.d., Lehmann 7241 (lectotype K 000261046, selected

here; isolectotypes K 000330329, F 0065517 [photo], GH 00071106 [photo], S 05-2457 [photo], PH 00018864 [photo], US 00117758 [photo]). **NOTES.** Examination of the type and protologue of *Myrcia lehmannii* shows that it is a synonym of *M. guianensis*. The author compares *M. lehmannii* to *Aulomyrcia poeppigiana*, previously synonymised under *M. guianensis*, highlighting leaves with more glands and larger flowers of the former, characters that are very variable throughout the distribution of *M. guianensis*. *M. lehmannii* is from the Colombian Amazon and is particularly similar to collections of *M. guianensis* from there. Hieronymus' types were deposited in B (Stafleu & Cowan 1979) and subsequently destroyed during WW2. The duplicate in K bearing the author's handwriting is chosen as lectotype.

Calycorectes maracayuensis Barb. Rodr. (Barbosa Rodrigues in Chodat & Hassler 1907: 807) **nom. nud., synonym. nov.**

Myrcia divaricata Barb. Rodr. (Barbosa Rodrigues in Chodat & Hassler 1907: 803) **nom. nud., synonym. nov.**, non (Lam.) DC. (de Candolle 1828: 243) [= *Myrcia splendens* (Sw.) DC.], nec (O. Berg) Lemée (1954: 146) **nom. illegit.** [= *Myrcia rufipila* McVaugh].

Myrcia cochleata Barb. Rodr. (Barbosa Rodrigues in Chodat & Hassler 1907: 803) **nom. nud., synonym. nov.**

Myrcia daphnoides var. *nervosa* Glaz. (Glaziou 1908: 218) **nom. nud., synonym. nov.**

GENERAL NOTES. The following names also belong to the synonymy of *Myrcia guianensis*: *Myrtus pyrifolia* J. St-Hil. in Duhael., *Myrcia cassinioides* DC., *M. daphnoides* DC., *M. elaeodendra* DC., *M. pallens* DC., *M. schrankiana* DC., *M. spixiana* DC., *M. torta* DC., *M. obtusa* Schauer, *M. alternifolia* Miq., *M. surinamensis* Miq., *Aulomyrcia cuneata* O. Berg, *A. obtusa* var. *grandifolia* O. Berg, *A. roraimensis* O. Berg, *A. schomburgkiana* O. Berg, *A. alagoensis* O. Berg, *A. botrys* O. Berg, *A. emarginata* O. Berg, *A. jequitinhonhensis* O. Berg, *A. jequitinhonhensis* var. *grandifolia* O. Berg, *A. pallens* var. *ovata* O. Berg, *A. pallens* var. *subcordata* O. Berg, *Aulomyrcia scrobiculata* O. Berg, *A. vacciniifolia* O. Berg, *A. velhensis* O. Berg, *A. uaupensis* O. Berg, *M. roraimae* Oliv., *M. adpressepilosa* Kiaersk., *M. dermatophylla* Kiaersk., *M. diaphanosticta* Kiaersk., *M. fastigiata* var. *coriacea* Kiaersk., *M. rhabdoides* Kiaersk., *M. arimensis* Britton, *M. incisa* D. Legrand, *Myrcianthes terminalis* Mattos & D. Legrand, and *Myrcia stemmeriana* D. Legrand (BFG 2015; Govaerts *et al.* 2016).

Molecular data (Lima *et al.* in prep.) has demonstrated that all 2-locular species previously considered synonyms of *Myrcia guianensis* (BFG 2015; Govaerts *et al.* 2016) belong to *Myrcia* sect. *Aulomyrcia* (O. Berg) Griseb. That section corresponds to clade 9 of Lucas *et al.* (2011) and were treated as such (Lucas

et al. 2016). This is the case for *Myrcia dictyophylla* (O. Berg) Mattos & D. Legrand, *M. heringeriana* Mattos, *M. myrtillifolia* DC., *M. pallida* (O. Berg) N. Silveira, *M. rorida* (O. Berg) Kiaersk., *M. rubella* Cambess. and *M. taubatensis* Kiaersk.

BFG (2015) and Govaerts *et al.* (2016) treated *Myrcia collina* S. Moore, *M. corumbensis* Glaz. and *Myrciaria silveirana* D. Legrand as synonyms of *M. guianensis*, however, their protologues and types do not match the morphology of the Guianensis clade. The morphology of these species suggests *Myrcia collina* may instead be assigned to clade 5, while *M. corumbensis* and *Myrciaria silveirana* are assigned to clade 8 (Lucas *et al.* 2011).

4. *Myrcia hypericoides* Cambess. (Cambessèdes in Saint-Hilaire 1832: 317). *Aulomyrcia hypericoides* (Cambess.) O. Berg (1855: 62). Type: [Brazil, Minas Gerais] 'In campis prope Campo Alegre, in parte deserta occidentalique provinciae Minas Geraes', s.d., *Saint-Hilaire* 536 (lectotype P 00161434, selected here; isolectotypes F 0065498 [photo], P 00161435).

Aulomyrcia orthophylla O. Berg (in Martius *et al.* 1859: 549). *Myrcia orthophylla* (O. Berg) Kiaersk. (Kiaerskou 1893: 90). Type: [Brazil, Goiás] 'Habitat in campis editis graminosis siccis super Chapada de S. Marcos prov. Goyazensis', Aug. 1834, *Riedel* 2492 (lectotype LE 00007111 [photo], selected here; isolectotypes G 00222017, K 000344024, LE 00007112 [photo], LE 00007113 [photo], P 00161167, P 00161168, P 00161169, S 05-2470 [photo], U 0005134, W 0070602).

5. *Myrcia laricina* (O. Berg) Burret ex Luetzelb. (Luetzelburg 1926: 201). *Aulomyrcia laricina* O. Berg (in Martius *et al.* 1857: 61). Type: [Brazil, Piauí] 'Habitat in prov. Piauhý', Nov. 1939, *Gardner* 2875 (lectotype W 0032527, selected here; isolectotypes BM 000953606, F 0064735 [photo], G 00222234, GH 00071105 [photo], K 000001882, K 000001883, P 00163106, W 1889-0116275).

6. *Myrcia laxiflora* Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 319). *Aulomyrcia laxiflora* (Cambess.) O. Berg (in Martius *et al.* 1857: 114). *Aulomyrcia laxiflora* var. *angustifolia* O. Berg (in Martius *et al.* 1857: 114). Type: [Brazil] 'In sylvis primaevae ad ripas flumunis Parahyba in provincia Rio de Janeiro', s.d., *Saint-Hilaire* C-14 (lectotype P 00161412, selected here; isolectotypes F 0065516 [photo], MPU 010943 [photo], P 00161409, P 00161410, P 00161411). **NOTES.** Although Cambessèdes cited 'provincia Rio de Janeiro' in the protologue of *Myrcia laxiflora*, all duplicates of *Saint-Hilaire* C-14 bear 'province de Minas Geraes' on

their labels. Indeed, the precise collection locality was 'Rio Parahyba' (Paraíba do Sul River), at the border between the Brazilian states of Minas Gerais and Rio de Janeiro, which may have been misunderstood.

Calyptromyrcia costata O. Berg (in Martius *et al.* 1857: 56). *Myrcia batistana* Mattos (2009: 3). Type: [Brazil, Minas Gerais] 'Habitat ad Praesidio de S. João Baptista in montibus Serra do Mar in prov. Minas Geraes', s.d., *Sellow* s.n. (holotype B†; lectotype LE [no barcode] [photo], selected here).

Calyptromyrcia cymosa O. Berg (in Martius *et al.* 1857: 58) **synon. nov.** *Aulomyrcia cymosa* var. *major* O. Berg (in Martius *et al.* 1857: 58). *Myrcia cymosa* (O. Berg) Nied. (Niedenzu in Engler & Prantl 1893: 76) **nom. illegit.**, non (O. Berg) Nied. (Niedenzu in Engler & Prantl 1893: 76) [= *Aulomyrcia cymosa* O. Berg]. *Myrcianthes cymosa* (O. Berg) Mattos (2000: 1). Type: [Brazil, São Paulo] 'Habitat in prov. S. Pauli', s.d., *Sellow* s.n. (lectotype BR 0000005239191, selected here).

Calyptromyrcia cymosa var. *minor* O. Berg (in Martius *et al.* 1857: 58) **synon. nov.** Type: [Brazil, São Paulo] prov. S. Pauli, s.d., *Sellow* s.n. (lectotype K 000913130, selected here). **NOTES.** *Calyptromyrcia cymosa* was listed as synonym of *Myrcia guianensis* by BFG (2015), but our study indicates it to be a synonym of *M. laxiflora*. *Calyptromyrcia cymosa* and *M. laxiflora* share chartaceous leaves, few-flowered inflorescences, very short calyx lobes, almost indistinguishable in the buds, and hypanthium tearing slightly at anthesis. Their types are from the same vegetation in southeastern Brazil, where *Myrcia laxiflora* is very common. Berg did not cite a specific type for each variety. Materials identified as types of *C. cymosa* were located at BM, BR, F, G, K, P, U and W; however, they do not seem to be duplicates of the same gathering. The material selected as lectotype best matches the protologue and bears Berg's handwriting. The other sheets are not considered as isolectotypes. The homonym *Myrcia cymosa* of Niedenzu (1893) is discussed in the notes of *Myrcia guianensis* (*Aulomyrcia cymosa*) and by Nic Lughadha (1994).

GENERAL NOTES. The following names are also synonyms of *Myrcia laxiflora*: *Calyptromyrcia paniculata* O. Berg, *C. paniculata* var. *opaca* O. Berg, and *Myrcia lateriflora* Kiaersk. (BFG 2015; Govaerts *et al.* 2016). *Aulomyrcia laxiflora* var. *latifolia* is proposed as a synonym of *M. glabra* (see notes on *M. glabra* for further details).

7. *Myrcia nivea* Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 332). *Aulomyrcia nivea* (Cambess.) O. Berg (in Martius *et al.* 1857: 103). *Aulomyrcia nivea* var. *andromedaefolia* O. Berg (in Martius *et al.* 1857: 103).

Type: [Brazil, Minas Gerais] 'In dumetis vulgo Carrascas prope praedium vulgo Fazenda do Riberão in parte provinciae Minas Geraes dicta Minas Novas', s.d., *Saint-Hilaire* 1751 (lectotype P 00161393, selected here; isotypes F 0065535 [photo], MPU 010950 [photo], P 00161394, P 00161395).

Aulomyrcia nivea var. *rosmarinifolia* O. Berg (in Martius *et al.* 1857: 103). *Myrcia nivea* var. *rosmarinifolia* (O. Berg) Mattos (1975: 3). Type: Brazil, s.d., *Helmreich* s.n. (lectotype BR 0000005236992, selected here).

Myrcia cambessedesiana O. Berg (in Martius *et al.* 1857: 202). Type: [Brazil, Minas Gerais] 'Habitat inter Estrema vicum et Vieira do Mattos praedium in prov. Minarum', s.d., *Pohl* 1002 (lectotype W 0032624, selected here; islectotypes K 000262446, K 000262447, W 0032625).

Myrcia tomentosa Glaz. (Glaziou 1908: 213) **nom. nud.**, **synon. nov.**, non (Aubl.) DC. (de Candolle 1828: 245). **NOTES.** Analysis of the types showed no morphological difference between Glaziou's *Myrcia tomentosa* (Glaziou 21556) and *M. nivea*; the former name is therefore synonymised here.

8. *Myrcia obovata* (O. Berg) Nied. (Niedenzu in Engler & Prantl 1893: 761). *Aulomyrcia obovata* O. Berg (in Martius *et al.* 1857: 122). *Eugenia crassifolia* Miq. (Miquel 1846: 439) **nom. illegit.**, non DC. (de Candolle 1828: 266) [= *Siphoneugena crassifolia* (DC.) Proença & Sobral], nec Ant. Molina (1953: 169) **nom. illegit.** [= *Eugenia hondurensis* Ant. Molina], nec Viell. ex Brongn. & Gris (Viellard ex Brongniart & Gris 1865: 469) **nom. illegit.** [= *Eugenia brongniartiana* (Vieill. ex Brongn. & Gris) Guillaumin]. *Myrcia crassifolia* (Miq.) Kiaersk. (Kiaerskou 1893: 89). Type: [Brazil, Minas Gerais] 'Habitat in prov. Minarum', 1840, *Claussen* 1526 (lectotype U 0005127, selected here; islectotypes BM 001191660, MO 313632 [photo], P 00550998, W 0033297).

Aulomyrcia atrovirens O. Berg (in Martius *et al.* 1857: 121). Type: [Brazil, Minas Gerais] 'Habitat in prov. Minarum', s.d., *Pohl* 1060 (holotype B†, lectotype W 0032513, selected here; islectotypes BR 0000008551443, K 000342613).

Aulomyrcia pallens var. *petiolaris* O. Berg (in Martius *et al.* 1857: 123) **synon. nov.** Type: [Brazil, Minas Gerais] s.d., *Saint-Hilaire* s.n. (lectotype P 00163128, selected here; islectotypes P 00163126, P 00163127). **NOTES.** Berg made a mistake when citing *Laruotte* as collector of the type of *Aulomyrcia pallens* var. *petiolaris*. He described this variety based on the description and material cited by Cambessèdes (1832) as 'in provincia Minas Gerais. Ab indefesso Laruotte lecta', which is Saint-Hilaire's collection bearing a note made by Laruotte on its label. Berg probably did not see the collection, as it

is deposited in P. Morphological analysis indicates *A. pallens* var. *petiolaris* to be a synonym of *M. obovata*, unlike the other varieties that are synonyms of *M. guianensis*. *A. pallens* var. *petiolaris* presents glabrous obovate leaves with conspicuous glands and attenuate bases somewhat decurrent on the petiole. There is no substantial difference between the two taxa.

9. *Myrcia retusa* (O. Berg) Nied. (Niedenzu in Engler & Prantl 1893: 76). *Aulomyrcia retusa* O. Berg (in Martius *et al.* 1857: 142). Type: [Brazil, probably São Paulo] 'Habitat in campis ad Rio das Pedras prov. Minarum', s.d., *Sellow* s.n. (holotype B†; lectotype BR 0000005232475, selected here; islectotypes F 0064802 [photo], K 000344159, P 00161118, P 00161119, W 0032450).

Myrcia obcordata Mattos (1964: 1) **synon. nov.** Type: Brazil, São Paulo, Santo André, Paranapiacaba, 5 Dec. 1961, *Mattos* 10588 (holotype SP 001367; isotypes C, HAS n.v., RB 00542155, RB 00557165, SPF 00067432).

GENERAL NOTES. *Myrcia retusa* was treated as synonym of *M. guianensis* by BFG (2015) and Govaerts *et al.* (2016). These species can be easily distinguished by the consistently smaller leaves with retuse apex and inflorescences always reduced to three flowers in the former. *M. retusa* is limited to eastern São Paulo state, occurring in the forests or *campos* of the Serra do Mar. Berg wrongly cited 'prov. Minarum' when indicating the type of *M. retusa*. According to Sellow's itinerary (Urban 1906), the precise locality 'Rio das Pedras' is actually in 'prov. S. Paulo', the same region where *M. retusa* has frequently been collected. *M. obcordata* has identical morphology to *M. retusa*. Mattos described 2-locular ovaries in the protologue of *M. obcordata*. We have not checked the locularity of the type collection, but all other examined specimens present 3-locular ovaries, as does *M. retusa* and the other Guianensis clade species.

10. *Myrcia rufipes* DC. (de Candolle 1828: 247). *Aulomyrcia rufipes* (DC.) O. Berg (in Martius *et al.* 1857: 131). *Aulomyrcia rufipes* var. *bracteata* O. Berg (in Martius *et al.* 1857: 131). Type: [Brazil, Minas Gerais] 'In Brasiliae prov. Minarum', s.d., *Martius* s.n. (holotype M 0137031 [photo], isotype G-DC).

Myrcia campestris DC. (de Candolle 1828: 247) **synon. nov.** *Aulomyrcia campestris* (DC.) O. Berg (in Martius *et al.* 1857: 128). *Aulomyrcia campestris* var. *rufa* O. Berg (in Martius *et al.* 1857: 128). Type: [Brazil, Minas Gerais] 'in Brasiliae campis prov. Minarum', s.d., *Martius* s.n. (lectotype M 0136772 [photo], selected here;

- isolectotypes G-DC, M 0136771 [photo]). **NOTES.** *Myrcia campestris* and *Aulomyrcia campestris* var. *brunnea* (below) were listed as synonyms of *M. guianensis* by BFG (2015) and Govaerts *et al.* (2016) but the current study indicates them to be synonyms of *M. rufipes* as previously suggested by Kawasaki (1989). As *M. rufipes*, they have rufous trichomes on the branches, leaves, inflorescences and flowers. The leaves are coriaceous and strongly revolute, similar to some forms of *M. rufipes* (= *Aulomyrcia crassifolia*).
- Myrcia rimosa* Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 333) **synon. nov.** Type: [Brazil] 'In pascuis partis desertae occidentalisque provinciae Minas Geraes dictae Sertão', s.d., *Saint-Hilaire* s.n. (lectotype P 00798917, selected here; isolectotypes F 0065560 [photo], MPU 010961 [photo], P 00798918, P 00798919). **NOTES.** *Myrcia rimosa* is a poorly understood species with few specimens identified as such in herbaria. It has the characteristics cited above, although the leaves are more congested than usual for the species. As a result, *M. rimosa* may be recognised as *M. rufipes* and thus we propose the synonymy.
- Aulomyrcia campestris* var. *brunnea* O. Berg (in Martius *et al.* 1857: 128) **synon. nov.** Type: [Brazil, Minas Gerais] 'Ad Engenho do Mato in eadem prov. (Minarum)', s.d., *Pohl* 5769 (lectotype W 0032628, selected here; isolectotypes F 0064697 [photo], W 0032627).
- Aulomyrcia crassifolia* O. Berg (in Martius *et al.* 1857: 128), non *Myrcia crassifolia* Kiaersk. (Kiaerskou 1893: 89). *Myrcia irwinii* Mattos & D. Legrand (1975: 4). Type: [Brazil, Minas Gerais] 'Habitat inter Viera do Mattos et Calumbão prov. Minarum', 1837, *Pohl* 1075 (lectotype W 0032565, selected here; isolectotypes K 000343442, W 0032566).
- Aulomyrcia crenulata* O. Berg (in Martius *et al.* 1857: 141) **synon. nov.** *Aulomyrcia crenulata* var. *hirta* O. Berg in Martius (1857: 141). *Myrcia crenulata* (O. Berg) Mattos (2008: 3). Type: [Brazil] Brasilia, Minas Novas prope Rio de S. Francisco' (label), *Martius* s.n. (holotype M 0136756 [photo]).
- Aulomyrcia crenulata* var. *glabrata* O. Berg (in Martius *et al.* 1857: 141) **synon. nov.** Type: [Brazil, Minas Gerais] 'Inter Calumbão et Barreiros in prov. Minarum', s.d., *Pohl* 1086 (lectotype W 0033203, selected here; isolectotypes F 0064703 [photo]; K 000342744, K 000342745, W 0033203, W 0032567). **NOTES.** *Aulomyrcia crenulata* and its varieties were also listed as synonyms of *Myrcia guianensis* by BFG (2015) but they have the same pattern of indument and revolute leaves of *Myrcia rufipes*. The synonymy of the former into the latter is here proposed.
- Aulomyrcia rufipes* var. *grandiflora* O. Berg (in Martius *et al.* 1857: 131). *Myrcia rufipes* var. *grandiflora* Kiaersk. (Kiaerskou 1893: 95). *Aulomyrcia pilantha* var. *grandiflora* O. Berg (in Martius *et al.* 1859: 556). Type: [Brazil, Minas Gerais] 'Inter Arrayal Nossa Senhora da Piedade et Villa do Fanado v. Cidade de Minas Novas prov. Minarum', s.d., *Pohl* 1082 (lectotype W 0037119, selected here; isolectotypes K 000344312, K 000344313, W 0040186).
- Aulomyrcia rufipes* var. *latifolia* O. Berg (in Martius *et al.* 1857: 131). Type: [Brazil, Minas Gerais] 'In prov. Minarum', 1840, *Claussen* 308 (lectotype BR 0000005233212, selected here; isolectotype BM 001191666, G 00222039).
- Aulomyrcia ternifolia* O. Berg (in Martius *et al.* 1857: 134) **synon. nov.** Type: [Brazil, Minas Gerais] 'Habitat in prov. Minarum', July 1840, *Gardner* 4659 (lectotype W 0042738, selected here; isolectotypes BM 001191665, G 00222001, K 000344638, K 000344639, W 1889-0116251). **NOTES.** *Aulomyrcia ternifolia* is an unplaced name in *Myrcia* known only from the type collection. It has rufous trichomes throughout, verticillate leaves and short petioles, characters that place it within the variation of *Myrcia rufipes*.
- GENERAL NOTES.** The following names are also synonyms of *Myrcia rufipes*: *Aulomyrcia rufipes* var. *angustifolia* O. Berg, *A. rufipes* var. *dives* O. Berg, *A. pilantha* O. Berg, *A. pilantha* var. *longifolia* O. Berg, *A. pilantha* var. *latifolia* O. Berg (BFG 2015; Govaerts *et al.* 2016).
- 11. *Myrcia subalpestris* DC.** (de Candolle 1828: 250). *Aulomyrcia subalpestris* (DC.) O. Berg (1855: 73). Type: [Brazil, Minas Gerais] 'In Brasiliae prov. Minarum', s.d., *Martius* s.n. (holotype M 0137008 [photo], isotype G-DC).
- Aulomyrcia corymbiflora* O. Berg (1855: 127) **synon. nov.** Type: [Brazil] 'In monte vulgo Serra de Curumatahi in prov. Minarum', s.d., *Saint-Hilaire* 2031 (lectotype P 00161343, selected here; isolectotypes P 00161344, P 00161345). **NOTES.** BFG (2015) treated *A. corymbiflora* as synonym of *Myrcia vestita*, probably due to the dense hairs in the young leaves. Our study however, found *Aulomyrcia corymbiflora* morphologically indistinguishable from *Myrcia subalpestris*.
- Aulomyrcia subverticillaris* O. Berg (in Martius *et al.* 1857: 124) **synon. nov.** *Aulomyrcia subverticillaris* var. *incanescens* O. Berg (in Martius *et al.* 1857: 124). *Myrcia subverticillaris* (O. Berg) Kiaersk. (Kiaerskou 1893: 88). Type: [Brazil] Brasilia, s.d., *Sellow* s.n. (lectotype K 000344445, selected here).
- Aulomyrcia subverticillaris* var. *rufa* O. Berg (in Martius *et al.* 1857: 124) **synon. nov.** Type: [Brazil, Minas Gerais] 'aliisque locis ejusd. prov. [Minarum]', Sept. 1840, *Gardner* 4664 (lectotype W 0040181, selected here; isolectotypes BM 001191651, G 00227999, K 000344443, K 000344444, W 1889-0116271).
- Aulomyrcia subverticillaris* var. *angustifolia* O. Berg (in Martius *et al.* 1857: 124) **synon. nov.** Type: [Brazil, Minas Gerais] 'aliisque locis ejusd. prov. [Minarum]',

s.d., *Martius* 1232 (lectotype M 0137006 [photo], selected here; isolectotypes BM 001191652, BR 0000005233229, BR 0000005233557, BR 0000005232574, F 0064775 [photo], GH 00395030 [photo], HAL 0089803 [photo], K 000344449, M 0137007 [photo], NY 00386694 [photo], P 00161042, S 05-2523 [photo], W 0040174, W 1889-0341991).

NOTES. Comparison of the protologues and types of *Myrcia subalpestris* and *Aulomyrcia subverticillaris* and its varieties found the species to be morphologically indistinguishable. These species are shrubs or trees with leaves densely covered on the abaxial surface by brown or rufous hairs that turn grey and fall at maturity. Petioles are generally long and relatively thin, adaxial leaf venation is inconspicuous (at least in young leaves) and the ovaries are mostly glabrous. Berg listed several syntypes when describing the varieties of *A. subverticillaris* but did not specify which type corresponds to the respective variety. The types were recognisable through identification on the labels in Berg's hand. Materials that best match the protologues are selected as lectotypes.

Aulomyrcia bicudoensis O. Berg (in *Martius et al.* 1859: 557)

synon. nov. *Myrcia bicudoensis* (O. Berg) Mattos (2009: 4). Type: [Brazil] 'Habitat in desertis prope Bicudo prov. Mato Grosso' (protologue), prov. Minas [Gerais] (label), Nov. 1834, *Riedel* s.n. (lectotype LE 00007025 [photo], selected here; isolectotype LE 00007026 [photo]). **NOTES.** *Aulomyrcia bicudoensis* is morphologically indistinguishable from *M. subalpestris*, although BFG (2015) treated it as synonym of *M. vestita*. In the protologue of *A. bicudoensis*, Berg cited 'habitat ad desertis prope Bicudo prov. Mato Grosso' as the collection locality, but the herbarium labels bear 'p. Bicudo, prov. Minas [Gerais], Nov. 1834'. According to Urban (1906), Sellow visited Minas Gerais between 1833 and 1835 indicating a mistake by Berg. No information regarding the precise locality of 'Bicudo' was found. *M. subalpestris* is common in southwestern Minas Gerais, São Paulo and southeastern Mato Grosso do Sul.

Aulomyrcia daphnoides var. *ochracea* O. Berg (1861: 663)

synon. nov. Type: [Brazil, Minas Gerais] 'Habitat in campis prope Caldas prov. Minarum in Brasilia', 25 Sept. 1854, *Lindberg* 314 (holotype BR 0000013473792). **NOTES.** *Aulomyrcia daphnoides* var. *ochracea* shares the diagnostic features of *M. subalpestris*. *A. daphnoides* var. *ochracea* is quite distinct from its typical variety, which is a synonym of *M. guianensis*.

12. *Myrcia tortuosa* (O. Berg) N. Silveira (1985a: 67). *Aulomyrcia tortuosa* O. Berg (in *Martius et al.* 1859: 558). Type: [Brazil, Goiás] 'Habitat in campis editis super Chapada de S. Marcos prov. Goyazensis', Aug. 1834, *Riedel* 2497 (holotype LE n.v., isotypes F 0064777 [photo], G 00222008, P 00161056, P 00161057).

Aulomyrcia linguiformis O. Berg (in *Martius et al.* 1857: 125). *Myrcia linguiformis* (O. Berg) N. Silveira (1985a: 66). Type: [Brazil, Goiás] 'Habitat ad Porto Real in prov. Goyaz', s.d., *Pohl* 1065 (lectotype W 0032542, selected here; isolectotypes F 0064737 [photo], K 000343727, K 000343728, M 0136956 [photo], W 0032543).

Aulomyrcia pachyclada O. Berg (in *Martius et al.* 1857: 133).

Aulomyrcia pachyclada var. *spathulata* O. Berg (in *Martius et al.* 1857: 133). *Myrcia pachyclada* (O. Berg) N. Silveira (1985b: 2). *Myrcia pachyclada* var. *spathulata* (O. Berg) N. Silveira (1985b: 2). Type: [Brazil] 'In campis prope Itararé', s.d., *Sellow* s.n.; 'ad S. Ignacio prov. Paraná', s.d., *Sellow* s.n. (syntypes B†). Brazil, Mato Grosso do Sul, Três Lagoas, Faz. Floresta prop. Joaquim Queiros, 17 Sept. 1964, *Gomes Jr.* 2139 (neotype UB 6670, selected here). **NOTES.** The neotypification of *Myrcia pachyclada* is necessary since its syntypes were destroyed and no duplicates were found. The specimen selected as neotype was collected on the border between the states of São Paulo and Mato Grosso do Sul, Brazil, from where one of the syntypes was registered, and it is a good match for the protologue.

Aulomyrcia pachyclada var. *elliptica* O. Berg (in *Martius et al.*

1857: 134). Type: [Brazil, Goiás] 'Ad urbem Natividade, in regione boreali prov. Goyaz', s.d., *Pohl* 1019 (lectotype W 0037117, selected here; isolectotypes F 0064746 [photo], K 000344033, W 0037118).

GENERAL NOTES. *Aulomyrcia pachyclada* var. *prolifera* O. Berg is a further synonym of *Myrcia tortuosa* (Govaerts *et al.* 2016). BFG (2015) treated *M. tortuosa* as synonym of *M. vestita*. Nevertheless, these species are distinguished by the indument on the buds, absent or very sparse in the former and dense in the latter (Rosa 2015).

13. *Myrcia variabilis* DC. (de Candolle 1828: 254).

Myrcia variabilis var. *intermedia* DC. (de Candolle 1828: 254). *Aulomyrcia variabilis* (DC.) O. Berg (1855: 62). *Aulomyrcia variabilis* var. *intermedia* (DC.) O. Berg (in *Martius et al.* 1857: 106). Type: [Brazil, Minas Gerais] 'In Brasiliae prov. Minarum', s.d., *Martius* s.n. (lectotype M 0136979 [photo], selected here; isotype G-DC). *Myrcia variabilis* var. *ovalifolia* DC. (de Candolle 1828: 254) *Aulomyrcia variabilis* var. *ovalifolia* (DC.) O. Berg (in *Martius et al.* 1857: 106). Type: [Brazil, Minas Gerais] 'In Brasiliae prov. Minarum', s.d., *Martius* s.n. (lectotype M 0136981 [photo], selected here; isotype G-DC).

Myrcia variabilis var. *nummularia* DC. (de Candolle 1828: 254). *Aulomyrcia variabilis* var. *nummularia* (DC.) O. Berg (in *Martius et al.* 1857: 106). Type: [Brazil, Minas Gerais] 'In Brasiliae prov. Minarum', s.d., *Martius* s.n. (lectotype M 0136983 [photo], selected here; isotype G-DC). **NOTES.** De Candolle

described *Myrcia variabilis* and its varieties based on Martius' collections. Of the *Martius* s.n. specimens of this species in M, only one bears de Candolle's identification; this sheet is therefore selected as lectotype of the typical variety. Other materials, named as *M. variabilis* var. *ovalifolia* and *M. variabilis* var. *nummularia*, match the protologues perfectly and are selected as lectotypes of the respective varieties.

Myrcia dealbata DC. (de Candolle 1828: 254) **synon. nov.** *Aulomyrcia dealbata* (DC.) O. Berg (in Martius *et al.* 1857: 102). *Aulomyrcia dealbata* var. *glaucescens* O. Berg (in Martius *et al.* 1857: 102). Type: [Brazil, Minas Gerais] 'In Brasiliae prov. Minas-Geraes', s.d., *Martius* s.n. (holotype M 0136877 [photo], isotype G-DC). **NOTES.** The type collection of *M. dealbata* is recognisable as *M. variabilis*, in particular sharing compressed glabrous branches, cordate, glabrous leaves with well-marked venation on both sides and calyx lobes pubescent internally. *M. dealbata* has generally smaller dimensions than *M. variabilis* but is still acceptable under the morphological variation of the latter. Since they were described at the same time, we choose to maintain the more frequently used name *M. variabilis*.

Myrcia cordata Cambess. (Cambessèdes in Saint-Hilaire *et al.* 1832: 330). Type: [Brazil, Goiás] 'In campis petrosis prope tuguria vulgo Sitio do Ribeirão in parte australi provinciae Goyaz', s.d., *Saint-Hilaire* C1-907 (lectotype P 0161453, selected here; isoelectotypes F 0065466 [photo], MPU 011013 [photo], P 0161453, P 0161455).

Aulomyrcia amethystina O. Berg (in Martius *et al.* 1857: 108) **synon. nov.** *Aulomyrcia amethystina* var. *pulchra* O. Berg (in Martius *et al.* 1857: 108). *Myrcia amethystina* (O. Berg) Kiaersk. (Kiaerskou 1893: 90). *Myrcia amethystina* var. *pulchra* (O. Berg) Kiaersk. (Kiaerskou 1893: 90). Type: [Brazil, Minas Gerais] 'Ad praedium Olho-d'Agua prope vicum Contendas in desertis prov. Minarum', s.d., *Sellow* s.n. (holotype B†; lectotype LE 00007020 [photo], selected here; isoelectotypes BR 000000523115, K 000342602).

Aulomyrcia amethystina var. *dealbata* O. Berg (in Martius *et al.* 1857: 108) **synon. nov.** *Myrcia amethystina* var. *dealbata* (O. Berg) Kiaersk. (Kiaerskou 1893: 90). Type: [Brazil, Minas Gerais] 'Ad villam S. João d'El Rey prov. ejusdem [Minarum]' s.d., *Pohl* 1073 (lectotype W 0033191, selected here; isoelectotypes BR 000000530402, K 000342606, K 000342607).

Aulomyrcia intermedia O. Berg (in Martius *et al.* 1857: 107) **synon. nov.** *Myrcia intermedia* (O. Berg) Kiaersk. (Kiaerskou 1893: 90). Type: [Brazil, Goiás] 'Habitat ad Formiga Oliveira et Rio de S. Francisci et Parnahyba in prov. Goyaz', 1837, *Pohl* 1030 (lectotype W 0032482, selected here; isoelectotypes

BR 000005280643, F 0064727 [photo], K 000343436, K 000343437, W 0033014).

Aulomyrcia dealbata var. *pallida* O. Berg (in Martius *et al.* 1857: 103) **synon. nov.** Type: [Brazil, Minas Gerais] 'In parte ejusdem provinciae, dicta Minas Novas', s.d., *Martius* s.n. (holotype M 0136876 [photo]).

Aulomyrcia ovalis O. Berg (in Martius *et al.* 1857: 107). *Myrcia ovalis* (O. Berg) N. Silveira (1985b: 2). Type: [Brazil, Minas Gerais] 'Habitat in prov. Minarum', 1840, *Claussen* 529 (lectotype BR 0000005304684, selected here).

Aulomyrcia trifolia O. Berg (in Martius *et al.* 1857: 107) **synon. nov.** Type: [Brazil, Minas Gerais] 'Habitat ad Pompeo in parte occidentali prov. Minas Geraes', s.d., *Sellow* s.n. (lectotype BR 0000005304370, selected here). **NOTES.** *Aulomyrcia amethystina*, *A. intermedia*, *A. ovalis* and *A. trifolia* are poorly delimited species grouped together in Berg's treatment (1857) and characterised by short petioles, glabrous to slightly puberulous branches and leaves, blades with well-marked venation and conspicuous glands on both sides, delicate inflorescences with thin peduncles and calyx lobes pubescent within. This morphotype, although not presenting a markedly cordate leaf-base, easily fits within the variation of *M. variabilis*. Kiaerskou (1893) suggested *A. amethystina* and *A. intermedia* as possible varieties of *M. variabilis*. BFG (2015) treat *A. amethystina* and *A. intermedia* as synonyms of *M. guianensis*, but the characters described above distinguish the former two species from the latter.

GENERAL NOTES. *Aulomyrcia variabilis* var. *suffruticosa* O. Berg is a further synonym of *Myrcia variabilis* (BFG 2015; Govaerts *et al.* 2016).

14. *Myrcia vestita* DC. (de Candolle 1828: 248). *Aulomyrcia vestita* (DC.) O. Berg (in Martius *et al.* 1859: 127). *Aulomyrcia vestita* var. *parviflora* O. Berg (in Martius *et al.* 1857: 127). *Myrcia vestita* var. *parviflora* (O. Berg) Kiaersk. (Kiaerskou 1893: 97). Type: [Brazil, Minas Gerais] 'In campis editis ferruginosis prov. Minarum Brasiliae', s.d., *Martius* s.n. (holotype M 0136975 [photo]; isotype G-DC).

Aulomyrcia thyrsoflora O. Berg (1855: 74). *Aulomyrcia thyrsoflora* var. *genuina* O. Berg (in Martius *et al.* 1857: 126). *Myrcia thyrsoflora* (O. Berg) Mattos (2008: 4). Type: [Brazil] 'Habitat in provincia Minas Geraes' (protologue); 'ad Fazenda Bom Retiro' (label), s.d., *Pohl* 1049 (lectotype W 0032442, selected here; isoelectotypes BM 001191658, K 000344846, K 000344847).

Aulomyrcia thyrsoflora var. *laterifolia* O. Berg (in Martius *et al.* 1857: 126). Type: [Brazil] 'Ad Rancho de Francisco da Paula', s.d., *Pohl* 5761 (lectotype W 0032440, selected here).

Aulomyrcia thyrsoiflora var. *obtusifolia* (DC.) O. Berg (in Martius *et al.* 1857: 126). Type: [Brazil, Minas Gerais] ‘Prope pagum Chapada, in parte provinciae ejusdem dicta Distrito dos Diamantes’, s.d., Martius s.n. (lectotype M 0136974 [photo], selected here).

Aulomyrcia thyrsoiflora var. *petiolaris* O. Berg (in Martius *et al.* 1857: 126). Type: [Brazil, Minas Gerais] ‘In prov. Minarum’, s.d., [Sellow, crossed out] Pohl s.n. (holotype B†; lectotype W 0032441, selected here).

NOTES. We recognised and selected the respective lectotypes of *Aulomyrcia thyrsoiflora* and its varieties through the presence of identifications in Berg’s hand on the labels. Berg cited Sellow, deposited and destroyed at B (‘v. in hb. Berol.’), as type of *A. thyrsoiflora* var. *petiolaris*. Material in W was found bearing ‘Sellow’ crossed out and replaced by ‘Pohl’ in Berg’s handwriting. This material matches the original description, with the confusion likely due to a misunderstanding in the protologue; it has already been considered as type material (Garcia *et al.* 2015) and designated here as the lectotype.

Aulomyrcia vestita var. *grandifolia* O. Berg (in Martius *et al.* 1857: 127). *Myrcia vestita* var. *grandifolia* (O. Berg) Kiaersk. (Kiaerskou 1893: 97). Type: [Brazil, Minas Gerais] ‘In eadem provincia haud infrequens’, s.d., Saint-Hilaire 2354 (lectotype P 00161346, selected here; isotype P 00161347).

Aulomyrcia chapadensis O. Berg (in Martius *et al.* 1859: 554), non *Myrcia chapadensis* S. Moore (1895: 355). Type: [Brazil, Goiás] ‘Habitat in campis editis lapidosis supra planitiem altam Chapada de S. Marcos prov. Goyazensis’, Aug. 1834, Riedel 2498 (lectotype LE [no barcode] [photo], selected here; isotypes F 0064699 [photo], F 0064700 [photo], G 00301846, K 000342652, P 00161304, P 00161305).

Atomostigma mattogrossense Kuntze (1898: 76) **synon. nov.** Type: [Brazil, Mato Grosso] Mattogrosso, July 1892, Kuntze 880 (holotype NY 00418571 [photo]). **NOTES.** *Atomostigma* is a monospecific genus originally described in Rosaceae, but that is in fact Myrtaceae. We are grateful to D. Mabberley (pers. comm.) who kindly shared this information with us. Careful study of the protologue and the type image of *Atomostigma mattogrossense* show that this specimen is indistinguishable from *M. vestita*; it was collected in the Brazilian state of Mato Grosso, where *M. vestita* is very common.

Myrcia decaisneana Glaz. (Glaziou 1908: 221) **nom. nud., synonym. nov.** **NOTES.** *Myrcia decaisneana* is a nomen nudum created by Glaziou and its related material matches perfectly the morphology of the typical *M. vestita*.

GENERAL NOTES. *Myrcia vestita* var. *obtusifolia* DC. is a further synonym of *M. vestita* (BFG 2015; Govaerts *et al.* 2016).

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descriptiones, nec non observations circa quasdam plantas dudum cognitae. Pars 2. Impensis auctoris, excudebant Nicolaus Möller et filius, aulae regiae typographi, Hauniae.

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