



A synopsis and notes for *Baccharis* subgen. *Tarchonanthoides* (Asteraceae: Astereae)

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Abstract

Nomenclatural and taxonomic notes are provided as the result of a taxonomic revision of *Baccharis* subgen. *Tarchonanthoides*, currently underway. A list of accepted species within the subgenus, their synonyms, and a revised sectional classification are presented. Protologues and types of previously published names have been reviewed. Currently 21 species and 10 synonyms are recognized within the subgenus. Morphologically, the species of the subgenus are classified into four sections: *Canescentes* (9 spp.), *Coridifoliae* (8 spp.), *Curitybensis* (2 spp.), and *Tarchonanthoides* (2 spp.). A new combination and status is proposed to *B. coridifolia* subsp. *bicolor*, *B. uleana* is assigned to subgen. *Tarchonanthoides*, and lectotypes are designated for *B. artemisioides*, *B. curitybensis*, *B. erigeroides* var. *dusenii*, *B. gibertii*, *B. patens*, *B. psammophila* and *B. squarrosa*, most of them providing ‘second-step’ lectotypes.

Key words: Baccharidinae, Compositae, lectotypifications, nomenclature

Introduction

Baccharis Linnaeus (1753: 860; Asteraceae: Astereae) is a New World genus comprising between 338–400 species (Bremer 1994, Müller 2010). The genus is broadly characterized by the usually tufted indumentum of the leaves and stems, with fused trichomes that have only one adjoining basal cell, and the common occurrence of dioecy (Müller 2006). Heering (1904) published the first subgeneric classification of *Baccharis* including the subgenera *Baccharis*, *Molina* (Persoon 1807: 424) Heering (1904: 40), *Pteronioides* Heering (1904: 15), *Stephananthus* (Lehm.) Heering (1904: 39) and *Tarchonanthoides* Heering (1904: 26). The most recent proposal of a subgeneric classification of *Baccharis* was published by Müller (2006), who accepted four of the five subgenera proposed by Heering (1904), but recognized the subgenus *Stephananthus* as simply *incertae sedis*.

Müller (2006) considered *Baccharis* subgen. *Tarchonanthoides* as the most consistently circumscribed subgenus of *Baccharis*, being characterized by the corollas of the female florets with five papillose teeth, and by male florets with a style apex nearly fully cleft into lanceolate or ovate branches. Species of this subgenus occur from southeastern Brazil to western Bolivia and south to central and eastern Argentina, with the greatest diversity found in southeastern Brazil and Uruguay. A taxonomic revision and phylogenetic analysis of *Baccharis* subgen. *Tarchonanthoides* are currently being carried out by the authors. A study of protologues, along with other relevant bibliography, and a revision of herbarium material, including an examination of types, has allowed us to prepare a first checklist of the subgenus accompanied by notes clarifying its nomenclature and taxonomy.

Nomenclatural and taxonomic notes

A list of currently accepted species and their synonymy is presented below, under a sectional classification system, and seven lectotypifications are proposed. As a result of the revision of all the names previously published at specific or infraspecific ranks within *Baccharis* subgen. *Tarchonanthoides*, 21 species are here accepted, along with the proposition of a new combination and status and the recognition of 10 synonyms. Morphologically, the species of the subgenus are classified into four sections: *Canescentes* Giuliano (2005: 535) and *Coridifoliae* Giuliano (Giuliano & Freire 2011: 339) with nine and eight species each respectively, and *Curitybensis* Giuliano (2005: 536) and *Tarchonanthoides* (Heering) Cuatrecasas (1967: 89), comprising two species each. However, changes in the circumscription and composition of the sections may take place when the forthcoming systematic and molecular phylogenetic studies are completed.

Barroso (1976: 7) in the introduction to her study of the subtribe Baccharidinae in Brazil stated that one of the goals of her work was to typify the species studied. Throughout the work, she indicated lectotypes in different ways, sometimes calling them “holotype”, sometimes “type” and sometimes even without mentioning these words. In addition, the herbaria hosting the chosen specimens were only rarely clearly indicated. This made Barroso’s lectotypifications sometimes valid and sometimes invalid, and often difficult to interpret. More than once her choices proved necessary to be narrowed further to a single specimen. Following Art. 9.15 of the ICBN (McNeil et al. 2006), ‘second-step’ lectotypification is required to clarify and establish most of the Barroso’s lectotype choices for *Baccharis* subgen. *Tarchonanthoides*.

Baccharis* subgen. *Tarchonanthoides Heering (1904: 26) [as “Tarchonantoides”]. —Type: *Baccharis tarchonanthoides* DC.

I. *Baccharis* sect. *Canescentes* Giuliano (2005: 535). —Type: *Baccharis helichrysoides* DC.

1. *Baccharis gibertii* Baker (1882: 52). —Type: “ad Maldonado et Montevideo, ad ripas fluminis S. Lucia: Capt. King! Gibert n. 813! 814! Arechavaleta n. 4104! Cunningham!”. URUGUAY. Montevideo: Santa Lucia, 1867, ♀, *M. E. Gibert 814* (lectotype K, first-step lectotype designated by Barroso 1976: 63, second-step lectotype **designated here** (000222026, right hand branch in the top) photo!; isolectotype K (000222026, left hand branch at the bottom) photo!). —Remaining syntypes: URUGUAY. Maldonado: s.d., ♂, *P. P. King 63* (K (000222025) photo!). Montevideo: Santa Lucia, 1867, ♂, *M. E. Gibert 813* (K (000222027) photo!); Bañado de la Barra de Santa Lucia, November 1814, ♂ & ♀, *J. Arechavaleta 4104* (LP (006775)!, MVM!). *Cunningham* (not found).

For *Baccharis gibertii*, Barroso (1976) indicated the specimen *Gibert 814* as “holotype”. Here we propose the right hand branch at the top of the sheet (K000222026) as lectotype and consider the second branch at the base, under the same name and barcode number, as an isolectotype. The choice of one of these two branches is justified because the both branches of *Gibert 814* are mounted separately on the same sheet and are mixed with the specimens of *Gibert 813* and *King 63*. The branch chosen here as lectotype is clearly identified by the original label with the type locality, date and collecting number attached to it, and has more capitulescences and capitula than the other regarded as an isolectotype.

2. *Baccharis gnaphalioides* Sprengel (1826: 461). —Type: “Ad fl. magnum Amer. austr. Sello”. URUGUAY. s.d., ♂, *F. Sellow d585* (holotype P; isotypes GH (00247130; 00247131) photos!, K (00022190; 000221905) photos!).

Baccharis radicans de Candolle (1836: 416). —Type: “in Brasiliae prov. Rio-Grande. ... (v. s. in h. Mus. reg. Par. à Mus. imp. Bras. sub n. 906 miss.)”. BRAZIL. Rio Grande do Sul: s. d., ♂, *F. Sellow s.n.* = *M. I. B. 906* (holotype P (00755689) photo!; isotypes B† photo in F! (0BN037718), G-DC (00200458) photo!).

3. *Baccharis helichrysoides* de Candolle (1836: 415). —Type: "in Brasiliae prov. Rio-Grande et Sancti-Pauli. ... (v. s. ... in h. Mus. reg. Par. à Mus. imp. Bras. sub n. 811 et 492 miss.)". BRAZIL. Rio Grande do Sul: [between Piratini and Pelotas fide Malagarriga (1957)], 1824, ♀ & ♂, *F. Sellow d2013* = *M. I. B. 811* (lectotype P (00468143) photo!, designated by Malagarriga 1958: 284; isolectotypes: G-DC (00200392) photo!, K). —Remaining syntypes: BRAZIL. São Paulo, s. d., ♀, *F. Sellow s.n.* = *M. I. B. 492* (syntype P (00468144) photo!). BRAZIL. S.L., s. d., ♂ & ♀, *F. Sellow s.n.* (probable syntypes, fide Müller (2010), G (00222633; 00222634) photos!, GH (00247134) photo!, W).

Baccharis lanuginosa Gardner (1848: 82). —Type: "Dry bushy places between Villa do Principe and Cocaes". BRAZIL. Minas Gerais: [between Serro and Arraial dos Cocais, between 18th and 26th August 1840, fide Hind, pers. comm.], Sept. 1840, ♀, *G. Gardner 4900/1* (holotype BM (000756675) photo!).

Barroso (1976) only indicated *Sellow d2013* as "holotype" of *B. helichrysoides*, without citing any herbarium acronym. Although effectively a lectotypification, her choice was superseded owing to a previous lectotypification by Malagarriga (1957) based on the same material in P. The holotype of *B. lanuginosa* is stated as being from September 1840 on the type specimen sheet. However, Gardner (1848) wrote 'Aug. 1840' in the protologue and cited the collection as '4900,1'. In the 'Catalogue' of his collections, the entry of *B. lanuginosa* was clearly added relatively late when Gardner realized he had a 'new species' (Hind, pers. comm.).

4. *Baccharis leucocephala* Dusén (1910: 24). —Type: "Wächst in Gebüsch; bei Roça nova, den 24. Nov. 1903, (Nr. 2208), und bei Itapirusú, den 17. Nov. 1908". BRAZIL. Paraná: Piraquara, Roça Nova, 24 November 1903, ♀, *P. K. H. Dusén 2208* (lectotype S (10-22317) photo!, designated by Barroso 1976: 62; isolectotypes HBG, R! (37746, ♂)). —Remaining syntypes: BRAZIL. Paraná: Itaperuçu, 17 November 1908, ♂ & ♀, *P. K. H. Dusén 7169* (syntypes NY! (00162259), S (10-22319; 10-22321; 10-22323) photos!).

Barroso (1976) chose *Dusén 2208* at S as the "holotype" of *B. leucocephala*. This is the only case within *Baccharis* subgen. *Tarchonanthoides* where a second-step lectotypification is not required, since Barroso's choice is in total accordance with the ICBN rules (McNeil *et al.* 2006).

5. *Baccharis leucopappa* de Candolle (1836: 415). *Baccharis helichrysoides* var. *leucopappa* (DC.) Baker (1882: 51). —Type: "in prov. Rio-Grande Brasiliae. (h. Mus. imp. Bras. n. 330)". BRAZIL. Rio Grande do Sul: [between Encruzilhada do Sul and Caçapava do Sul fide Malagarriga (1957)], ♀, *F. Sellow 3111* = *M. I. B. 830* (holotype P (00755454) photo!; isotypes B (100093163) photo!, G-DC (00200391) photo!, P (00755455) photo!).

6. *Baccharis patens* Baker (1882: 52). —Type: "Habitat prope Montevideo: Sello n. 463! 729!"). URUGUAY. Montevideo: s. d., ♀, *F. Sellow d463* (lectotype K (000221906) photo! **designated here**; isolectotypes GH (00003969) photo!, NY! (0016229)). —Remaining syntypes: URUGUAY. Montevideo: s.d., ♀, *F. Sellow s.n.* (syntypes K (000222052) photo!), B† photo in F! (0BN015027)).

Baccharis squarrosa Baker (1882: 50), non Kunth (1818). —Type: "Habitat in Uruguay, in campis et rupestribus ad Maldonado: Capt. King!; prope Montevideo: Sello n. 2808! 2924!; prope Las Minas in fissuris rupium: Gibert n. 881!". URUGUAY. Lavalleja: Minas, April 1869, ♂, *M. E. Gibert 881* (lectotype K, first-step lectotype designated by Barroso 1976: 57, second-step lectotype **designated here** (K000222090, uppermost branch) photo!; isolectotype K (000222090, branches of the same collection at the bottom of the sheet) photo!). —Remaining syntypes: URUGUAY. Maldonado: 1826, ♀, *P. P. King 28* (K (000222088; 000222091) photos!). BRAZIL. Rio Grande do Sul: Porto Alegre, Morro da Polícia [fide Malagarriga (1957)], June 1825, ♀, *F. Sellow 2808* (syntype GH (00004002) photo!). *F. Sellow 2924* (not found).

Baccharis bakeri Heering (1904: 39). —Type: "Reineck & Czermak n. 106. Rio Grande do Sul. Belém Velho an bebuschten Hängen". BRAZIL. Rio Grande do Sul: Porto Alegre, Belém Velho, 12 September 1894, ♂ & ♀, *E. M. Reineck & J. Czermak n. 106* (holotype HBG 2 sheets; isotypes P (00509635) photo!, S (10-22206) photo!).

Barroso (1976) did not lectotypify *Baccharis patens*. We have designated *Sellow d463* in K (000221906) as the lectotype on the basis of its agreement with the protologue, because it bears more branches and capitula than the remaining isolectotypes, and because of more complete label data, showing clearly the collector and collecting number, when compared to the remaining syntypes. The locality on the label is "Brasilia", however the collection was made in what is now Uruguay, which was annexed by the former Brazilian Empire as the Cisplatina Province during the time when Friedrich Sellow travelled in the region (1822-1823). Barroso (1976) assigned the specimen *Gibert 881* in K as type material of *B. squarrosa*, however, without either using the words "type" or "holotype", and did not cite the remaining syntypes. We interpret this as a first-step inferential lectotypification and the uppermost branch of the same collection (K000222090) mentioned by Barroso (1976) is designated here as the second-step lectotype. The remaining branches under the same label and barcoding number are interpreted here as isolectotypes. Choosing just one of the branches is justified because the detached branches of *Gibert 881* are mounted on the same sheet with the syntype specimens of *King 28*, which are stored under two barcoding numbers (K000222088; K000222091), and three branches of the collection *Tweedie 1023* (K000222089), which are not types of *B. squarrosa*.

7. *Baccharis phyllicifolia* de Candolle (1836: 415) [as "phylicaefolia"]. —Type: "in Brasiliae prov. Sancti-Pauli. ... (v. s. in h. Mus. reg. Par. à Mus. imp. Bras. sub n. 491 miss.)". BRAZIL. São Paulo: s.d., ♂, *F. Sellow s.n. = M. I. B. 491* (holotype P (00755658) photo!; isotype G-DC (00200390) photo!).

8. *Baccharis psammophila* Malme (1933: 70). —Type: "Santa Catharina: Laguna 24/6 09 (n. 8425). Hab. in arena mobili". BRAZIL. Santa Catarina: Laguna, 24 June 1909, *P. K. H. Dusén 8425* (lectotype S (S-R-597, ♂) photo!, **designated here**). —Remaining syntype: BRAZIL. Santa Catarina: Laguna, 24 June 1909, *P. K. H. Dusén 8425* (S (0-22439, ♀) photo!).

Malme (1933) based his description of *B. psammophila* on the *Dusén 8425* collection in S. An examination of this collection demonstrated that effectively there are two syntypes under the same number housed in S, as they are not clearly labelled as two parts on different sheets for the same specimen. The single preparation comprising the staminate specimens of *Dusén 8425* (S-R-597) is here designated as lectotype as it is in agreement with the original description and bears the original collection label written in pencil. The female duplicates of *Dusén 8425* (S10-22439), which lack the original annotations other than the herbarium label and are mounted on another single sheet, is considered here as an isolectotype.

9. *Baccharis uleana* Malagarriga (1977: 139). —Type: "Strauch in den Sümpfen der Estive dos Pregos bei Tubarão". BRAZIL: Santa Catarina, Capivari de Baixo, Bahado da Estiva dos Pregos, November 1889, *E. Ule 1510* (holotype P (♀); isotype F! (1520199, ♂)).

Heering (1904) cited the collection *Ule 1510* as a voucher of *B. gibertii* in Santa Catarina State, southern Brazil. However, *B. gibertii* is restricted to Rio Grande do Sul State, southernmost Brazil, and Uruguay. Later, Malagarriga (1977) described *B. uleana* based on the same collection and indicating one specimen in P as holotype. Müller (2010) assigned *B. uleana* to *Baccharis* subgen. *Baccharis*, however he did not cite the voucher specimens seen. Malagarriga's holotype in P has not been found, however examination of a male isotype found at F, completely in agreement with the type locality and the protologue diagnosis, enables the recognition of this taxon as a distinct species belonging to subgenus *Tarchonanthoides*.

II. *Baccharis* sect. *Coridifoliae* Giuliano (2011: 339). —Type: *Baccharis coridifolia* DC.

10. *Baccharis albilanosa* Oliveira & Deble (2006: 4) [as "albolanosa"]. —Type: BRAZIL. Rio Grande do Sul: São Francisco de Assis, RS 241, estrada de chão entre São Francisco de Assis e Manoel Viana, em solo arenoso, 27 February 2006, L. P. Deble & A. S. de Oliveira 5109 (holotype MBM; isotypes CTES! (0013895, ♂ & ♀), HDCF, PACA, SI! (000815, ♂; 000816, ♀)).

11. *Baccharis artemisioides* Hooker & Arnott (1841: 41). —Type: "Between Rio de los Ehovillos and el Rio Quinto, province of San Luis. Dr Gillies (n. 185.) Salt Plains of Bahia Blanca, lat. 40°. in N. Patagonia, and in high and dry places of Cordova. Tweedie (n. 1126.)". ARGENTINA. San Luis: between Río Chorillos and Río Quinto, ♀, *J. Gillies 185* (lectotype K (000222002) photo!, **designated here**; isolectotype E! (00322911)). —Syntypes: ARGENTINA. Buenos Aires: Bahia Blanca, 40° S, s. d., ♀, *J. Tweedie s.n.* (syntypes E! (00322910), K (000222003) photo!). Córdoba: s. d., ♂, *J. Tweedie 1126* (syntype K (000222004) photo!).

Hooker & Arnott (1841) described *B. artemisioides* based on three collections cited in the protologue. All of them are located in K, agree with the protologue and are in good condition. We designate *Gillies 185* at K (000222002) as lectotype because it possesses more branches and capitula. An isolectotype, in good condition, is available in E (00322911).

12. *Baccharis bicolor* (Joch. Müll.) G. Heiden, *comb. et stat. nov.*

Basionym: *Baccharis coridifolia* subsp. *bicolor* Müller (2006: 276). —Type: BOLIVIA. Cochabamba: Prov. Ayopaya, Independencia 22 km hacia Kami, em dirección S, 3670 m, 29 November 1981, ♂ & ♀, *S. Beck 7467* (holotype JE (00005245) photo!; isotypes G, LPB, SI! (004229), US! (00901686), USZ).

Müller (2006) applied the infraspecific rank of subspecies to "taxa that are morphologically (nearly) always well separated and have distinct or scarcely overlapping distributions" and used varieties for "taxa in which the character states show frequent overlap and which are sympatric". In the current checklist, any taxon that can be distinguished from the others by morphological characters is considered a species and therefore a new combination and status is proposed. As pointed out by Müller (2006), *B. bicolor* can be distinguished from *B. coridifolia* by, amongst others, leaves and shoots with a persistent indumentum of filiform hairs and a pappus of female florets with less than 60 bristles. In contrast, *B. coridifolia* has longer and wider leaves and shoots without filiform hairs or with these only present on very young structures and then caduceus. *Baccharis coridifolia* has female florets with a pappus of more than 80 bristles. Both species do not overlap in geographic distribution, since *B. bicolor* is restricted to the Yungas of northeastern Bolivia (elevations between 2500–3500 m in the Departments of Cochabamba and La Paz) while *B. coridifolia* is widespread in southern South America, occurring from southwestern Bolivia (elevations between 1200–2700 m in the Departments of Chuquisaca, Tarija and Santa Cruz) to southeastern Brazil, south to central and eastern Argentina.

13. *Baccharis coridifolia* de Candolle (1836: 422). —Type: "in Brasiliae prov. Rio-Grande et fortè Sancti-Pauli. ... (v. s. in h. Mus. reg. Par. à Mus. imp. Bras. sub n. 810, 826, 837, 855 et fortè 510 miss.)". BRAZIL. Rio Grande do Sul: [between Herval and Piratini fide Malagarriga (1957)], February–March 1824, ♀, *F. Sellow d1893* = *M. I. B. 826* (lectotype P (00755558) photo!, first-step lectotype designated by Barroso 1976: 56, second-step lectotype designated by Müller 2006: 273; isolectotypes G-DC, R!). —Remaining syntypes: BRAZIL. Rio Grande do Sul: s.d., ♀, *F. Sellow d616* = *M. I. B. 810* (P (00755555) photo!); s. d., ♂, *F. Sellow s.n.* = *M. I. B. 837* (P (00755557) photo!); s. d., ♀, *F. Sellow d2067* = *M. I. B. 855* (P (00755556) photo!). São Paulo: s.d., ♂ & ♀, *F. Sellow s.n.* = *M. I. B. 510* (P (00755554) photo!).

Eupatorium montevidense Sprengel (1826: 417). —Type: URUGUAY. "Monte Video. Sello"; s.d., ♀, *F. Sellow s.n.* (holotype P (00755549) photo!).

Müller (2006) chose *Sellow d1893* (P00755558) as lectotype of *B. coridifolia*. However, Barroso (1976) previously designated the same collection as “holotype”, although without indicating the herbarium where this lectotype is housed. Yet, she stated that the duplicate at R is an isotype. The choice by Barroso is here considered as the first-step lectotypification, whereas Müller’s (2006) designation is a second-step lectotypification to accomplish the ICBN requirements (McNeil *et al.* 2006).

14. *Baccharis erigeroides* de Candolle (1836: 418). —Type: “in campis editis prov. Sancti-Pauli”. BRAZIL. São Paulo: Mogi das Cruzes, November 1833, ♀, *P. W. Lund 845* (holotype G-DC (00136722) 2 sheets photo!).

Baccharis puberula de Candolle (1836: 401). —Type: “in Brasiliae prov. Sancti-Pauli ... (v.s. ♀ in h. Mus. reg. Par. à Mus. imp. Bras. sub n. 515 miss.)”. BRAZIL. São Paulo: s.d., ♀, *F. Sellow s.n. = M. I. B. 515* (holotype P (00755577) photo!; isotype G-DC microfiche!).

Baccharis erigeroides var. *dusenii* Heering ex Dusén (1910: 23). —Type: “Gesammelt auf den Campos bei Capão grande am 18. Dez. 1903 (Nr. 2766), und bei Capivari am 21. Okt. 1908”. BRAZIL. Paraná: Ponta Grossa, Capão Grande, 18 December 1903, ♂, *P. K. H. Dusén 2766* (lectotype R!, first-step lectotype designated by Barroso 1976: 55, second-step lectotype **designated here**; isolectotype R!, S). —Syntypes: BRAZIL. Paraná: Jaguariaíva, Capivari, 21 October 1908, ♂, *P. K. H. Dusén s.n.* (syntypes A (00003941) photo!, E! (00346655), M (0031202) photo!, NY! (00162243)).

De Candolle (1836) described *B. erigeroides* based on *Lund s.n.* The specimen *Lund 845*, the only collection of this species at G-DC herbarium, agrees with the original data and description in the protologue and is composed of two sheets labelled as part 1 and 2 of the same specimen. These are stored under the same barcoding number (G00136722). So a lectotypification is not required in this situation. Concerning *Baccharis erigeroides* var. *dusenii*, Barroso (1976) cited the specimen *Dusén 2766* as a type with duplicates housed in R and S, without specifying which one is the lectotype. There are two duplicates of *Dusén 2766* stored in the same folder in R, but not labelled as the same specimen. Barroso’s (1976) indication of *Dusén 2766* is a first-step lectotypification. The designation here, of the preparation consisting of a branch with a fertile and a vegetative shoot along with another detached fertile shoot and the original label with Dusén’s handwriting, is the second-step lectotypification. The remaining duplicate at R, composed of three detached fertile branches, is considered an isolectotype; the duplicate in S could not be located. *Baccharis erigeroides* var. *dusenii* Heering ex Dusén is commonly cited as originally described by Heering, however, this taxon was recognized by Heering *in schedula* and was later validated by Dusén (1910).

15. *Baccharis ochracea* Sprengel (1826: 460). —Type: “Monte Video. Sello”. URUGUAY. S.d., ♂, *F. Sellow d477* (holotype P (00755681) photo!; isotypes GH (00247151) photo!, K (000221891) photo!, P (00755680) photo!).

Baccharis velutina de Candolle (1836: 415). —Types: “in Brasiliae prov. Rio-Grande. ... (v. s. in h. Mus. reg. Par. à Mus. imp. Bras. ♂ sub n. 995, ♀ sub 819 miss.)”. BRAZIL. Rio Grande do Sul: [between Herval and Piratini fide Malagarriga (1957)], February–March 1824, ♂, *F. Sellow d1978 = M. I. B. 995* (lectotype P (00755682) photo!, designated by Malagarriga 1958: 288; isolectotypes G-DC, K (222047) photo!, NY! (00162282), P (00755680) photo!). —Remaining syntypes: s.d., ♀, *Sellow s.n. = M. I. B. 819* (syntypes G-DC; P (00755679; 00755683) photos!).

16. *Baccharis scabrifolia* Heiden (2008: 6) [16 June 2008]. —Type: “Taimbesinho p. São Francisco de Paula”. BRAZIL. Rio Grande do Sul: Cambará do Sul, Itaimbezinho, 7 February 1941, ♂, *B. Rambo 4392* (holotype PACA!).

Baccharis multipaniculata Oliveira-Deble & Deble (2008: 18) [August 2008]. —Type: BRAZIL. Santa Catarina: Curitibanos, no campo, 900 m. s. m., 22 February 1962, ♀, *R. Reitz & R. M. Klein 12222* (holotype HBR!).

17. *Baccharis suberectifolia* Oliveira-Deble & Deble (2008: 18). —Type: BRAZIL. Paraná: Palmeira, Rod. BR-277, rio Papagaios, campo limpo, ereta, capítulos alvescentes, 11 February 1988, ♀, *G. Hatschbach* & *S. Ginzburg* 51875 (holotype MBM!; isotype US! (3112550)).

III. *Baccharis* sect. *Curitybenses* Giuliano (2005: 536). —Type: *Baccharis curitybensis* Heering ex Malme.

18. *Baccharis chionolaenoides* Falkenberg & Deble (2010: 64). —Type: BRAZIL. Santa Catarina: Urubici, extremo sul do topo do Morro da Igreja, pouco além da área cercada pelo CINDACTA, 6 December 1996, ♀, *D. B. Falkenberg* 8961 (holotype FLOR!; isotypes CTES, MBM, SI, UEC!).

19. *Baccharis curitybensis* Heering ex Malme (1933: 69). —Types: “Curityba 20/10 08 (n. 6906), Serrinha 14/10 09 (n. 8539). Hab. in campo. Ad eandem speciem pertinet Glaziou n. 7715 (in Serra da Bocaina civit. Sao Paulo lecta)”. BRAZIL. Paraná: Curitiba, 20 October 1908, ♂, *P. K. H. Dusén* 6906 (lectotype S (10-22254), first-step lectotype designated by Barroso 1976: 97, second-step lectotype **designated here** photo!; isolectotypes: F! (0049682F), G (00222589) photo!, GH (00003932) photo!, K (000221944) photo!, LD (1222629) photo!, MO! (797734), NY! (00162224), US! (00129284)). —Remaining syntypes: BRAZIL. Paraná: Balsa Nova; São Luiz do Purunã, Serrinha, 14 October 1909, ♂, *P. K. H. Dusén* 8539 (syntype S (10-22255) photo!). São Paulo: Serra da Bocaina, ♂, *A. F. M. Glaziou* 7715 (syntype S (S10-22253) photo!).

Barroso (1976) referred to the specimen *Dusén* 6906 as “holotype” of *B. curitybensis*, without indicating which duplicate she was referring to and in which herbarium it is located. Barroso’s choice was the first-step for lectotypification and the specimen *Dusén* 6906 at S (S10-22254) is here designated as lectotype in the second-step to accomplish the ICBN requirements (McNeil *et al.* 2006). This designation restricts and specifies Barroso’s (1976) choice and results in several isolectotypes for this name. The remaining syntypes don’t have known duplicates.

IV. *Baccharis* sect. *Tarchonanthoides* (Heering) Cuatrecasas (1967: 89). *Baccharis* subgen. *Tarchonanthoides* Heering (1904: 26) [as “Tarchonantoides”]. —Type: *Baccharis tarchonanthoides* DC.

20. *Baccharis lychnophora* Gardner (1848: 85). —Type: “Moist rocky places on the high mountains of the Diamond District”. BRAZIL. Minas Gerais: July 1840, ♂, *G. Gardner* 4898 (holotype BM (000554168) photo!; isotypes B† photo in F! (0BN015009, Macbride negative number 15009), BHCB! (000042), G (00222623) photo!, GH (00003953) photo!, K, NY! (00162263), P (00755476) photo!, W, US! (00129312)). *Baccharis tarchonanthoides* var. *integrifolia* Baker (1882: 50). —Syntypes: “in prov. S. Paulo: Sello n. 175; in Minas Geraës ad Itambé: Martius” (syntypes not looked for). (synonym fide Barroso (1976)).

Two collections were cited by Baker (1882) in the description of *Baccharis tarchonanthoides* var. *integrifolia*. Since none has been found so far, a lectotype cannot be designated here. The description provided in the protologue agrees with *B. lychnophora* and Barroso (1976) recognized this name as a synonym of this species.

21. *Baccharis tarchonanthoides* de Candolle (1836: 414). —Type: “in Brasiliae prov. Minarum General.”. BRAZIL. Minas Gerais: Mariana, 1833, ♂, *A. C. Vauthier* 275 (holotype G-DC (00200472) photo!; isotypes G (00169376) photo!, GH (00004012) photo!, K (000221895) photo!, P (00755763; 00755764), photos!, W) *Baccharis ibitensis* Toledo ex Handro (1953: 67). —Type: BRAZIL. São Paulo: Amparo, Monte Alegre, encosta do Pico da Serra Negra, 1200 m, 30 August 1943, ♀, *M. Kuhlmann* 1032 (holotype SP! (50262); isotype RB! (114847)).

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