

NEW SPECIES OF *BACCHARIS* (ASTERACEAE, ASTEREAE) FROM BRAZIL

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Summary: Oliveira-Deble, A. S. de & Deble, L. P. 2008. New species of *Baccharis* (Asteraceae, Astereae) from Brazil. *Bonplandia* 17(1): 13-24. ISSN: 0524-0476.

In a recent review of the genus *Baccharis* L. we recognized five new species: *Baccharis crassipappa* Deble & Oliveira-Deble, *B. inexpectata* Deble & Oliveira-Deble, *B. multipaniculata* Oliveira-Deble & Deble, *B. nassauvioides* Oliveira-Deble & Deble and *B. suberectifolia* Oliveira-Deble & Deble. All species are described and illustrated and delimitation with allied taxa is discussed.

Key words: *Baccharis*, taxonomy, new species, Asteraceae, Brazil.

Resumen: Oliveira-Deble, A. S. de & Deble, L. P. 2008. Nuevas especies de *Baccharis* (Asteraceae, Astereae) para Brasil. *Bonplandia* 17(1): 13-24. ISSN: 0524-0476.

En una revisión reciente del género *Baccharis* L. para Brasil, fueron reconocidas cinco especies nuevas: *Baccharis crassipappa* Deble & Oliveira-Deble, *B. inexpectata* Deble & Oliveira-Deble, *B. multipaniculata* Oliveira-Deble & Deble, *B. nassauvioides* Oliveira-Deble & Deble y *B. suberectifolia* Oliveira-Deble & Deble. Todas las especies son descritas, ilustradas y diferenciadas de los taxones relacionados.

Palabras clave: *Baccharis*, taxonomía, nuevas especies, Asteraceae, Brasil.

Introduction

The New World genus *Baccharis* L. comprises between 400 and 500 species, frequently dioecious or imperfectly dioecious, of perennial herbs, vines, subshrubs, shrubs, or small trees (Oliveira-Deble, 2008). In a recent check list for Brazil 146 species were accepted (Oliveira & al., 2006). Among the main diversity centers within the country

there are the grasslands and open forests of the southern Brazil as well as the highest elevations of the Brazilian Plateau, especially in the southeast and in part of northeast regions (Bahia). On the other hand, the lesser species frequency is observed in the middle west, northeast and north of Brazil. During a the review of the genus for Brazil we have recognized five new species that are here described and illustrated, and the delimitation with its nearest relatives is discussed.

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Results

1. *Baccharis crassipappa* Deble & Oliveira-Deble, *sp. nov.*

Fig. 1

Suffrutex 0,5 m altus; caulibus ramosus, adscendentibus erectisve. Folia linearia, anguste oblonga vel anguste oblanceolata, 15-50 mm longa, 1-2 mm lata, alterna (internodiis 1-5 mm longis), uninervata, sessilia, concolora, integra, glabrata vel pauci pilosa, apice leviter acuta ad rotundata, basi attenuata. Capitula (breviter) pedicellata, racemosa vel solitaria in axillis foliorum disposita. Capitula feminea campanulata, 4-4,5 mm alta et crassa; involucrium 3-4 mm altum, 4-4,5 mm crassum, 18-24-florum. Bracteis involucri 4-seriatis, leviter acutis, dorso brunneis, margine hyalinis; externis ovatis ad ovato-lanceolatis, 1,2-2 mm longis, 0,8-1,2 mm latis; mediis lanceolatis, 2,5-3 mm longis, 0,8-1 mm latis; internis lanceolatis, 2,8-3,3 mm longis, 0,7-0,9 mm latis. Flores feminei corolla tubulosa, 1,7-1,9 mm longa, apice 5-dentata. Stylo 2-2,2 mm longo; rami styli lanceolati, 0,4 mm longi. Pappus albus, multiseriatus, 2-2,2 mm longus; setis pappi 60-70. Achaenia sordescens, 10-costata, glabrata, obovata, 1-1,2 mm longa. Capitula mascula campanulata, 2,5-3,5 mm alta, 4-4,5 mm crassa; involucrium 2,5-3 mm altum, 3,5-4 mm crassum, 17-19-florum. Bracteis involucri 4-seriatis, leviter acutis, dorso brunneis, margine hyalinis; externis ovatis vel ovato-lanceolatis, 1,5-2 mm longis, 0,8-1 mm latis; mediis lanceolatis, 2-2,5 mm longis, 0,8-1 mm latis; internis anguste lanceolatis, 2-2,8 mm longis, 0,6-0,7 mm latis. Flores mascula corolla tubuloso campanulata, 2-2,5 mm longa, apice 5-lobata; lobulis lanceolatis, 0,6-0,8 mm longis. Antherae 0,6-0,8 mm longae. Stylus 2-2,3 mm longus; rami styli breves, connati. Pappus albus, uniseriatus, 1,8-2,2 mm longus; setis pappi 21-27.

Typus: Brazil. Minas Gerais: Joaquim Felício, Serra do Cabral, subarbusto de 50 cm, capitulo alvascento, margem do córrego encachoeirado, campo serrado, exemplar ♀, 10-IV-2004, G. Hatschbach, M. Hatschbach & O. S. Ribas 77696 (*holotypus* MBM).

Shrub 0.5 tall; branching erect-patent. Leaves linear, narrowly oblong to narrowly oblanceolate, 15-50 mm long, 1-2 mm wide, alternate, internodes 1-5 mm long, appearing uninervate, sessile, concolorous, margin entire, apex slightly acute to rounded, base narrowed; both leaf surfaces (and shoots) with tufted indument of flagellate hairs, usually covered by resin. Capitula (shortly) pedunculate, arranged in terminal racemes or solitary in the leaf axils; peduncles up to 25 mm long; bracts 0-2. Female capitula campanulate, 4-4.5 mm long and wide; flowers 18-24; involucre 3-4 mm long, 4-4.5 mm wide; involucre bracts in 4 series, apex slightly acute, darker in the distal third, margin hyaline; outer bracts ovate to ovate-lanceolate 1.2-2 mm long, 0.8-1.2 mm wide; median bracts lanceolate, 2.5-3 mm long, 0.8-1 mm wide; inner bracts lanceolate, 2.8-3.3 mm long, 0.7-0.9 mm wide. Female corolla tubular, 1.7-1.9 mm long, apically with 5 short teeth. Style slightly exceeding the corolla, 2-2.2 mm long; branches lanceolate, 0.4 mm long. Pappus white, in several series, 2-2.2 mm long; bristles 60-70. Achenes obovoid, 1-1.2 mm long, glabrous, brownish, 10-ribbed. Male capitula campanulate, 2.5-3.5 mm long, 4-4.5 mm wide; flowers 17-19; involucre 2.5-3 mm long, 3.5-4 mm wide; involucre bracts in 4 series, apex slightly acute, darker in the distal third, margin hyaline; outer bracts, ovate to ovate-lanceolate, 1.5-2 mm long, 0.8-1 mm wide; median bracts, lanceolate, 2-2.5 mm long, 0.8-1 mm wide; inner bracts, narrowly lanceolate, 2-2.8 mm long, 0.6-0.7 mm wide. Male corolla 2-2.5 mm long, apically with 5 lanceolate lobes, 0.6-0.8 mm long. Anthers 0.6-0.8 mm long. Style not or slightly exceeding the corolla, 2-2.3 mm long; style branches short, attached. Pappus white, uniseriate, 1.8-2.2 mm long; bristles 21-27.

Distribution and habitat: *Baccharis crassipappa* is known only from the type population located at the Serra do Cabral (Joaquim Felício), in north central of Minas Gerais (Brazil).

Obs.: *Baccharis crassipappa* is similar to

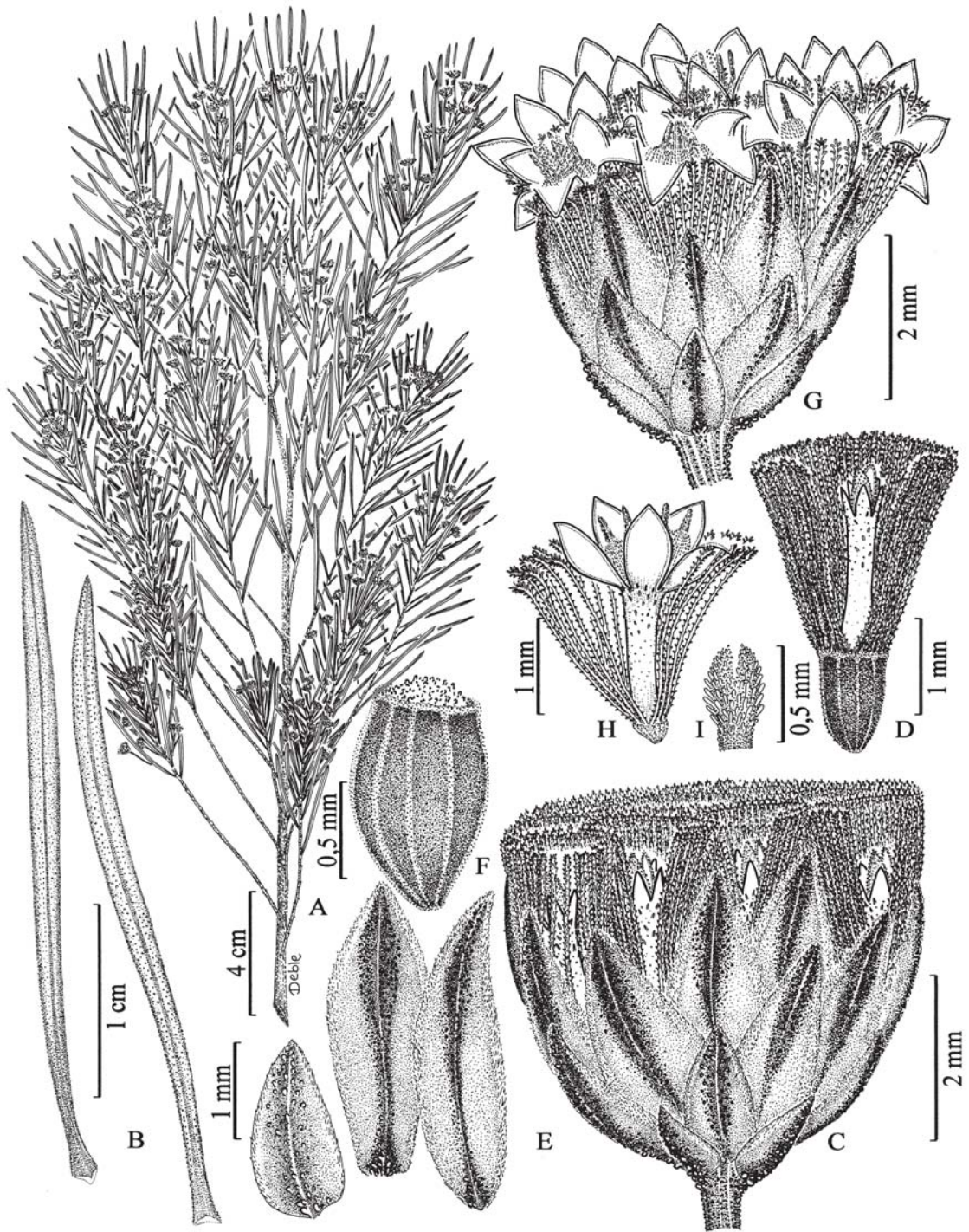


Fig. 1. *Baccharis crassipappa* Deble & Oliveira-Deble. A: male branch. B: leaves. C: female capitulum. D: female flower. E: female involucre bracts. F: achene. G: male capitulum. H: male flower. I: apex of style from male flower (A, B, G-I, Hatschbach & al. 77.699 paratypus MBM; C-F, Hatschbach & al. 77.696 holotypus MBM).

Baccharis myriciifolia DC., but differs by entire, 1-2 mm wide leaves (versus leaves frequently with 2-5 obtuse teeth, and 3-10 mm wide), as well as by thicker pappus bristles of female flowers.

Additional specimen examined. **BRAZIL. Minas Gerais:** Joaquim Felício, Serra do Cabral, subarbusto de 50 cm, capítulo alvascento, margem do córrego encachoeirado, campo serrado, exemplar ♂, 10-IV-2004, G. Hatschbach, M. Hatschbach & O. S. Ribas 77699 (MBM).

Etymology: The specific epithet refers to the thick pappus bristles.

2. *Baccharis inexpectata* Deble & Oliveira-Deble, sp. nov.

Fig. 2

Frutex ramosus, 0,5-2 m altus; caulibus adscendentibus erectisve, usque ad apice foliosus. Folia anguste oblonga vel obovata, 3-15 mm longa, 0,8-6 mm lata, alterna (internodiis 1-5 mm longis), 1-3-nervata, sessilia, concolora, integra vel utrinque 1-3-dentata, punctulato-glandulosa, apice obtusa vel rotunda, basi cuneata vel attenuata. Capitula sessilia vel breviter pedicelata in spicis foliorum disposita. Involucrum femineum cylindraceum, 4-5 mm altum, 0,8-1,5 mm crassum, 2-4-florum. Bracteis involucri 4-5-seriatis, leviter acutis, margine hyalinis; externis ovatis ad ovato lanceolatis, 0,8-2 mm longis, 0,5-0,8 mm latis; mediis ovato lanceolatis ad lanceolatis, 2,5-4 mm longis, 0,7-1 mm latis; intimis oblongis, 3,8-4,3 mm longis, 0,6-1 mm latis. Flores feminei corolla tubular-filiformia, 1,6-2,2 mm longa, apice dentata. Stylus 2-3,2 mm longus; rami styli lanceolati, 0,4-0,5 mm, longi exserti. Pappus albus, uniseriatus, 2,2-3 mm longus; setis pappi 45-50. Achaenia glabra, castanea, 10-12-costata, obovato-elliptica, 1-1,2 mm longa. Involucrum masculinarum anguste campanulatum, 3-4,5 mm altum, 1,2-2 mm crassum, 5-8-florum. Bracteis involucri 3-4-seriatis, acutis; externis ovatis, 1-2 mm longis, 0,6-0,8 mm latis; mediis ovato-lanceolatis, 2,5-3 mm longis, 1-1,2 mm latis; intimis ellipticis, 3,5-4 mm longis, 0,8-1 mm latis. Flores masculina corolla tubuloso campanulata, 2,8-3 mm longa, apice 5-

lobata; lobis lanceolatis, 0,8-1,1 mm longis. Antherae 0,8-1 mm. Stylus 3-3,2 mm longus; rami styli connati. Pappus albus, uniseriatus, 2-2,5 mm longus; setis pappi 18-22.

Typus: Brazil. Rio Grande do Sul: Rosário do Sul, Serra do Caverá, Cerro Grande, 30°11'49,3"S-55°08'10,4"W, população próximo ao topo, exemplar ♀, 01-V-2007, L. P. Deble & A. S. de Oliveira-Deble 9344 (*holotypus* MBM, *isotypi* CTES, SI).

Shrub 0.5-2 m tall; branching erect-patent or erect, glutinous. Leaves narrowly oblong to obovate, 3-15 mm long, 0.8-6 mm wide, alternate, appearing 1-3-nervate, sessile, glandular, concolorous, margin entire or with 1-3 short or long obtuse teeth, apex obtuse to rounded, base narrowed to cuneate, internodes 1-5 mm long. Capitula sessile or shortly pedunculate, in the leaf axils. Female capitula and involucre narrowly cylindrical, 4-5 mm long, 0.8-1.5 mm wide; flowers 2-4; involucre bracts in 4-5 series, apex slightly acute, margin hyaline; outer bracts, ovate to ovate-lanceolate 0.8-2 mm long, 0.5-0.8 mm wide; median bracts, ovate-lanceolate to lanceolate, 2.5-4 mm long, 0.7-1 mm wide; inner bracts, oblongs, 3.8-4.3 mm long, 0.6-1 mm wide. Female corolla tubular-filiform, 1.6-2.2 mm long, apically with 5 short teeth. Style exceeding the corolla, 2-3.2 mm long; branches lanceolate, 0.4-0.5 mm long. Pappus white, uniseriate, 2.2-3 mm long; bristles 45-50. Achenes obovoid-ellipsoid, 1-1.2 mm long, glabrous, brownish, 10-12-ribbed. Male capitula and involucre narrowly campanulate, 3-4.5 mm long, 1.2-2 mm wide; flowers 5-8; involucre bracts in 3-4 series, apex acute; outer bracts, ovate, 1-2 mm long, 0.6-0.8 mm wide; median bracts, ovate-lanceolate, 2.5-3 mm long, 1-1.2 mm wide; inner bracts, elliptic, 3.5-4 mm long, 0.8-1 mm wide. Male corolla 2.8-3 mm long, apically with 5 lanceolate lobes, 0.8-1.1 mm long. Anthers 0.8-1 mm long. Style not or slightly exceeding the corolla, 3-3.2 mm long; style branches short, attached. Pappus white, uniseriate, 2-2.5 mm long; bristles 18-22.

Distribution and habitat: *Baccharis*

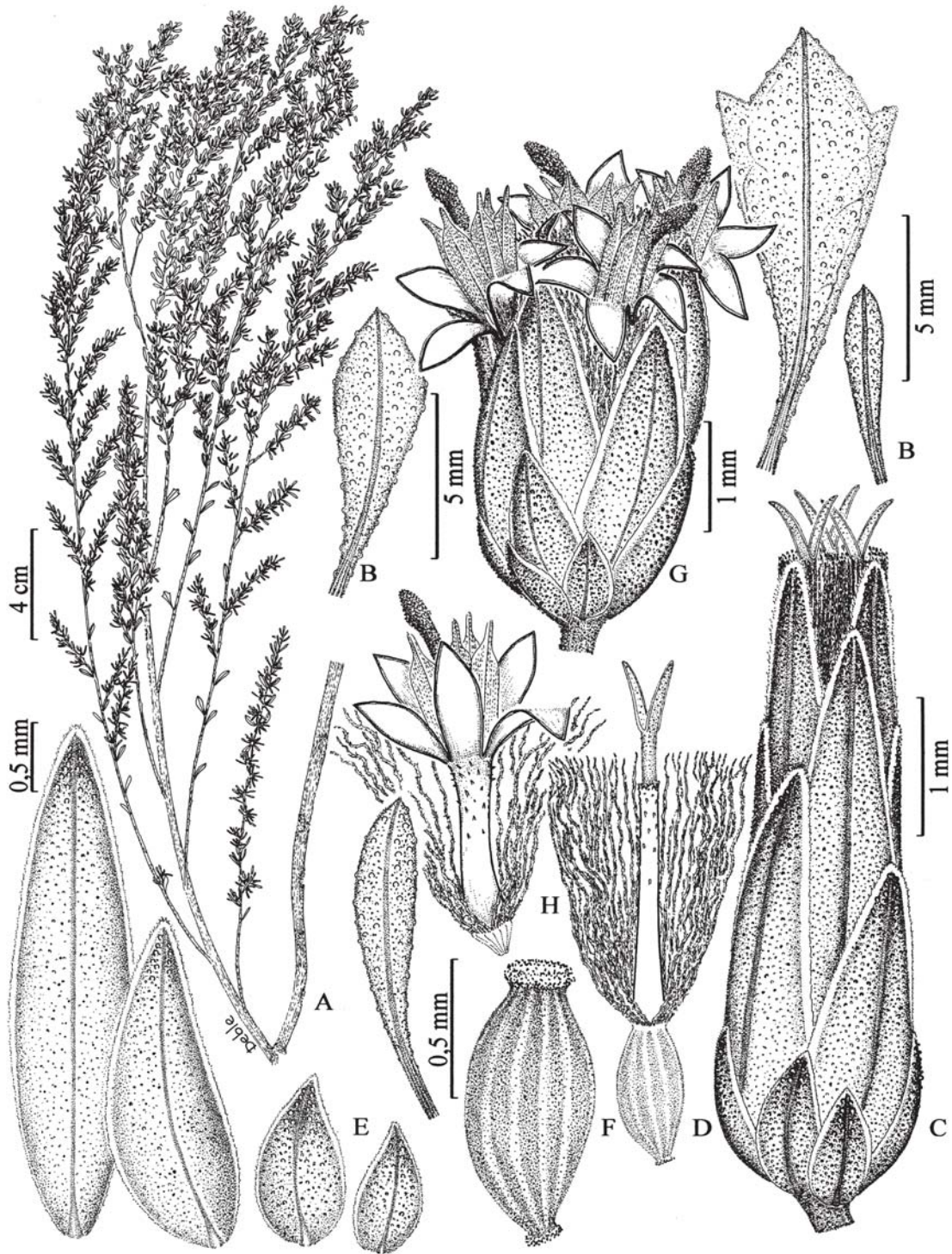


Fig. 2. *Baccharis inexpectata* Deble & Oliveira-Deble. A: female branch. B: leaves. C: female capitulum. D: female flower. E: female involucral bracts. F: achene. G: male capitulum. H: male flower (A-F, Deble & Oliveira-Deble 9344 holotypus MBM; G-H, Deble & Oliveira-Deble 9345 paratypus MBM).

inexpectata is known only from the type population at the highest elevations of the Serra do Caverá (Rosário do Sul), in the south of Rio Grande do Sul (Brazil).

Obs.: *Baccharis inexpectata* belongs to sect. *Cylindricae* Heering, ser. *Axillaris* Giuliano. The new species is close to *Baccharis perlata* Sch.Bip. ex Baker, from Bahia and Minas Gerais, but differs by oblong to obovate leaves, frequently with 1-3 teeth at the margin and 0.8-6 mm wide (versus leaves narrowly spatulate with entire margin and with 0.5-2 mm wide), by flexible, twisting, and narrowly filiform pappus bristles of female flowers (versus pappus bristles rigid, erect, and filiform), as well as by obovoid-ellipsoid, 1-1.2 mm long achenes (versus nearly cylindrical with a narrowed base, 2 mm long achenes).

Additional specimens examined. **BRAZIL. Rio Grande do Sul:** Rosário do Sul, Serra do Caverá, Cerro Grande, 30°11'49,3"S-55°08'10,4"W, população próximo ao topo, exemplar ♂, 01-V-2007, L. P. Deble & A. S. de Oliveira-Deble 9345 (MBM, CTES, SI); idem, capítulos masculinos imaturos, 01-V-2007, L. P. Deble & A. S. de Oliveira-Deble 9346 (MBM).

Etymology: This species is named by the unexpected way in that it was found.

3. *Baccharis multipaniculata* Oliveira-Deble & Deble, *sp. nov.*

Fig. 3

Suffrutex ramosus 0,5-1,5 m altus; caulibus pilosus, adscendentibus erectisve. Folia linear-lanceolata vel lanceolata 10-25 mm longa, 1-4 mm lata, subopposita vel alterna, sessilia, uninervata, concolora, integra, revoluta; laminis conspersis pilosis (pilis flageliformis et retrorsis munitis), apice acutis, basi semiamplexicaulis. Capitula pedicellata in multi panicula racemosis disposita. Capitula feminea late campanulata, 2,5-3 mm alta et crassa; involucrium, 2-2,5 mm altum, 2,5 mm crassum, 6-7-florum. Bracteae involucri 2-3-seriatis, obtusis vel rotundatis, dor-

so brunneis, margine hyalinis; externis ovatis, 1-1,5 mm longis, 0,7-1 mm latis; mediis et intimis ellipticis, 2-2,5 mm longis, 0,8-1 mm latis. Flores feminei corolla tubulosa, 1,3-1,5 mm longa, apice glanduloso dentata. Stylus 1,5-1,8 mm longus; rami styli lanceolati, 0,2-0,3 mm longi. Pappus albus, uniseriatus, 1,8-2,2 mm longus; setis pappi 35-40. Achaenia fulva, 5-costata, obovato elliptica, 1-1,2 mm longa, cum pappilis vestita. Capitula mascula hemisphaerica, 2-2,5 mm alta, 2,5 mm crassa; involucrium 2-2,5 mm altum et crassum, 12-16-florum. Bracteae involucri 2-3-seriatis, leviter acutis vel obtusis; externis ovatis, 1-1,6 mm longis, 0,8-1 mm latis; intimis ovato-oblongis, 1,5-2 mm longis, 1-1,2 mm latis. Flores mascula corolla tubuloso-campanulata, 1-1,2 mm longa, apice 5-lobata, cum pilis geminis et papillis vestita. Antherae 0,5-0,7 mm longae. Stylus 1-1,5 mm longus; rami styli breves, connati. Pappus albus, uniseriatus, 1-1,5 mm longus; setis pappi 15-20.

Typus: Brazil. Santa Catarina: Curitiba, no campo, ♀, 900 m s.m., 22-II-1962, R. Reitz & R. M. Klein 12222 (*holotypus* HBR).

Subshrub 0.5-1.5 m tall; branching erect-patent, shoots with dense indument of uniseriate hairs and glandular hairs. Leaves linear-lanceolate to lanceolate, 10-25 mm long, 1-4 mm wide, subopposite to alternate, sessile, appearing uninervate, concolorous; margin entire and revolute, apex acute, base subcordate; both leaf surfaces with uniseriate flagellate hairs, glandular hairs and short rigid pedestal hairs, internodes to 10 mm long. Capitula pedunculate, borne in dense terminal panicles. Female capitula broadly campanulate, 2.5-3 mm long and wide; flowers 6-7; involucre 2-2.5 mm long, 2.5 mm wide. Involucral bracts in 2-3 series, apex obtuse to rounded, often darker in the distal part, margins hyalines; outer bracts ovate 1-1.5 mm long, 0.7-1 mm wide; median and inner bracts broadly elliptic, 2-2.5 mm long, 0.8-1 mm wide. Female corolla tubular, 1.3-1.5 mm long, apically with 5 papillose teeth. Style slightly exceeding the corolla, 1.5-1.8 mm long; branches lanceolate, 0.2-0.3 mm long. Pappus white, uniseriate, 1.8-2.2 mm long; bristles 35-40, basally connate, persistent.

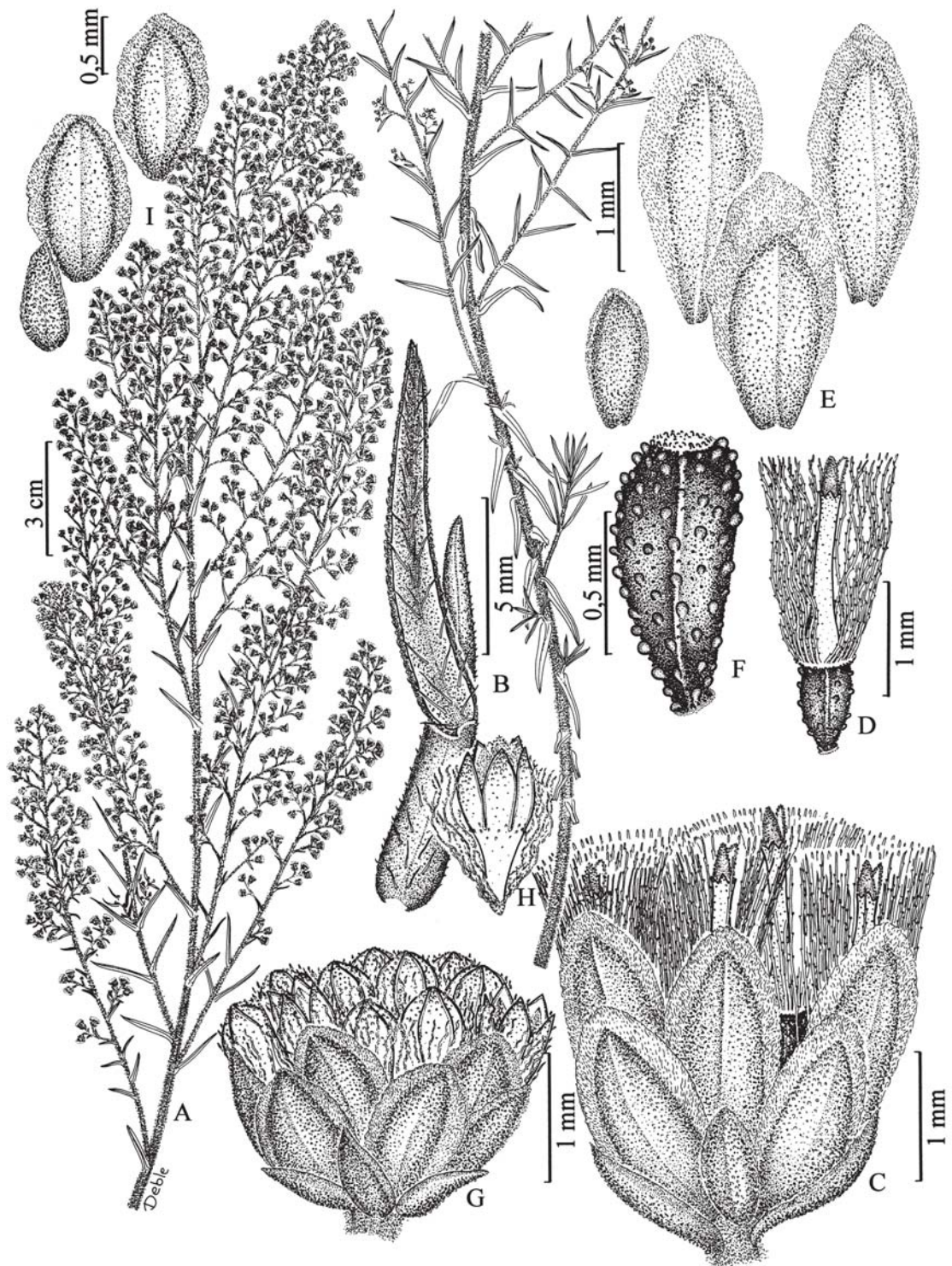


Fig. 3. *Baccharis multipaniculata* Oliveira-Deble & Deble. A: female branch. B: leaves, abaxial and adaxial surface. C: female capitulum. D: female flower. E: female involucre bracts. F: achene. G: male capitulum. H: male flower. I: male involucre bracts (A-F, Reitz & Klein 12222 holotypus HBR; G-I, Rambo s. n. paratypus PACA).

Achenes yellowish or light brown, obovoid-ellipsoid 1-1.2 mm long, laterally slightly compressed, with 5 longitudinal ribs and biseriate glandular hairs. Male capitula hemispheric, 2-2.5 mm long, 2.5 mm wide; flowers 12-16; involucre 2-2.5 mm long and wide. Involucral bracts in 2-3 series, apex obtuse or slightly acute; outer bracts ovate, 1-1.6 mm long, 0.8-1 mm wide; inner bracts ovate to broadly elliptic, 1.5-2 mm long, 1-1.2 mm wide. Male corolla 1-1.2 mm long, apically with 5 lanceolate lobes. Anthers 0.5-0.7 mm long. Style not or slightly exceeding the corolla, 1-1.5 mm long; style branches short, attached or free. Pappus white, uniseriate, 1-1.5 mm long; bristles 15-20.

Distribution and habitat: Known only from two collections from Rio Grande do Sul and Santa Catarina (Brazil).

Obs.: *Baccharis multipaniculata* belongs to sect. *Tarchonanthoides* (Heering) Cuatrec. The new species is related to *B. coridifolia* DC., differing by subcordate leaves (versus narrowed or rounded), by female capitulescence with more capitula (versus female capitulescence with less capitula), by broadly campanulate, 2.5-3 mm long and wide female capitula (versus broadly cylindrical to narrowly campanulate, 6-10 mm long, 2.5-3.5 mm wide), by 1.3-1.5 mm long female corolla (versus 2.8-4 mm long) and by the pappus of the female flowers with 35-40 bristles (versus 100-130 bristles).

Additional specimen examined. **BRAZIL. Rio Grande do Sul:** São Francisco de Paula, Itaimbezinho, in paludosis dumetosis, ♂, 12-II-1956, *B. Rambo s.n.* (PACA 58.571).

Etymology: The specific epithet refers to the capitulescence of many terminal panicles.

4. *Baccharis nassauvioides* Oliveira-Deble & Deble, sp. nov.

Fig. 4

Suffrutex ramosus; caulibus apice dense foliosus,

postremo cicatricosis. Folia obovata, obovato-spathulata vel orbiculata, 4-9 mm longa, 3-6 mm lata, dense imbricata, trinervata, sessilia, concolora, paucidentata vel integra, apice rotundata, basi obtusa vel attenuata. Capitula sessilia vel breviter pedicellata in spicis foliorum disposita. Involucrum femineum cylindraceum, 4,5-6,5 mm altum, 0,8-1,5 mm crassum, 1-2-florum. Bracteis involucri 4-5-seriatis, leviter acutis, margine hyalinis; externis ovatis ad ellipticis, 2-2,5 mm longis, 0,8-1 mm latis; mediis oblongis vel lanceolatis, 3-4 mm longis, 0,8-1 mm latis; intimis anguste oblongis, 4-5 mm longis, 0,8-1 mm latis. Flores feminei corolla tubular-filiformia, 3-3,2 mm longa, apice obtuse 5-dentata. Stylus 3,8-4,5 mm longus; rami styli linear-lanceolati, 0,8-1 mm. Pappus albus, multiseriatus, 2,2-3 mm longus; setis pappi 90-112. Achaenia glabra, castanea, 10-12-costata, oblonga, 2-2,5 mm longa. Capitula mascula anguste campanulata, 4,5-5 mm alta, 1,5-2 mm crassa; involucrum mascularum cylindraceum, 3,5-4 mm altum, 1-1,2 mm crassum, 5-7-florum. Bracteis involucri 3-4-seriatis, leviter acutis; externis ovatis, 1-2 mm longis, 0,6-0,8 mm latis; mediis ovatis ad orbiculatis, 2-2,5 mm longis, 1,3-1,6 mm latis; intimis lanceolatis, 2,8-3 mm longis, 1-1,2 mm latis. Flores mascula corolla tubuloso-campanulata, 3,4-3,7 mm longa, apice 5-lobata; lobulis lanceolatis, 1-1,2 mm longis. Antherae 1-1,1 mm longae. Stylo 3,5-4,5 mm longo; rami styli connati, longi exserti. Pappus albus, biseriatus, 3-3,5 mm longus; setis pappi 48-56.

Typus: Brazil. Rio de Janeiro: Itatiaia, Prateleiras, 2.200 m s.m., ♀, 8-V-1975, A. M. Camerish 57a (holotypus RB).

Subshrub; branching erect; apex densely leafy. Leaves obovate, obovate-spathulate to nearly circular, 4-9 mm long, 3-6 mm wide, densely imbricate, sessile, concolorous, resinous, 3-veined from near the base, margin with few short obtuse teeth (rarely entire), apex rounded, base obtuse to narrowed. Capitula sessile or shortly pedunculate, in leaf axils. Female capitula and involucre narrowly cylindrical, 4.5-6.5 mm long, 0.8-1.5 mm wide; flowers 1-2; involucral bracts in 4-5 series, apex slightly acute, margin hyaline; outer bracts ovate to elliptic, 2-2.5 mm long, 0.8-1 mm wide; median bracts oblong to lanceolate, 3-4 mm long,

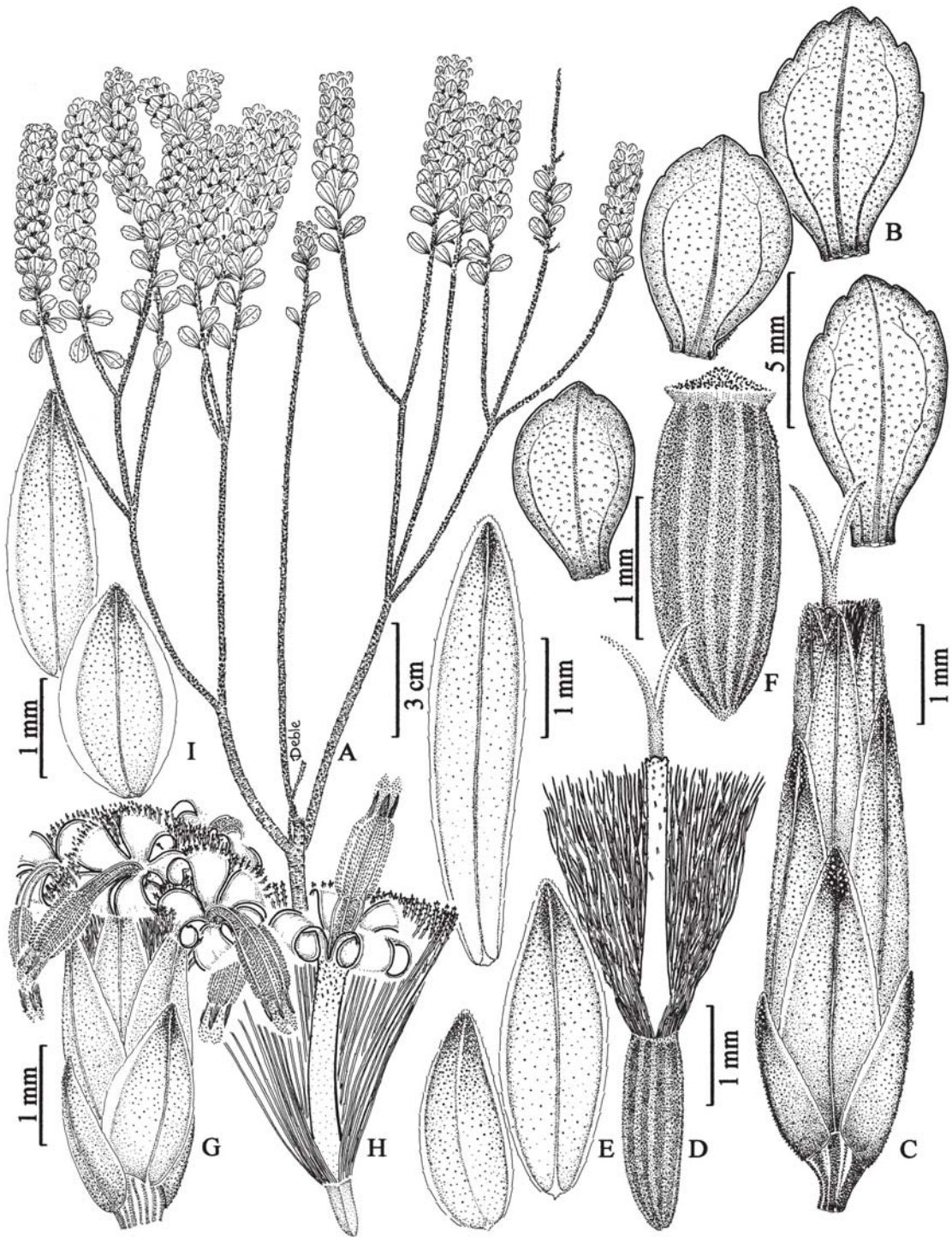


Fig. 4. *Baccharis nassauvioides* Oliveira-Deble & Deble. A: female branch. B: leaves. C: female capitulum. D: female flower. E: female involucre bracts. F: achene. G: male capitulum. H: male flower. I: male involucre bracts (A-F, *Camerish 57a* holotypus RB; G-I, *Camerish 57b* paratypus RB).

0.8-1 mm wide; inner bracts narrowly oblong, 4-5 mm long, 0.8-1 mm wide. Female corolla tubular-filiform, 3-3.2 mm long, apically with 5 short rounded teeth. Style exceeding the corolla, 3.8-4.5 mm long; branches linear-lanceolate, 0.8-1 mm long. Pappus white, multiseriate, 2.2-3 mm long; bristles 90-112. Achenes oblong, 2-2.5 mm long, glabrous, brownish, 10-12-ribbed. Male capitula narrowly campanulate, 4.5-5 mm long, 1.5-2 mm wide; flowers 5-7; involucre cylindrical, 3.5-4 mm long, 1-1.2 mm wide; involucre bracts in 3-4 series, apex slightly acute; outer bracts ovate, 1-2 mm long, 0.6-0.8 mm wide; median bracts ovate to nearly circular, 2-2.5 mm long, 1.3-1.6 mm wide; inner bracts lanceolate, 2.8-3 mm long, 1-1.2 mm wide. Male corolla 3.4-3.7 mm long, apically with 5 lanceolate lobes, 1-1.2 mm long. Anthers 1-1.1 mm long. Style exceeding the corolla, 3.5-4.5 mm long; style branches short, attached. Pappus white, biseriata, 3-3.5 mm long; bristles 48-56.

Distribution and habitat: *Baccharis nassauvioides* is known only from the type collection in the highest elevations of the Serra de Itatiaia (Itatiaia), Rio de Janeiro (Brazil).

Obs.: *Baccharis nassauvioides* belongs to *Baccharis* sect. *Cylindricae* ser. *Axillaris*. The new species is close to *Baccharis aracatubensis* Malag. & Hatsch. ex G. M. Barroso, and differs by obovate, obovate-spathulate to nearly circular, 4-9 mm long and 3-6 mm wide leaves (versus oblong leaves, 10-15 mm long, 4-6 mm wide), by 4.5-6.5 mm long and 0.8-1.5 mm wide female involucre (versus 7-9 mm long, 2.5-2.8 mm wide), with 1-2 flowers (versus 3-5) and by a 2.2-3 mm long pappus of the female flowers (versus 6-8 mm long). *Baccharis nassauvioides* is also similar to *B. serrula* Sch.Bip., differing by imbricate, 4-9 mm long and 3-6 mm wide leaves (versus not imbricate, 12-15 mm long, 2-4 mm wide) with a few short obtuse teeth or rarely with entire margin (versus margin with 6-12 acute teeth).

Additional specimen examined. **BRAZIL. Rio**

de Janeiro: Itatiaia, Prateleiras, 2.200 m s.m., ♂, 8-V-1975, A. M. Camerish 57b [fragment, in pocket, together with *Camerish 57a*].

Etymology: The specific epithet refers to the habit similar to many species of the genus *Nassauvia* Comm. (Asteraceae).

5. *Baccharis suberectifolia* Oliveira-Deble & Deble, sp. nov.

Fig. 5

Suffrutex 0,8-1,5 m altus; caulibus erectus, inferne simplicibus. Folia linearia, 15-35 mm longa, 1-3 mm lata, alterna (internodiis 4-15 mm longis), subadpressa, 1-3-nervata, sessilia, integra, punctulato-glandulosa, apice acuta, basi trunculata. Capitula pedicellata in panicula racemosis disposita. Capitula feminea oblonga, 7-8 mm alta, 2-3 mm crassa; involucre oblongum, 5-5,5 mm altum, 2-3 mm crassum, 5-6-florum. Bracteis involucri 3-seriatis, acutis vel obtusis, margine hyalinis; externis ovato-lanceolatis ad lanceolatis, 1,5-3 mm longis, 1-1,2 mm latis; mediis et intimis oblongis, 4-4,5 mm longis, 1-1,5 mm latis. Flores feminei corolla tubulosa, 3,4-3,6 mm longa, ad apicem glanduloso-dentata. Stylus 4-4,2 mm longus; rami styli lanceolati, 0,6-0,7 mm longi. Pappus fulvus, multiseriatus, 3,5-4,5 mm longus; setis pappi 55-60. Achaenia castanea, leviter compressa, 2-2,5 mm longa, puberula, cum pilis geminis et pappilis vestita. Capitula mascula campanulata vel hemisphaerica, 3,5-4 mm alta et crassa; involucre 2,5-3 mm altum, 2,5-3,5 mm crassum, 15-20-florum. Bracteis involucri 2-3-seriatis, acutis vel rotundatis; externis ovatis vel lanceolatis, 1,5-2,5 mm longis, 1-1,2 mm latis; intimis ovatis vel orbiculatis, 2,2-2,5 mm longis, 1-2 mm latis. Flores mascula corolla tubuloso-campanulata, 2,5-3 mm longa, apice 5-lobata; lobulis lanceolatis, 0,6-0,7 mm longis, cum pilis geminis et papillis vestita. Antherae 0,7-0,8 mm longae. Stylus 3-3,3 mm longus; rami styli breves, connati. Pappus albus vel fulvus, uniseriatus, 1,5-2 mm longus; setis pappi 16-22.

Typus: Brazil. Paraná: Palmeira, Rod. BR-277, rio Papagaios, campo limpo, ereta, capítulos alvescentes, ♀, 11-II-1988, G. Hatschbach & S. Ginzburg 51875 (holotypus MBM).

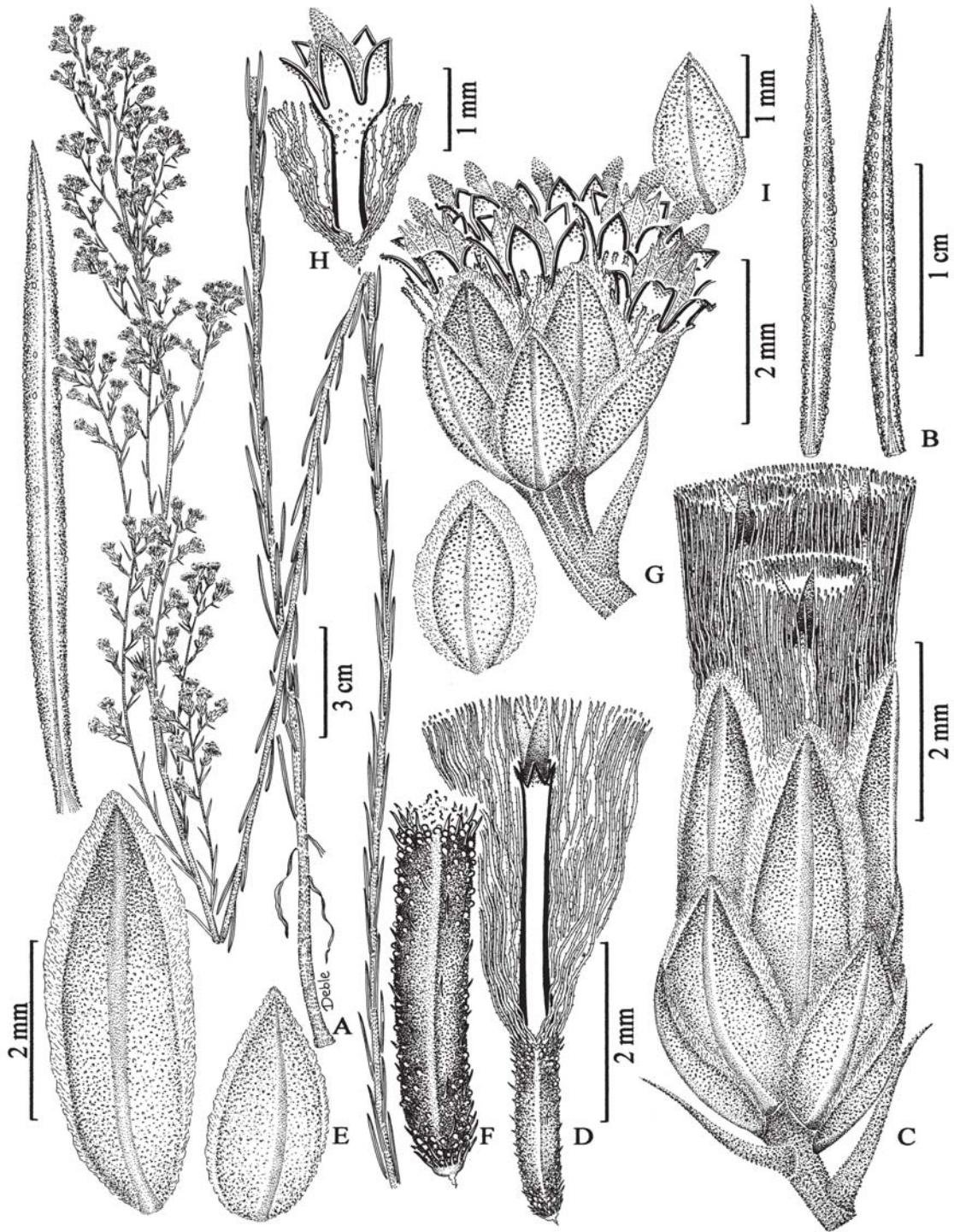


Fig. 5. *Baccharis suberectifolia* Oliveira-Deble & Deble. A: female plant. B: leaves. C: female capitulum. D: female flower. E: female involucre bracts. F: achene. G: male capitulum. H: male flower. I: male involucre bracts (A-F, Hartschbach & Ginzburg 51875 holotypus MBM; G-I, Hartschbach & Ginzburg 51876 paratypus MBM).

Subshrub; stems single, erect, branching only in the capitulescence, 0.8-1.5 m tall. Leaves appressed to the stem, alternate, concolorous, linear, 15-35 mm long, 1-3 mm wide, appearing 1-3-veined, sessile, glandular, margin entire, apex acute, base truncate, internodes 4-15 mm. Capitula pedunculate, borne in terminal panicles. Female capitula broadly cylindrical, 7-8 mm long, 2-3 mm wide; flowers 5-6; involucre 5-5.5 mm long, 2-3 mm wide; involucral bracts in 3-series, apex acute or obtuse; outer bracts ovate-lanceolate to lanceolate, 1.5-3 mm long, 1-1.2 mm wide; median and inner bracts oblongs, 4-4.5 mm long, 1-1.5 mm wide. Female corolla tubular, 3.4-3.6 mm long, apically with 5 papillose teeth. Style exceeding the corolla, 4-4.2 mm long; branches lanceolate, 0.6-0.7 mm long. Pappus yellow, in several series, 3.5-4.5 mm long; bristles 55-60, basally connate, persistent. Achenes dark brown, 5-ribbed, slightly compressed laterally, 2-2.5 mm long, with biseriate glandular hairs and twin hairs. Male capitula campanulate to hemispheric, 3.5-4 mm long and wide; flowers 15-20; involucre 2.5-3 mm long, 2.5-3.5 mm wide; involucral bracts in 2-3-series, acute to rounded; outer bracts ovate to lanceolate, 1.5-2.5 mm long, 1-1.2 mm wide; inner bracts ovate to nearly circular, 2.2-2.5 mm long, 1-2 mm wide. Male corolla 2.5-3 mm long, apically with 5 lanceolate lobes, 0.6-0.7 mm long. Anthers 0.7-0.8 mm long. Style not or slightly exceeding the corolla, 3-3.3 mm long; style branches short, attached or free. Pappus white or yellow, uniseriate, 1.5-2 mm long; bristles 16-22.

Distribution and habitat: The new species is known only from southern Paraná (Brazil), in grassland near rio Papagaios, Palmeira and Campo Largo.

Obs.: *Baccharis suberectifolia* belongs to sect. *Tarchonanthoides*. The new species is related to *B. coridifolia* DC., differing by simple stems branching only in the capitulescence (versus branching stems), by erect leaves that are appressed to the stem

(versus erect-patent or patent, not appressed to stem), by acute or obtuse female involucral bracts (versus apex rounded) and by the pappus of female flowers with 55-60 bristles (versus 100-130). *Baccharis suberectifolia* is also similar to *B. erigeroides* DC., differing by linear, 15-35 mm long and 1-3 mm wide leaves (versus oblong, 20-50 mm long, 3-8 mm wide), by 4-15 mm long internodes (versus 10-40 mm), by broadly cylindrical female capitula 7-8 mm long and 2-3 mm wide (versus campanulate, 9-11 mm long, 7-8 mm wide); as well as by number of flowers in female capitula (5-6 versus 15-20).

Additional specimens examined. **BRASIL. Paraná:** Campo Largo, rio Papagaios, campo limpo, 930 m s.m., ♀, 23-II-1960, G. Hatschbach 6759 (MBM). Palmeira, rio Papagaios, campo limpo seco, ereta, capítulos creme, ♂, 11-II-1988, G. Hatschbach & S. Ginsbarg 51876 (MBM).

Etymology: The specific epithet refers to the frequently erected leaves.

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