

NOVELTIES IN *BACCHARIS* SECT. CAULOPTERAE
(ASTERACEAE: ASTEREEAE)¹

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SUMMARY

A new species - *Baccharis tenuiptera* - endemic to southern coast of Rio Grande do Sul state (Brazil) is described and illustrated. The new species was previously determined as *Baccharis triangularis* Hauman; this species, however, is recognized as endemic of central Argentina. A new combination and status is proposed to allied Argentinean taxon *Baccharis genistelloides* subsp. *lorentzii* Joch. Müll.

Key Words: *Baccharis*, Caulopterae, new species, new combination, new status, geographic distribution, Argentina, Brazil.

RESUMO

[Novidades em *Baccharis* sect. Caulopterae (Asteraceae: Astereae)].

Uma nova espécie - *Baccharis tenuiptera* - restrita à costa sul do estado do Rio Grande do Sul é descrita e ilustrada. *Baccharis tenuiptera* foi primeiramente determinada como *B. triangularis* Hauman; esta espécie, entretanto, é reconhecida como exclusiva do centro da Argentina. Uma nova combinação e status são propostos para o táxon argentino *Baccharis genistelloides* subsp. *lorentzii* Joch. Müll.

Palavras-chave: *Baccharis*, Caulopterae, nova espécie, nova combinação, novo status, distribuição geográfica, Argentina, Brasil.

INTRODUCTION

The genus *Baccharis* L. comprises between 400 and 500 species of perennial herbs, vines, subshrubs, shrubs or small trees (Oliveira-Deble et Deble, 2008). In Brazil, a check list includes 146 species (Oliveira et al., 2006) and a most recent work, updates this number to 163 species, 23 of them belonging to sect. Caulopterae (Oliveira-Deble, 2008). In Argentina, Giuliano (2000) accepted 99 species (nine in the informal group that includes the species with winged stems); subsequently, this author (Giuliano, 2001) placed the Argentinean species into 15 sections, with ten species in Caulopterae.

RESULTS

1. A new species in Caulopterae

Several years ago (1880), C.A.W. Schwacke collected an unusual material with winged stems

during an exploration of “Ilha dos Marinheiros” (Rio Grande city). This material, a female exemplar with few capitula, was previously determined by me as *Baccharis triangularis* Hauman; this species was cited from Brazil in two recent works, realized by Heiden (2005) and by Oliveira et al. (2006). Recently, in a new exploration at “Ilha dos Marinheiros”, this species was founded again, and the analysis of more exsiccates allowed me to consider the material as new to science, being presently described here.

Baccharis tenuiptera Deble, sp. nov.

Baccharis riograndensi Malag. & Vidal, ramis fertis anguste alatis, capitula feminea cylindrica, primu aspectu, sed habitu minoribus (10-36 cm vs. 30-60 cm), ramis sterilis anguste alatis, planis (vs. latioribus, crispis), capitula feminea pauciflora (14-28 vs. 30-40), capitula mascula majoribus (5.5-7.5 mm vs. 3.5-5.5 mm), differt. *Baccharis triangulari* Hauman, habitu demissu, ramis anguste alatis affinis, sed inflorescentia spiciformis (vs. capitula solitaria vel geminata), capitula feminea cylindrica

¹ Recebido em 21-11-2008 e aceito para publicação em 28-12-2008.

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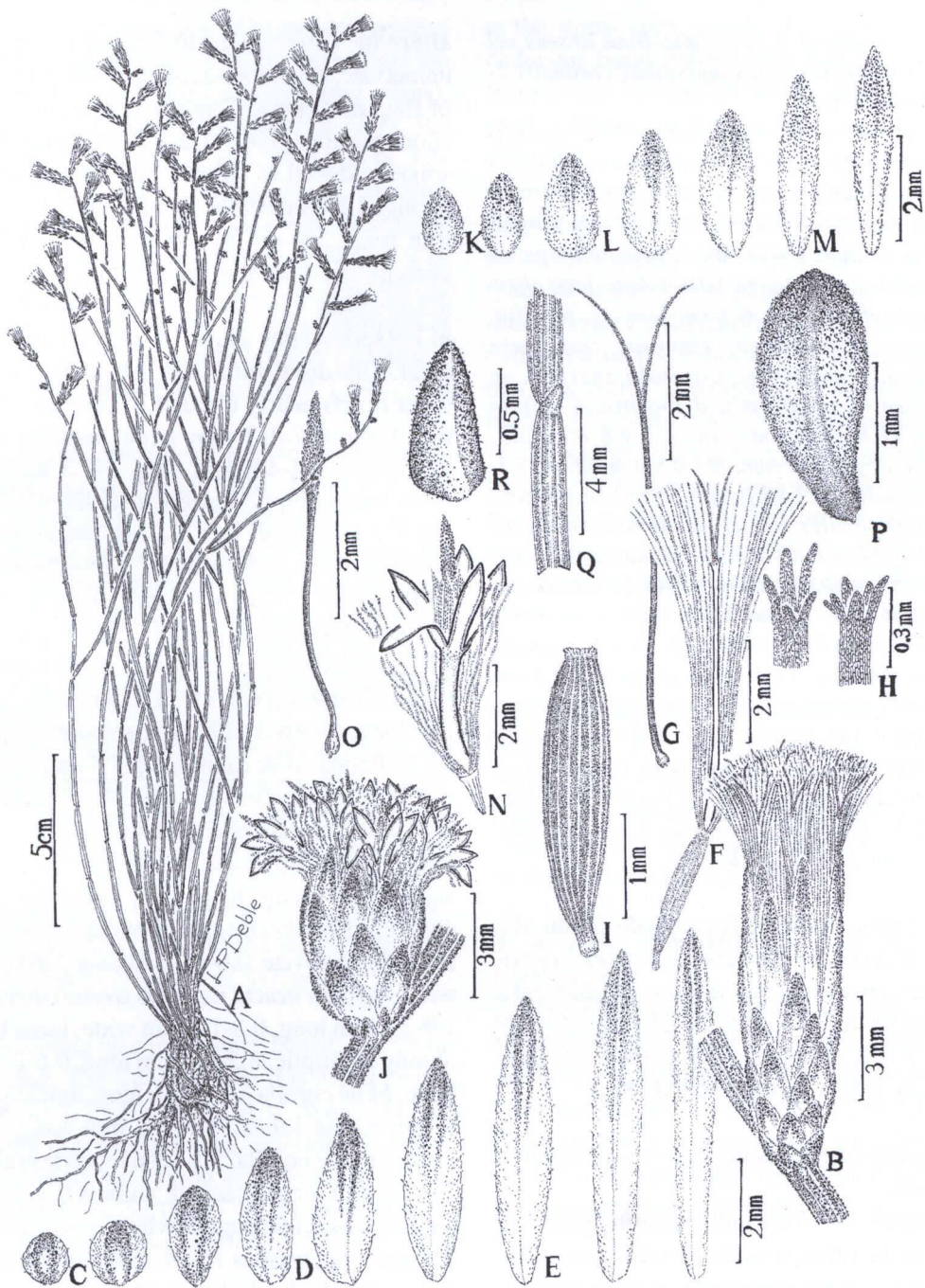


FIGURE 1 – *Baccharis tenuiptera*. Habit (A). Female capitulum (B). Bracts of female involucre (C-E): outer (C), median (D) and inner (E). Female flower (F). Style of female flower (G). Apex of female flower (H). Cypsela (I). Male capitulum (J). Bracts of male involucre (K-M): outer (K), median (L) and inner (M). Male flower (N). Style of male flower (O). Basal leaf (P). Stem detail (Q). Apical leaf (R). [A-I, P-R Deble & Oliveira-Deble 10.026 holotypus CTES; J-O Deble & Oliveira-Deble 10.027 paratypus CTES].

(vs. *late cylindrica*) et foliis apicalibus absens vel squamiformibus (vs. foliis apicalibus coronatis 2-4), optime distincta.

Suffrutex e basi ramosus, glabrus [obscuris pilis flagelliformis agregatis et glandulares vestitis], 32 cm altus; caules adscendentibus erectisve, leviter lignosus, trialatus; alae planae, 2-63 mm longae, 0.2-1.3 mm latae. Folia lanceolata, oblonga ad obovata, 0.1-2.2 mm longa, 0.05-1.4 mm lata, alterna (internodiis usque 6.3 cm longis), sessilia, uninervata, concolora, integra, consperse punctulato-glandulosa. Capitula sessilia, in inflorescentia spiciformia disposita. Capitula feminea 11.8-13.2 mm alta, 2.1-4.8 mm lata; involucrem cylindraceum, 8.3-9.8 mm altum, 2.1-3.2 mm crassum, 21-28-florum. Bracteis involucri 8-9-seriati, leviter acutis ad obtusis, margine hyalinis, fimbriatis, dorso pilis glandulosis munitis; externis orbiculatis ad obovatis, 0.8-2.1 mm longis, 0.7-1.2 mm latis; mediis lanceolatis, 2.6-4.4 mm longis, 1-1.3 mm latis; intimis elliptico-lanceolatis ad linear-ellipticis, 4.8-7.1 mm longis, 0.7-1.1 mm latis. Flores feminei corolla filiformia, 5.2-5.8 mm longa, apice 5-7-dentata; stylo 7-7.8 mm longo; rami styli filiformi, 1.4-1.6 mm longi. Pappus albus, uniseriatus, basi connatus, 7.2-7.7 mm longus; setis pappi 36-45. Cypselae papillosae, 12-14-costatae, cylindraceae, 2.8-3.1 mm longae.

Typus speciei: Brasil, Rio Grande do Sul, Rio Grande, Ilha dos Marinheiros, indivíduo ?, próximo a córrego, em campo arenoso e dunas, rara, 31°59'48.98"S, 52°06'95"W, 21-II-2008, L. P. Deble & A. S. Oliveira-Deble 10.026. *Holotypus* CTES *Isotypi* MBM, SI.

Diagnose (the measure includes all material examined):

Subshrub, 10-36 cm tall; appearing glabrous, indument in tufts, usually covered by resin; branching erect or erectopate, strongly resinous and narrowly three wings; wings 2-7.5 mm long, 0.2-1.6 mm wide, flat in vegetative and fertile shoots. Leaves lanceolate, oblong to obovate, 0.1-2.4 mm long, 0.05-1.4 mm wide, sessile,

alternate (internodes to 7.5 cm), appearing uninervate, concolorous, margin entire, indument of flagellate hairs. Capitula sessile, in terminal short pseudospikes, 1.8-6.5 cm long, lateral spikes reduced to solitary sessile capitula, not arranged in glomerules. Female capitula 9.4-13.2 mm long, 1.9-4.8 mm wide; flowers 14-28; clinanthium alveolate; involucre cylindrical, 7.8-9.3 mm long, 1.9-3.2 mm wide; involucral bracts in 7-9 series, apex slightly acute to obtuse, glandular in the distal third, margin hyaline, fimbriate; outer bracts nearly circular to obovate, 0.7-2.3 mm long, 0.7-1.3 mm wide; median bracts lanceolate, 2.4-4.5 mm long, 1-1.3 mm wide; inner bracts elliptic-lanceolate to linear-elliptic, 4.8-7.1 mm long, 0.6-1.1 mm wide. Female corolla filiform, 5-5.8 mm long, apically with 5-7 teeth; style 7-7.8 mm long; style branches filiform, 1.4-1.6 mm; pappus white, uniseriate, 7-7.7 mm long; bristles 33-45, scarcely barbellate, basally fused; cypselas nearly cylindrical, 2.8-3.1 mm long, covered with inconspicuous papillae, 12-14-ribbed. Male capitula 5.5-7.5 mm long, 4.2-6.5 mm wide; flowers 16-27; clinanthium alveolate; involucre campanulate, 4.2-5.4 mm long, 2.6-4.5 mm wide; involucral bracts in 4-7 series, apex acute to obtuse, glandular in the distal third, margin hyaline, fimbriate; outer bracts lanceolate to ovate, 0.6-1.6 mm long, 0.6-0.8 mm wide; median bracts ovate to ovate-lanceolate, 1.9-3.2 mm long, 0.8-1.1 mm wide; inner bracts oblong to elliptic, 3.5-4.5 mm long, 0.6-0.9 mm wide. Male corolla 4.1-5 mm long, apically with 5 lanceolate lobes, 1.3-1.8 mm long; style exceeding the corolla, 5.3-5.9 mm; style branches 1.1-1.5 mm long, attached; anthers 0.9-1.2 mm long, apices acute; pappus white, uniseriate, 3.5-4.3 mm long; bristles 16-24, apically broadened and scarcely barbellate; abortive cypselas obconical, 0.15-0.6 mm long.

The new species is most closely related with *Baccharis riograndensis* Malag. & Vidal, but

differs by smaller habit (10-36 cm vs. 30-60 cm), fertile and vegetative branches narrow-winged (vs. only fertile branches narrow-winged and the vegetative branches with undulate large wings), female capitula with few flowers (14-28 vs. 30-40) and male capitula larger (5.5-7.5 mm vs. 3.5-5.5 mm). *Baccharis triangularis*, another species related with *B. tenuiptera*, differs by solitary or few capitula at the stems apex (vs. in pseudospikes), with 2-4 leaves crowned the capitula (vs. without apical leaves or reduced at scales) and female involucre broadly cylindrical with 3.5-4 mm wide (vs. cylindrical, 1.9-3.2 mm wide).

Baccharis tenuiptera is also related with *Baccharis lorentzii* (Joch. Müll.) Deble [the new combination and status is made in this paper]; however, this species is larger (30-60 cm vs. 10-36 cm), with fertile wing branches 2-4 mm wide (vs. narrow-winged) and female capitula campanulate, with 40-120 flowers [40-50, in material examined] (vs. cylindrical, with 14-28 flowers).

The habit, the reduced leaves and the capitulescence of *Baccharis tenuiptera* is similar to *B. aphylla* (Vell.) DC. and principally to *B. polygona* Baker; both species, however, have epappillose with smooth cuticle cypselas (vs. papilllose with cuticle folded and covered by papillae cypselas) and apically truncate to short ligulate female corolla (vs. 5-7-teeth).

Specimina visa (paratypi): Brasil, Rio Grande do Sul, Rio Grande, Ilha dos Marinheiros, indivíduo ?, 29.II.1880, C.A.W. Schwacke 283 (R); Ilha dos Marinheiros, indivíduo ?, próximo a córrego, em campo arenoso e dunas, rara, 31°59'48.98"S, 52°06'95"W, 21-II-2008, L. P. Deble & A. S. Oliveira-Deble 10.027 (CTES, MBM, SI).

2. *Baccharis triangularis* in Brazil

Baccharis triangularis is a small multibranched subshrub, which is characterized

by narrow winged stems, capitula solitary or few at the stems apex, involved by 2-4 apical and caducous basal leaves. This species was cited from Brazil by Heiden (2005) and by Oliveira et al. (2006); the first author cites only one collection from Brazil: "Rio Grande do Sul, São José do Norte, Estreito, I.1992, P Tagliani 77 (HURG)". Unfortunately, I didn't saw this material, but the place of collection stays only 5.5-6 km from the typical population of *Baccharis tenuiptera*; furthermore, I believe that the collection of P. Tagliani 77 is conspecific with this new taxon. The citation of *B. triangularis*, made by Oliveira et al. (2006), is based in C. A. W. Schwacke 283, presently recognized as a paratype of *Baccharis tenuiptera*. In conclusion, the geographic distribution of *Baccharis triangularis* is reestablished as endemic from the Biogeographic Provinces of "Espinal", "Pampeana" and "Del Monte", in central Argentina.

Specimina visa "*Baccharis triangularis*": Argentina, Prov. Buenos Aires, Pigüé, ?, 10.XI.1932, A. Burkart 4.730 (SI); Prov. San Luis, Gen. Pedernera, pastizal serrano, suelo arenoso con piedra, infrecuente, 13 cm alt., ?, D. Anderson 1.826 (CORD).

3. A new combination and status in Caulopterae

Recently, Müller (2006b) described a new subspecies from central Argentina: *Baccharis genistelloides* subsp. *lorentzii*. This subspecies, however, shows several distinct morphologic characteristics, being not justifiable its subordination to *B. genistelloides*. A new status and combination is furnished below.

Baccharis lorentzii (Joch.Müll) Deble, *comb. et stat. nov.*

Basionim: *Baccharis genistelloides* (Lam.) Pers. subsp. *lorentzii* Joch. Müll., Haussknechtia 11: 144. 2006.

Typus: Argentina, Prov. Córdoba, Est. Germania, prope Córdoba; jun-dec. 1874, ?; Lorentz 121. *Holotypus*: BR not seen. *Isotypi* CORD! W not seen, photo! M not seen.

Baccharis lorentzii differs from *B. genistelloides* by laxer capitulescence and fewer cypsela ribs (9-12 vs. 12-20) and very thick, with greatly reduced intercostal regions. *Baccharis lorentzii* is most closely related with *B. riograndensis* Malag. & Vidal, but differs by winged fertile and vegetative stems (vs. distinctly narrow-winged fertile stems and undulate –wing of vegetative stems), by fewer cypsela ribs (9-12 vs. 12-20) and by multiseriate pappus in female flowers (vs. uniseriate).

Illustrations of *Baccharis genistelloides*, *B. lorentzii* and *B. riograndensis* are respectively furnished by Müller (2006a), Müller (2006b) and Heiden & Schneider (2008).

ACKNOWLEDGMENTS

I would like to thank the curator of the herbaria CTES, CORD, MBM, R, RB, SI. I also thank to Anabela Silveira de Oliveira-Deble and José Newton Cardoso Marchiori for the helpful comments and Erika Werner (SI) for sent of bibliography.

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