

Taxonomy of Baccharis (Asteraceae: Astereae): revision of subgenera Coridifoliae, Heterothalamulopsis, Heterothalamus and Oblongifoliae

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Key words: Baccharidinae, Neotropics, Taxonomic revision, South America.

A novel phylogenetic based infrageneric classification of the American genus Baccharis (440 species) recognizes seven subgenera based on monophyletic groups. The taxonomy of B. subgen. Tarchonanthoides, comprising 13 species, was recently revised and published. The current goal is to provide the taxonomic revision of another four subgenera, along with increasing the sampling of these subgenera for phylogenetic studies. For the completion of the revision of the sections Coridifoliae, Heterothalamus, Heterothalamulopsis and Oblongifoliae, review of literature, study of herbaria specimens and fieldworks are underway along with sequencing of additional specimens for the phylogeny. This work summarizes the first results of the number of accepted sections and species recognized in these subgenera. Baccharis subgen. Oblongifoliae comprises 18 species occurring mostly in the summits of the main mountainous ranges of South America, with the highest diversity found in southeastern Brazil. The sect. Oblongifoliae is the only known section belonging to this subgenus. Baccharis subgen. Heterothalamus comprises seven species occurring mostly in mountain summits and rock outcrops. This subgenus comprises three sections: sect. Bradeanae (2 spp.) found in Serra do Caparaó, southeastern Brazil; sect. Psila (2 spp.) occurring along the Andes from northern Argentina to Peru; and sect. Heterothalamus (3) spp.), distributed in Pampean mountains and hilly ranges of Argentina, southern Brazil and Uruguay. Baccharis subgen. Heterothalamulopsis comprises only the sect. Heterothalamulopsis with one species (B. wagenitzii), a rupiculous shrub found in basaltic cliffs in southern Brazil. Baccharis subgen. Coridifoliae comprises two sections and ten species: sect. Pluricephalae with two narrow endemic species from southern Brazil, found in highland marshes and peat bogs, and sect. Coridifoliae, comprised by eight species, occurring in moist or dry grasslands and savannas from Bolivia and central Brazil, south to central Argentina. Funding: Systematics Research Fund 2016.

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Gustavo Heiden is a Botanist interested in systematics, biogeography, evolution, conservation and applied uses of the plants, specially South American Subtropical and Temperate flora. Major research interests include systematics and evolution of Compositae; genetic resources and pre-breeding of crop wild relatives; sustainable management and use of the palm landscapes from Southern Brazil; and curation and exploration of herbaria data. Gustavo obtained his Bachelor and Licenciate degree in Biology from Universidade Federal de Pelotas, Master in Botany from Jardim Botânico do Rio de Janeiro, and PhD from Universidade de São Paulo. He currently works as researcher at Embrapa Clima Temperado, Pelotas, Brazil.

Cover photo

Baccharis psiadioides, a species of Baccharis placed in the subgenus Heterothalamus