



# PHYTOTAXA

179

## **Systematics of the Octopleura Clade of *Miconia* (Melastomataceae: Miconieae) in Tropical America**

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## Abstract

The Octopleura clade of *Miconia* is a natural group of Neotropical subshrubs and small trees comprising some thirty-three species. These had previously been described in *Ossaea* and *Clidemia*, two traditionally recognized genera of Miconieae, but this natural group is nested within the megadiverse genus *Miconia*. This study represents the first comprehensive monograph of the clade across its entire range based on a study of over 2100 collections from seven herbaria. Thirteen new combinations are made (*Miconia aguilarii*, *M. aurantiaca*, *M. biolleyana*, *M. boekei*, *M. chocoensis*, *M. evanescens*, *M. incerta*, *M. laxivenula*, *M. palenquensis*, *M. quinquenervia*, *M. radicans*, *M. reitziana*, and *M. rufibarbis*). Thirteen new names are provided for epithets preempted in *Miconia* (*M. albertobrenesii*, *M. alboglandulosa*, *M. approximata*, *M. atropurpurea*, *M. bensparrei*, *M. bractiflora*, *M. erikasplundii*, *M. magnifolia*, *M. neocoronata*, *M. quadridomius*, *M. sessilis*, *M. spiciformis*, and *M. variabilis*). Six new species are proposed (*M. alatissima*, *M. anchicayensis*, *M. formicaria*, *M. latidecurrens*, *M. renatoi*, and *M. veraguensis*). A taxonomic key, detailed descriptions, distribution maps, and phenological and ecological information are presented for all species, along with SEM images of seed morphology for selected species. A preliminary geospatial conservation assessment is made for each species. Diagnostic illustrations are included for all new taxa and other selected species. A molecular phylogenetic analysis based on four genic loci is presented, along with a reconstruction of ancestral character states. Molecular and morphological data are used to develop a better understanding of the constituent species of the clade and their evolutionary relationships. Three subclades, *Approximata*, *Quinquenervia*, and *Variabilis*, are evident within the Octopleura clade, and supported by morphological synapomorphies.

**Key words:** *Approximata*, Neotropics, Phylogeny, *Quinquenervia*, Taxonomy, *Variabilis*

## Resumen

El clado Octopleura de *Miconia* es un grupo natural que comprende unas treinta y tres especies de subarborescentes y árboles pequeños neotropicales. Las especies del clado Octopleura habían sido descritas separadamente como miembros de *Ossaea* y *Clidemia*, pero en base a análisis moleculares preliminares de la tribu Miconieae este grupo representa un linaje dentro de *Miconia*. Esta investigación representa la primera monografía exhaustiva del clado a través de todo su rango de distribución y se basa en el estudio de más de 2100 colecciones depositadas en siete herbarios. En este estudio se proponen 13 combinaciones nuevas (*Miconia aguilarii*, *M. aurantiaca*, *M. biolleyana*, *M. boekei*, *M. chocoensis*, *M. evanescens*, *M. incerta*, *M. laxivenula*, *M. palenquensis*, *M. quinquenervia*, *M. radicans*, *M. reitziana*, and *M. rufibarbis*). Se proporcionan trece nombres nuevos para combinaciones ya existentes en *Miconia* (*M. albertobrenesii*, *M.*

## Excluded species

*Clidemia radicans* Pilger (1905: 179). Type: PERÚ. Amazonia: close to Leticia, *Ule 6869* (holotype: MG; isotype: B-internet image!, photograph: F!). = *Clidemia epiphytica* var. *trichocalyx* (Blake) Wurdack (1964: 215–216).

*Ossaea ciliata* (Triana) Cogniaux (1891a: 1067). *Davya ciliata* Grisebach (1860b: 265). *Octopleura ciliata* Triana (1871: 146). Type: In insula TRINITATIS, *Crueger s.n.* (holotype: BR-internet image!). = *Miconia lateriflora* Cogniaux (1909: 255).

*Ossaea involucrata* (Grisebach) Triana (1871: 147). Type: CUBA. Prope Monte Verde, 1856–1857, *Wright 194* (holotype: BR-2 sheets-internet images!). = *Calycogonium involucratum* Grisebach (1860c: 184).

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