This monograph treats 77 species in the genus Conostegia (Family Melastomataceae: Tribe Miconieae). Members of this group are small shrubs to medium size trees, ranging in distribution from northern South America to Central America and the Caribbean, with an outlying population of one species in Bahia, Brazil. They are most common in cloud forest and rain forest habitats where they are buzz pollinated by female bees and their seeds dispersed by frugivorous birds.

The broader circumscription of Conostegia adopted in this revision is guided by molecular phylogenetic studies that identified a well supported Conostegia clade, which also included some species assigned to the genera Clidemia and Miconia. These new additions to the traditional concept of Conostegia are surprising morphologically because the presence of a calyptra in the flower was thought to unite the genus. Previous suggestions and recent findings that even within the Conostegia clade calyptras have evolved independently have weakened its uniqueness to define the group. Interestingly most of the species of other genera that lack a calyptra and fall in the Conostegia clade are narrow endemics in Costa Rica and Panama. The more widespread species and many others can still be identified based on the presence of the calyptra, and combinations of characters are used to define the three sections of Conostegia proposed here. To further aid in the identification of all species in the genus, extensive documentation of its anatomy, macro and micro morphology are included. In addition, color plates of most species, a dichotomous key and distributional maps are also provided.

A MONOGRAPH OF CONOSTEGIA (MELASTOMATACEAE, MICONIEAE)

BY RICARDO KRIEBEL



Conostegia tenuifolia Donn. Sm.

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