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The systematic position of *Cubanthus* and other shrubby endemic species of *Euphorbia*
(Euphorbiaceae) in Cuba
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Abstract

Steinmann, V.W., Van Ee, B., Berry, P.E. & Gutiérrez, J. 2007. The systematic position of *Cubanthus* and other shrubby endemic species of *Euphorbia* (Euphorbiaceae) in Cuba. *Anales Jard. Bot. Madrid* 64(2): 123-133. *Cubanthus* (Euphorbiaceae) has traditionally been recognized as a small genus of three similar species restricted to Cuba and Hispaniola. In this study we used DNA sequence data from the nuclear ITS and chloroplast *ndhF* gene regions to investigate its systematic position and the position of four other shrubby *Euphorbia* species endemic to Cuba: *E. cubensis*, *E. helenae*, *E. munizii*, and *E. podocarpifolia*. The results demonstrate that all of these taxa belong to a well-supported Antillean clade nested within *Euphorbia* that also includes *E. punicea* and *E. gymnonota*. For that reason, we treat *Cubanthus* as a section of *Euphorbia* instead of a separate genus. *Euphorbia* sect. *Adenorima* is relegated to a synonym of sect. *Cubanthus*. New names are proposed for *Cubanthus brittonii* and *Cubanthus linearifolius* (*Euphorbia millspaughii* and *E. scutiformis*, respectively), and a new combination is made for *Cubanthus umbelliformis* (*Euphorbia umbelliformis*). Section *Cubanthus* belongs to clade C of *Euphorbia* and is part of a New World assemblage that includes members of sections *Euphorbiastrum*, *Pteroneurae*, *Portulacastrum*, *Stachydium*, and the former genus *Pedilanthus*. Based on both the molecular results and morphological differences, two subsections are proposed: subsect. *Cubanthus* and subsect. *Moa*. The molecular phylogeny supports the hypothesis that section *Cubanthus* radiated entirely within the Antilles and the nearby Bahamian archipelago.

Keywords

Antilles, Cuba, *Cubanthus*, *Euphorbia*, molecular phylogeny.

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