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## ABSTRACT

The Neotropical genera *Rosenbergiodendron* and *Randia* have been studied. *Rosenbergiodendron* is revised and presented in a separate paper. The other three papers concern *Randia*, which is partly revised and phylogenetically analysed.

*Rosenbergiodendron* is morphologically distinct and cannot be synonymised under *Randia*. *Rosenbergiodendron* differs from *Randia* by having bisexual flowers, pollen in monads, immature fruits with white longitudinal stripes, colleters inside the calyx tube, and also by being unarmed. The phylogenetic analysis shows that *Rosenbergiodendron* is more closely related to *Sphinctanthus* and *Tocoyena* than it is to *Randia*.

*Randia* is shown to consist of three groups. First, there is a group of Mexican, Central American, and Antillean species. Representatives of this group differ from South American taxa in having a cup-shaped to tubular calyx tube not found among South American representatives. Second, there is a group of Andean species characterised by having both male and female flowers solitary on axillary brachyblasts or on distal brachyblastic branch segments, the male specimens often having clustered axillary brachyblasts, and by having a small corolla (tube 4–8 mm long) that is mostly yellow to yellowish. The branches grow rhythmically and the thorns are found both on dolichoblasts and at the transition between a dolichoblastic and a brachyblastic branch segment. Third, there is a group of mainly lowland, South American species characterised by having male flowers usually two to several in fascicles situated terminally on distal brachyblastic segments of major branches or on reduced dolichoblasts, thorns at the transition between dolicho- and brachyblastic branch segments, and by having white corollas. The three groups are here considered as separate genera. The group of Andean species comprises 12 species. It is formally described as a new genus, *Oreorandia*, and a complete taxonomic revision is presented.

Key words: *Randia*, *Rosenbergiodendron*, Rubiaceae, Gardenieae, taxonomy, phylogeny, ITS, 5S.

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