



Nomenclatural notes in the Pleurothallidinae (Orchidaceae): *Apoda-prorepentia*

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Abstract

A new species of *Acianthera*, *A. serratifolia*, is described and illustrated based on material from Colombia. The species belongs to a small group of species that has alternatively been placed in the genus *Apoda-prorepentia*. Nevertheless, *Apoda-prorepentia* is embedded within *Acianthera* and therefore reduced to synonymy. The required new combinations are proposed.

Key words: *Acianthera*, *A. serratifolia*, Colombia, new combinations, new species, systematics, taxonomy

Introduction

The genus *Acianthera* Scheidweiler (1842: 292) (Orchidaceae: Pleurothallidinae) has traditionally been considered a synonym of *Pleurothallis* R. Brown in Aiton (1813: 211) (Luer 1986). It was only recently re-instated by Pridgeon & Chase (2001) and Pridgeon (2005), based on the molecular studies of Pridgeon *et al.* (2001). A taxonomic revision of the genus, including a subgeneric classification, was subsequently prepared by Chiron & van den Berg (2012) on the basis of a broader molecular study of *Acianthera* species by Chiron *et al.* (2012). The latter studies included especially Brazilian material, where *Acianthera* is richer in species numbers. However, the phylogenetic placement of a few Central American, Antillean and Andean clades of *Acianthera* is still not well resolved.

Pleurothallis subgen. *Apoda-prorepentia* Luer (1986: 31) was proposed for a group of 5 species found in Central America, the Antilles and the Ecuadorian and Colombian Andes. *Apoda-prorepentia* (Luer) Luer (2004: 255) was eventually given generic status, and the genus was revised systematically by Luer (2007). *Acianthera melanochthoda* (Luer & Hirtz in Luer 1996: 169) Pridgeon & Chase (2001: 244) was the only species assigned to *Apoda-prorepentia* sequenced by Pridgeon *et al.* (2001). A second species, *Acianthera testifolia* (Swartz 1788: 122) Solano in Solano *et al.* (2011: 50), was included by Stenzel (2004) in his phylogenetic analysis of the Pleurothallidinae of the Antilles. In both cases it was clear that the species of *Apoda-prorepentia* were embedded within *Acianthera* and closely related to other Central American and Andean species of the genus.

Here we present a phylogenetic analysis showing the position of the species of *Apoda-prorepentia* within Pleurothallidinae and specifically within *Acianthera*. Combinations for the species of *Apoda-prorepentia*, which were not previously available in *Acianthera*, are made. Finally, a new species belonging to the group is described based on Colombian material.

Materials and Methods

Plant material in Costa Rica was collected under the scientific permits handed by the Costa Rican Ministry of Environment (MINAE) to researchers at JBL. Individual plants were photographed, illustrated and preserved as DNA samples, herbarium specimens and spirit specimens in formaldehyde: acetic acid: ethanol [FAA (53% ethanol, 37% water, 5% formaldehyde and 5% glycerol)] (only including flowers) for future reference, deposited at JBL-spirit and L-spirit and the DNA bank of Naturalis Biodiversity Center.