Three new species of *Campylocentrum* (Vandeae, Orchidaceae) from Brazil

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Abstract

*Campylocentrum* comprises about 70 species, half of which are cited from Brazil. In recent studies for the taxonomical review of the genus, three new species belonging to *C.* sect. *Campylocentrum* were found and are here described. Two of these species are from the Atlantic Forest, *C.* *itatiaiae* and *C.* *schlechterianum*, and one from *Cerrado* vegetation, *C.* *carvalhoi*. We provide illustrations, distribution map and a discussion about their affinities with allied species.

Key words: Neotropics, Atlantic Forest, Cerrado, Angraecinae

Introduction

In the Neotropics, Angraecinae Summerhayes (1966: 188) are represented by the genera *Campylocentrum* Bentham (1881: 337) and *Dendrophylax* Reichenbach (1864: 903). The taxonomic limits within the subtribe were studied with a molecular approach by Carlsward *et al.* (2003). *Campylocentrum* comprises about 70 species (Govaerts *et al.* 2014), of which 35 are recorded by Barros *et al.* (2015) from Brazil. More than two-thirds of the Brazilian species are found in the Atlantic Forest, which, according to Todzia (1980), is the center of endemism for the genus. The Brazilian species of *Campylocentrum* were reviewed by Cogniaux (1906), who proposed three sections: *C.* sect. *Campylocentrum* (Cogniaux 1906: 504), *C.* sect. *Dendrophylopsis* (Cogniaux 1906: 504), and *C.* sect. *Pseudocampylocentrum* (Cogniaux 1906: 504). During the 20th century, 15 new names based on Brazilian specimens were proposed (Brade 1941, Hoehne 1938, Hoehne 1941, Hoehne & Schlechter 1922, Mansfeld 1928, Schlechter & Hoehne 1926) but nowadays most of them are considered synonyms. Recently, two new species: *C.* *insulare* Siqueira & Pessoa in Siqueira *et al.* (2015: 79) and *C.* *serranum* Pessoa & Alves (2015: 54) were described from the states of Santa Catarina and Pernambuco.

In recent studies for the taxonomical review of the genus, three new species of *C.* sect. *Campylocentrum*, characterized by conduplicate leaves, were recognized from Brazil. Two of them are from the Atlantic Forest and were found among previously made but unidentified collections in local herbaria. The third species is from *Cerrado* vegetation and was collected during fieldwork carried out in 2013–2014. This study aims to describe the new discoveries and provides illustrations, a distribution map and discussion of the morphological affinities of the new taxa with allied species.

*Campylocentrum carvalhoi* E. Pessoa & M. Alves, sp. nov. (Fig. 1A–F)

Type:—BRAZIL, Minas Gerais: Cristais, Propriedade do Sr. Lázaro de Assis Carvalho (Sitio Barreiro), 876m a.s.l., 20 July 2014, fl., fr., B. M. Carvalho 119b (holotype: UFP, isotype, BHCB).

Morphologically related to *C.* *intermedium* (Rchf.b. & Warm. in Reichenbach 1881: 337) Rolfe (1903: 245), but differs by shorter floral parts such as sepals (1.3–1.8 mm vs. 3.0 mm long), petals (1.2–1.3 mm vs. 2.5–2.7 mm long), and lip (3-lobed and 1.6–1.7 mm vs. entire and 3.0 mm long).