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## Notes on *Campylocentrum* (Vandeae; Epidendroideae; Orchidaceae): Re-establishment of two South American species

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### Abstract

During research for a taxonomical review of *Campylocentrum*, two South American species, *C. kuntzei*, described from Bolivia, and *C. mattogrossense* from Brazil, previously considered synonyms of *Campylocentrum micranthum* or *C. robustum*, were recognized as distinct species. This study reinforces the significant morphological differences among the taxa and proposes their re-establishment. Descriptions and illustrations, in addition to typifications, new synonyms, an identification key and their conservation statuses are provided.

**Keywords:** Amazon, Brazil, Cerrado, Neotropics, Angraecinae

### Introduction

*Campylocentrum* was proposed by Bentham (1881: 337) for Neotropical species of Angraecinae placed in *Angraecum* Bory (1804: 359) by Lindley and *Aeranthes* Lindley (1824: 817) by Reichenbach f. (1881). *Campylocentrum micranthum* (Lindley 1835: 1772) Maury (1889: 273) was the first species described for the genus, although it is not the type species. This species was originally described under *Angraecum* by Lindley (1835), and after being transferred to *Campylocentrum* by Maury (1889). Further 14 new names were proposed based on specimens closely related to *C. micranthum*, most of which are nowadays considered synonyms.

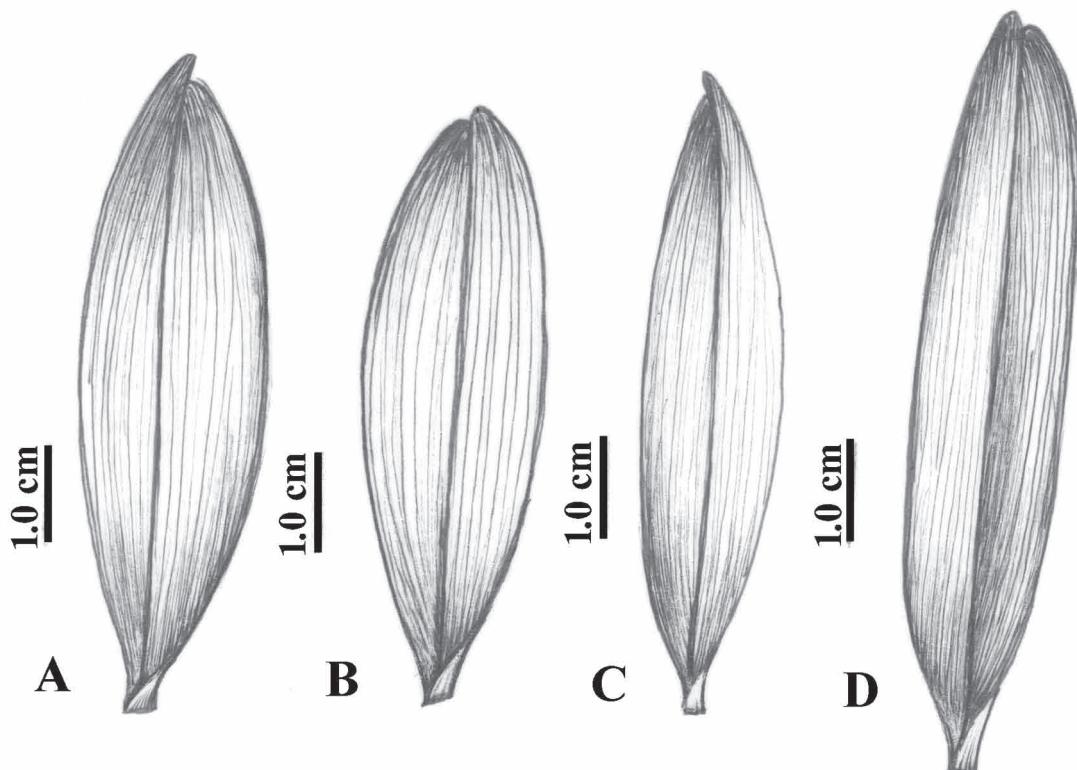
*Campylocentrum kuntzei* Cogniaux ex Kuntze (1898: 298), described from Bolivia and *C. mattogrossense* Hoehne (1941: 62) from Brazil have been cited as synonyms of *C. micranthum* (Brako & Zarucchi 1993, CONABIO 2009, D'Arcy 1987, Dodson & Dodson 1980, Hamer 1982, Ibisch 1996, Jørgensen *et al.* 2015, McLeish *et al.* 1995, Stevens *et al.* 2001) or *C. robustum* Cogniaux (1906: 509) (e.g. Brako & Zarucchi 1993, Jørgensen & León-Yáñez 1999, Zuloaga 2008). During studies for a taxonomical review of the genus, we evaluated the identity of *C. kuntzei* and *C. mattogrossense* and concluded that they constitute separate taxa in relation to *C. micranthum*. Complete descriptions of the species, illustrations, typifications, new synonyms, an identification key and the conservation statuses (IUCN 2013) are also included. A discussion of morphological affinities is also presented.

### Taxonomic treatment

***Campylocentrum kuntzei* Cogniaux ex Kuntze** (1898: 298). Type: BOLIVIA. Rio Juntas, 500 m alt., 13 April 1892, C.O. Kuntze s.n. (lectotype: BR!, designated here, isolectotypes: F (not seen, photograph seen), NY 8632 (not seen, photograph seen), NY 8631 (not seen, photograph seen), (Fig. 1)

Epiphytic herbs. Roots 1.5–3 mm diam., cylindrical, fibrous, smooth, whitish to dark grey. Stem 11–20 cm long, cylindrical, rarely branched. Leaves 60–85 × 14–27 mm, greenish, oblong-elliptical to lanceolate, the apex asymmetrically slightly 2-lobed, lobes acute, margin entire. Inflorescences 16–40 mm long, racemose, the flowers

- Lateral lobes of the lip deltoid to subdeltoid, the apex acute, obtuse, or truncate; spur slightly curved to inflexed ..... 3
- 3. Spur < 3.5 mm, shorter than the sepals, inflexed ..... *C. micranthum*
- Spur > 4.8 mm, as long as or longer than the sepals, slightly curved ..... *C. kuntzei*



**FIGURE 3.** Leaves. A. *Campylocentrum kuntzei*; B. *C. mattogrossense*; C. *C. micranthum*; D. *C. robustum*.

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