



## Three new species of *Rhipidocladum* (Poaceae: Bambusoideae: Arthrostylidiinae) from South America

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### Abstract

Three new woody bamboo species from South America, *Rhipidocladum arenicolum* from Peru, *R. cordatum* from Ecuador and *R. rubrofimbriatum* from Venezuela, are here described and illustrated. Based on morphological analysis, *R. arenicolum* and *R. cordatum* are placed in sect. *Rhipidocladum* and *R. rubrofimbriatum* in sect. *Racemiflorum*. *Rhipidocladum arenicolum* and *R. cordatum* are most similar to *R. harmonicum*, but *R. arenicolum* differs in its wider foliage leaf blades and longer spikelets and florets. *Rhipidocladum cordatum* differs by having cordate culm leaf blades, more branchlets per node and smaller, narrower foliage leaf blades as well as more closely spaced spikelets. *Rhipidocladum rubrofimbriatum* is most similar to *R. sibilans* but is awnless, has fewer branchlets per node, and larger, wider foliage leaf blades.

### Resumen

Se describe e ilustra tres nuevas especies de bambúes leñosos de Sudamérica, *Rhipidocladum arenicolum* de Perú, *R. cordatum* de Ecuador y *R. rubrofimbriatum* de Venezuela. Con base en un análisis morfológico, *R. arenicolum* y *R. cordatum* se establece en sección *Rhipidocladum* y *R. rubrofimbriatum* en sección *Racemiflorum*. *Rhipidocladum arenicolum* y *R. cordatum* son más similares a *R. harmonicum*. *Rhipidocladum arenicolum* se distingue de *R. harmonicum* por sus hojas de follaje anchas y sus espiguillas y flósculos más largos mientras que *R. cordatum* se distingue por tener las láminas de las hojas caulinares cordadas, más ramitas por nudo y láminas foliares más pequeñas y angostas y espiguillas menos distantes. *Rhipidocladum rubrofimbriatum* es más parecida a *R. sibilans* pero carece de aristas, tiene menos ramitas por nudo, y hojas de follaje más grandes y anchas.

**Key words:** Bambuseae, neotropical woody bamboo

### Introduction

*Rhipidocladum* McClure (1973: 105) is a neotropical woody bamboo genus of 15 species occurring from central Mexico to Brazil and Argentina. The genus has a distinctive fan-like branching architecture that is mirrored in allied genera *Actinocladum* (McClure in Soderstrom 1981: 1201), *Didymogonyx* (L. G. Clark & Londoño 1991: 1271) C. D. Tyrrell, L. G. Clark & Londoño (2012: 146) and *Merostachys* Sprengel (1825: 132). *Rhipidocladum* species are differentiated from these by having a basic caryopsis (*Actinocladum* and *Merostachys* possess a nucoid caryopsis) and uniform culm internode lengths (*Didymogonyx* is characterized by alternating short and long internodes along the culm; Tyrrell *et al.* 2012). The genus is divided into two sections: the monotypic *Rhipidocladum* sect. *Rhipidocladum* L. G. Clark & Londoño (1991: 1271) containing the type species, *R. harmonicum* (Parodi 1944: 479) McClure (1973: 105), and *Rhipidocladum* sect. *Racemiflorum* L. G. Clark & Londoño (1991: 1275) comprising the remaining 14 species.