



***Oatea ramirezii* (Poaceae: Bambusoideae: Bambuseae) flower description and the importance of the Mexican national living bamboo collection**

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Abstract

Botanical gardens have several aims, among which is to increase awareness of plant diversity, to study it, and to conserve it. The Francisco Javier Clavijero Botanical Garden at the Instituto de Ecología, in Xalapa, Mexico, curates the Mexican national living national bamboo collection. In 2010 a new *Oatea* species was collected, described and cultivated in the living bamboo collection. Two years after being planted, this bamboo began to flower in the summer of 2012. I decided to visit the type locality and I found the entire population flowering. Based on collected specimens, the synflorescences and spikelets of *Oatea ramirezii* are described and these structures are compared with those of the known *Oatea* species described with flowers. The living national bamboo collection of Mexico is important for the preservation of native species and, given that the flowering cycles of most bamboo species are not known, for the documentation of their life cycles.

Key words: asynchrony, botanical garden, flowering cycle, phenology, monocarpic, synflorescence

Resumen

Los jardines botánicos tienen diversos objetivos, uno de ellos es aumentar la conciencia, la investigación y la conservación de biodiversidad vegetal. El jardín botánico Francisco Javier Clavijero en el Instituto de Ecología, en Xalapa, México, resguarda la colección nacional de bambúes Mexicanos. En 2010 se colectó, describió y cultivó una especie nueva de *Oatea* en la colección nacional de bambúes. Después de dos años de crecimiento, el bambú comenzó a florecer en el verano de 2012. Decidí visitar la localidad tipo y encontré a toda la población floreciendo. Con base en los especímenes colectados, se completo la descripción de *Oatea ramirezii*, describiendo las inflorescencias y flores. Esas estructuras se compararon con la de las especies conocidas de *Oatea* descritas con flores. La colección nacional de bambúes Mexicanos es muy importante para la conservación de las especies nativas y dado que los ciclos de floración de la mayoría de las especies de bambúes no se conocen, la documentación de sus ciclos de vida es necesaria.

Introduction

In the Americas, the highest bamboo diversity and endemism is found in Brazil, the northern and central Andes, Mexico and Central America (Judziewicz et al., 1999). Prior to 2004 there were 36 native species of bamboos described in eight genera for Mexico (Judziewicz et al., 1999; Cortés Rodríguez 2000; Clark and Cortés 2004), but recent work has brought this number to 44 species (Judziewicz et al., 1999; Ruiz-Sanchez et al., 2011, 2011a; Ruiz-Sanchez 2012; Ruiz-Sanchez and Clark 2013) and three more are in the process of being described. More than the half (23) of the Mexican bamboo species are endemic and this number could increase with the description of new taxa. The Mexican bamboos grow in tropical dry and perennial forests, mixed pine-oak and pine-spruce forests, pine forests, and cloud forests from sea level to 3,000 m elevation (Cortés Rodríguez 2000; Ruiz-Sanchez et al., 2011, 2011a; Ruiz-Sanchez & Clark 2013).

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