

Three new species of *Begonia* endemic to the Puerto Princesa Subterranean River National Park, Palawan

Rosario Rivera Rubite¹, Mark Hughes², Patrick Blanc³, Kuo-Fang Chung⁴, Hsun-An Yang⁵, Yoshiko Kono⁵, Grecebio J D Alejandro⁶, Llogene B De Layola¹, Arthur Gregory N Virata¹ and Ching-I Peng^{5*}

¹ Department of Biology, College of Arts and Sciences, University of the Philippines Manila, Padre Faura, Manila 1000, Philippines

² Royal Botanic Garden Edinburgh, 20a Inverleith Row, Edinburgh EH3 5LR, UK

³ CNRS, 3 rue Michel-Ange, Paris, 75794, France

⁴ School of Forestry and Resource Conservation, National Taiwan University, Taipei 106, Taiwan

⁵ Biodiversity Research Center, Academia Sinica, Taipei 115, Taiwan

⁶ College of Science and Research Centre for the Natural and Applied Sciences, University of Santo Tomas, España, Manila 1015, Philippines

For all author emails, please [log on](#).

Botanical Studies 2015, **56**:19 doi:10.1186/s40529-015-0099-1

Published: 24 July 2015

Abstract

Background

Begonia is a mega-diverse genus of flowering plants prone to generating micro-endemic species, especially on limestone habitats. During fieldwork in the Puerto Princesa Subterranean River National Park, Palawan (Philippines), three species were encountered which did not match any previously described from the region.

Results

Following morphological, anatomical, molecular phylogenetic and cytological investigation a hypothesis of three new species is supported. The three new species belong to a clade endemic to Palawan and Borneo.

Conclusions

The limestone habitats in the Puerto Princesa Subterranean River National Park environs support a unique flora. The description of three new species from a small area within the park demonstrates how much remains to be discovered there, and the importance of its continued protection.

Keywords:

Limestone; Endemic; New species; Conservation