



## *Peperomia* (Piperaceae) novelties from Veracruz State, Mexico

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### Abstract

The preparation of a taxonomic treatment of the genus *Peperomia* (Piperaceae) for the ‘Flora of Veracruz’, revealed that three species remained without being described. This finding is a result of the review and study of botanical collections in several Mexican and foreign herbaria, as well as of field work in order to collect living and fertile material, which allowed us to describe and illustrate the species as new to science. Two of these, *P. chazaroi* and *P. vazquezii*, appear to be endemic to Veracruz, whereas *P. parastriata* was also found in the neighboring states Chiapas and Oaxaca. The treatment includes assessments of conservation status considering IUCN Red List criteria.

### Resumen

La preparación de un tratamiento taxonómico del género *Peperomia* (Piperaceae) para la ‘Flora de Veracruz’ reveló que tres especies permanecían sin ser descritas. Este hallazgo fue resultado de la revisión y el estudio de colecciones botánicas en varios herbarios Mexicanos y extranjeros, así como de trabajo de campo para coleccionar material vivo y fértil, lo que nos permitió describir e ilustrar las especies como nuevas para la ciencia. Dos de estas, *P. chazaroi* y *P. vazquezii*, parecen ser endémicas de Veracruz, mientras que *P. parastriata* fue encontrado también en los estados vecinos Chiapas y Oaxaca. Se incluyen las evaluaciones del estado de conservación según los criterios de la Lista Roja de la UICN.

**Key words:** Conservation, distribution, endemism, taxonomic treatment, IUCN Red List criteria

### Introduction

The genus *Peperomia* Ruiz & Pavón (1794: 8) belongs to the magnoliid family Piperaceae of which it is the second largest genus, with 1,608 taxa (1,432 species and 176 varieties and forms) (Mathieu, 2001–2015), after *Piper* Linnaeus (1753: 28), with approximately 2,000 species (Samain, 2008). The species of *Peperomia* are distributed in the tropical and subtropical regions worldwide, although a major part of them is endemic to the Andes and Amazon regions, while fewer species can be found in Africa, Asia and Oceania (Mathieu, 2001–2015).

The state of Veracruz is located in eastern Mexico along the Gulf coast and is characterized by a heterogeneous geomorphology and a wide variety of climate types (Soto-Esparza & Geissert, 2011), responsible for the presence of 19 vegetation types, including humid montane, pine-oak and tropical humid forests, which are considered to be the most diverse ecosystems in Mexico (Castillo-Campos *et al.*, 2011). Along with its southern neighbors Chiapas and Oaxaca, Veracruz has the largest vascular plant diversity of any Mexican state (Espejo-Serna *et al.*, 2004; Castillo-Campos *et al.*, 2011), but it also faces the highest loss of natural vegetation in the country (SEMARNAT-PNUD, 2005).

Veracruz is well known for its high *Peperomia* diversity. Almost half of the 131 Mexican species can be found here. A preliminary checklist reveals 60 species for Veracruz including the three new species presented here (Vergara-Rodríguez, 2013), compared to the following numbers for the neighboring states: Chiapas: 78, Oaxaca: 68, Hidalgo: 29, Puebla: 28, San Luis Potosí: 25, Tabasco: 20 and Tamaulipas: 19 (G. Mathieu, unpublished data).

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