



***Zamia incognita* (Zamiaceae): the exciting discovery of a new gymnosperm from Colombia**

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Abstract

Colombia is home to the majority of known South American species of *Zamia* (Zamiaceae). Although *Zamia* is now the only recognised genus of extant Cycadales in South America, it shows some complex ecological adaptations that have resulted in several evolutionarily divergent sections within the genus. The recent publication of Flora de Colombia listed 16 species, of which seven are endemic and five were newly described in the very same treatment. Although this treatment was current at the time of publication, recent collections and additional material of little-known species have made an update and further clarification necessary. A new species, *Zamia incognita* is described here and its relationships are discussed.

Key words: Colombia, cycads, gymnosperms, *Zamia*

Introduction

The classification of *Zamia* Linnaeus (1763: 1659), a genus of about 57 species of mainly South and Central American cycads, is still incomplete with new species still to be discovered and described. The relationships are not very well-studied and there are few classifications at the subgeneric level (Schuster, 1932). Most species have been described individually by various authors and not as part of a larger taxonomic treatment or revision. Because of the inaccessibility of many habitats, there are very few specimens of South American species. This has resulted in a limited understanding of the geographical distribution and morphological variability of these species. Several of the *Zamia* species named during the 19th century were described from cultivated material, often from only a single sterile plant. Some of the descriptions and illustrations are inadequate for specific determination, and typification is often unresolved or confusing, making the correct application of names difficult. Recent nomenclatural and taxonomical clarifications (Lindström, 2009) have increased our basic knowledge of South American *Zamia*, and have resulted in a more appropriate synonymy and resurrection of existing names for known species.

In this article we present a new species that was previously overlooked and could not be matched with any of the existing species.

Material and Methods

Field work in Panama, Colombia, Ecuador, Peru, Bolivia and Brazil was carried out annually since 1998 by the first author. Herbarium vouchers, including types and additional specimens, were studied from AMAZ, BM, COAH, COL, CUUC, FTG, HUA, INPA, JAUM, K, L, MEDEL, MG, MO, P, QCA, QCNE, RB, RPSC, SEL, STO and USM. Living specimens were studied in cultivation at the Jardín Botánico de Medellín in Colombia and the Nong Nooch Tropical Botanical Garden in Thailand.