



A new species of *Spigelia* (Loganiaceae) from Guerrero, Mexico

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Abstract

A new species of *Spigelia* endemic to Guerrero, Mexico, is described and illustrated. *Spigelia guerrerensis* sp. nov. can be separated from all known species of the genus by its infundibuliform white corollas sometimes tinged with purple at the lobe margins and in the base of the throat, apically hirsutulous fruits, and its restriction to the mountain system of northeastern Guerrero. In addition, we provide a distribution map and conservation status recommendation for the new species, as well as a key to the species of *Spigelia* known from Guerrero. Including this new addition, 17 species are recognized in Mexico, making it one of the hotspots of the genus.

Key words: Endemic, Guerrero, Loganiaceae, Mexico, *Spigelia*

Resumen

Se describe e ilustra una nueva especie de *Spigelia* para el estado de Guerrero, México. *S. guerrerensis* sp. nov. puede ser separada del resto de las especies del género por su corola infundibuliforme blanca, algunas veces con tonos morados en el margen de los lóbulos y en la base de la garganta, sus frutos apicalmente hirsútulos y su distribución restringida al sistema montañoso del noreste de Guerrero. Además, proporcionamos un mapa de distribución y sugerimos el estado de conservación de la nueva especie, así como una clave de las especies de *Spigelia* en Guerrero. Incluyendo esta nueva especie, México representa un hotspot para el género con 17 especies.

Palabras clave. Endemismo, Guerrero, Loganiaceae, México, *Spigelia*

Introduction

Spigelia Linnaeus (1753a: 149) (Loganiaceae) is a neotropical genus of around 60 species comprising herbs and small shrubs, with opposite (sometimes verticillate below the inflorescences), entire, stipulate leaves. Inflorescences are cymose (cincinnous), sometimes reduced to one or three flowers, which are perfect and pentamerous with a gamopetalous corolla with valvate aestivation. The fruits are capsules (Gould 1999, Fernández-Casas & Huft 2009). The genus is endemic to the Americas, with a wide distribution from the southeastern United States to northern Argentina and Chile (Gould 1999, Fernández-Casas & Huft 2009, Popovkin *et al.* 2011). Some species are cultivated for their attractive flowers (Fernández-Casas 2009), and one, *Spigelia anthelmia* Linnaeus (1753a:149–150), has escaped and become naturalized and weedy in Africa, Asia and Australia (Fernández-Casas & Huft 2009, Desai & Raole 2013). *Spigelia* has several hotspots. One of these is Mexico, with 16 species, eight of them endemic (Gould 1999, Fernández-Casas 2009, Popovkin *et al.* 2011), representing 26% of the known species diversity of the genus. Thus Mexico is one of the centers of diversity of the genus for North America (Gould 1999).

During review of Loganiaceae for Guerrero, we found three specimens of *Spigelia* (*Monroy de la Rosa* 363, 384, 392) that were misidentified as *Bouvardia langlassei* Standley (1921: 110), Rubiaceae, due to their opposite and entire leaves, and sympetalous corollas. This material was easily assigned to *Spigelia* by the superior ovary, valvate corolla lobes, articulate style, and fruits with remnant styles. However, specimens could not be identified to any of the species known from Mexico. In this paper we describe and illustrate a new species for Guerrero, and provide a key to the species from Guerrero.