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## A new species of *Tragia* (Euphorbiaceae) from Oaxaca, Mexico

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### Abstract

A new species of *Tragia* from the state of Oaxaca, Mexico is described and illustrated; it is different from other known Mexican species, although somewhat similar in habit to *T. nepetifolia*. *Tragia chiltepeca* is an erect herb with deeply cordate leaves with an acuminate apex and a long petiole, a long pedunculate inflorescence, a single pistillate flower in the proximal node, several male flowers at the distal nodes, and pyriform buds. This species is endemic to the Tuxtepec district. A taxonomic key is provided to distinguish this from other *Tragia* species in Oaxaca.

### Resumen

Se describe e ilustra una especie nueva de *Tragia* para el estado de Oaxaca; ésta es diferente de las otras especies mexicanas conocidas, y algo similar en hábito a *T. nepetifolia*. *Tragia chiltepeca* es una hierba erecta, con hojas profundamente cordadas, el ápice acuminado y pecíolos largos; con inflorescencia largo-pedunculada, una sola flor pistilada en el nudo proximal, varias flores estaminadas entre los nudos distales y los botones piriformes. Esta especie es endémica del distrito de Tuxtepec. También se presenta una clave de identificación para distinguirla del resto de las especies presentes en el estado.

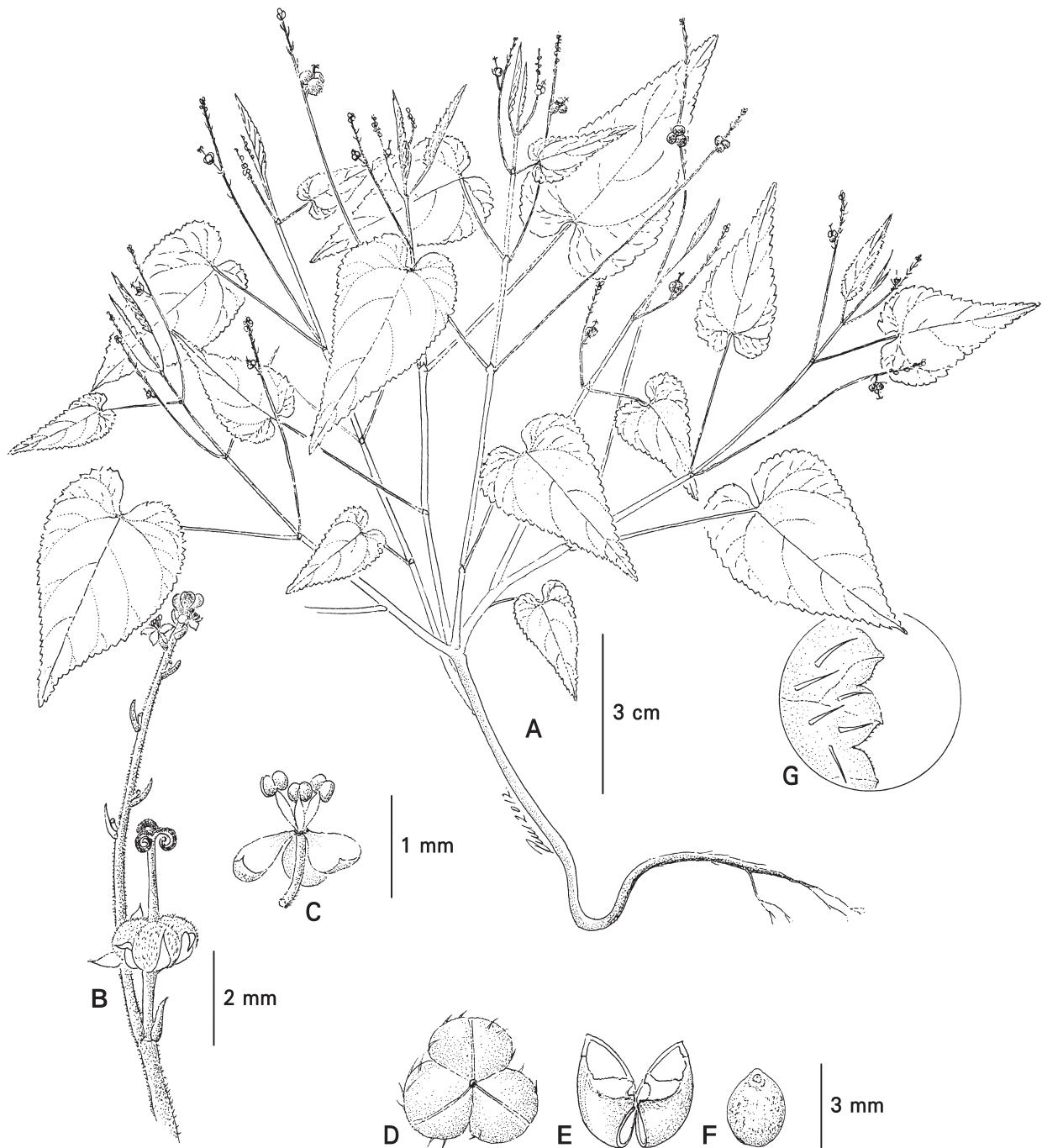
**Key words:** Acalyphoideae, Plukenetiae, Tragiinae, Tuxtepec

### Introduction

After *Acalypha* Linnaeus (1753: 1003), *Croton* Linnaeus (1753: 1004), and *Euphorbia* Linnaeus (1753: 450), the genus *Tragia* Linnaeus (1753: 980) is one of the most diverse pantropical genera of the family Euphorbiaceae, with approximately 130 species (Gillespie 1994). It belongs to subfamily Acalyphoideae, tribe Plukenetiae, subtribe Tragiinae. The plants are generally herbaceous twiners with urticating trichomes. The genus has been little studied; a recently segregated genus, *Bia* Klotzsch (1841: 189) (Webster 2007, Wurdack *et al.* 2005), is distinguished morphologically from *Tragia* by bifurcate inflorescences and an androecium with 8–40 stamens. Two species of *Bia* occur in Mexico: *Bia cordata* (Baillon 1858: 496) Webster (2007: 237) and *B. manuelii* Steinmann & Ramírez-Amezcua (2013: 747).

Gillespie (1994) recognized nine sections in *Tragia*, but two of these, *Bia* and *Zuckertia* Baillon (1858: 495), have subsequently been segregated from the genus. The new species would be included in section *Tragia*, because of its staminate flowers with three sepals, three stamens with free filaments, and a single pistillate flower at the inflorescence base. Mexico has 19 species of *Tragia*, two of which are endemic (Martínez-Gordillo *et al.* 2002), distributed in evergreen tropical forest, deciduous and semi-deciduous tropical forest, oak forest, cloud forest, xeric scrublands, and grasslands, which demonstrates that species in the genus have adapted to different climates and soils.

Oaxaca is the floristically richest state in Mexico and has the greatest number of botanical collections; nevertheless, several municipalities lack any or have very few collections of *Tragia*. Six species were reported recently for Oaxaca (Martínez-Gordillo 2011). Here a seventh, *T. chiltepeca*, is described. It is the only species that is endemic to the state.



**FIGURE 1.** *Tragia chiltepeca*. A. Plant habit. B. Inflorescence and pistillate flower. C. Staminate flower. D. Fruit, apical view. E. Mericarp after dehiscence, ventral view. F. Seed. G. Trichomes (A–G from Luis Cortés A. 193, R. Torres & P. Tenorio, MEXU).

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