



A new species of the *Vaejovis eusthenura* group in Oaxaca, Mexico (Scorpiones: Vaejovidae)

CARLOS SANTIBAÑEZ LÓPEZ¹ & W. DAVID SISSOM²

¹*Colección Nacional de Arácnidos, Instituto de Biología, Departamento de Zoología, Universidad Nacional Autónoma de México, Tercer Circuito Exterior sin número, Ciudad Universitaria, Apartado Postal 70-153, Mexico D. F., 04510. Mexico.*

E-mail: ironc81@hotmail.com

²*Dept. of Life, Earth, & Environmental Sciences, West Texas A&M University, WTAMU Box 60808, Canyon, TX 79016. USA.*

E-mail: dsissom@wtamu.edu

Abstract

Vaejovis oaxaca, a new species of the *Vaejovis eusthenura* group is described from the Mexican state of Oaxaca. It is found in lowlands ranging from the Mitla area in central Oaxaca southeast into the Isthmus of Tehuantepec and the eastern edge of Chiapas.

Key words: new species, Oaxaca, setal counts, systematics.

Introduction

The genus *Vaejovis* C. L. Koch, 1836 is the most diverse element of the North American scorpiofauna (Sissom 2000), with over 70 described species. For many years, the genus was subdivided into a number of species groups and a small number of unassigned species. Recently, the species groups were given generic status by Soleglad & Fet (2008), but these authors provided no cladistic tests of monophyly for the proposed new genera, and their previous efforts at cladistic analysis were demonstrated to be greatly flawed (Prendini & Wheeler 2005). Consequently, we prefer to retain the genus *Vaejovis* in its previous state, most recently summarized by Sissom (2000) and Prendini & Wheeler (2005), pending the production of a valid cladistic analysis.

The *eusthenura* group of *Vaejovis* currently consists of 18 species distributed in the southwestern USA, Baja California, and most of mainland Mexico into the Isthmus of Tehuantepec. It is the purpose here to describe one new species in this group from the Mexican state of Oaxaca and adjacent Chiapas. Oaxaca has been promoted as the state with the highest biodiversity in all of Mexico (García-Mendoza, *et al.* 2004), and is proving to be a region of high scorpion diversity (Francke 1977, 1978). The species described herein represents part of an assemblage of species collected as a result of recent inventory work in the Northern Mountain Range (also known as the Sierra de Juarez) by the senior author.

Material and methods

Nomenclature and mensuration follows Stahnke (1970), except for trichobotrial terminology after Vachon (1974), carinal terminology modified after Francke (1977), hemispermatophore terminology after Sissom (1991), and pedipalpal setal terminology after Haradon (1983, 1984a, 1984b, 1985). Taxonomy follows Prendini & Wheeler (2005). Measurements were taken using an ocular micrometer calibrated at 10X from a Nikon SMZ-1500 microscope and are given in millimeters. Drawings were obtained with a camera lucida supported on the same stereoscope and were edited with Adobe Photoshop C3. Additional methodological issues are discussed below.