



An updated checklist of the phlebotomine sand flies of Veracruz, Mexico (Diptera: Psychodidae, Phlebotominae)

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Abstract

Previous records of phlebotomine sand flies from Mexico included 14 species in the state of Veracruz. In this work, new records of some species are given, including four species not previously known to occur in Veracruz and one previously unknown from Mexico. 18 species of Phlebotominae are now known to occur in Veracruz.

Key words: geographic records, fauna, Phlebotominae

Introduction

Phlebotomine sand fly records published by Ibáñez-Bernal (1999, 2001, 2002, 2003) indicated the presence of nine species in the state of Veracruz. These records included one species of *Brumptomyia* França and Parrot, and eight species of *Lutzomyia* França *sensu* Young and Duncan (1994).

In a subsequent paper, Ibáñez-Bernal *et al.* (2006) listed the phlebotomine species related to some human cutaneous leishmaniasis cases from the municipalities of Colipa and Juchique de Ferrer, and described one new species. As a result, two genera (*sensu* Young and Duncan 1994) and 13 species of Phlebotominae were known to occur in the state of Veracruz.

Recently, Godínez-Alvarez and Ibáñez-Bernal (2010) published the catalog of Psychodidae deposited in the Colección de Artrópodos con Importancia Médica (CAIM) of the Instituto de Diagnóstico y Referencia Epidemiológicos (InDRE), Secretaría de Salud (formerly Instituto de Salubridad y Enfermedades Tropicales- ISET) in which unpublished records for Veracruz of some previously known species were presented. *Lutzomyia chiapanensis* (Dampf 1947) (*sensu* Young and Duncan 1994) was added to the list of species found in Veracruz, increasing the total to 14 species. In this paper we include some new geographical records of species previously known to occur in Veracruz, and report four new species records for the state of Veracruz.

Materials and methods

As part of the objectives of the project “Estratificación de tres enfermedades prioritarias en áreas de riesgo con base en sus insectos vectores en el estado de Veracruz, México” (FOMIX-CONACYT-Gobierno de Veracruz, 68317) phlebotomine sand flies were collected from various localities in Veracruz between February 2008 and February 2011. In addition, some specimens collected as part of a leishmaniasis surveillance program by the Department of Vector Control of Secretaría de Salud de Veracruz (SESVR) were examined by us and included in this report.

Specimens collected from natural refuges were taken by hand or by Centers for Disease Control (CDC) miniature UV-light traps (John W. Hock Company, Gainesville, FL) and Malaise traps (John W. Hock Company, Gainesville, FL). Specimens were preserved in 70% ethanol (those from Malaise traps) or stored dry (those from CDC