

First record of *Tenuipalpus uvae* De Leon, 1962 (Acari: Tenuipalpidae) in Brazil

Jeferson Luiz de Carvalho Mineiro^{1*}, Ronald Ochoa², Maria do Socorro Miranda de Sousa³, Manoel Guedes Correa Gondim Júnior⁴, Ezequiel da Glória de Deus⁵ and Ricardo Adaime⁵

- 1 Centro Experimental do Instituto Biológico, Laboratório de Acarologia, Rodovia Heitor Penteadó km 3, CEP 13092-543, Campinas, SP, Brazil.
 - 2 USDA, ARS, Systematic Entomology Laboratory, BARC-West, Bldg. 005, Room 137 Beltsville, Maryland 20705, USA.
 - 3 Universidade do Estado do Amapá, Av. Presidente Vargas 650, CEP 68906-970, Macapá, AP, Brazil.
 - 4 Universidade Federal Rural de Pernambuco, Departamento de Agronomia, Área de Fitossanidade. Rua Dom Manoel de Medeiros s/n, Dois Irmãos, CEP 52171-900, Recife, PE, Brazil.
 - 5 Embrapa Amapá. Rodovia Juscelino Kubitschek, km 5, No. 2600, CEP 68903-419, Macapá, AP, Brazil.
- * Corresponding author. E-mail: jefmin@hotmail.com

ABSTRACT: This is the first record of *Tenuipalpus uvae* De Leon (Tenuipalpidae) in Brazil. Specimens were collected from *Spondias mombin* L. (Anacardiaceae) in the states of Amapá (northern Brazil) and Pernambuco (northeast).

Spondias mombin L. is a perennial fruit tree, dispersed across tropical regions of the Americas, Africa and Asia. In Brazil it is found mainly in the northern and northeastern states, where its fruit, the hog plum, is known as taperebá, cajá-mirim or cajá. The hog plum is used in the preparation of fruit pulps, ice creams, nectars, jams, and juices (Sacramento and Souza 2000).

Few phytophagous mites have been reported on *Spondias*, namely: *Diptilomiopus alagarmaliensis* Mohanasundaram, *Tegolophus spondiallus* Mondal & Chakrabarti, *Vasates spondiasi* Boczek & Chandrapatya and *Diptilomiopus cythereae* (Chandrapatya), respectively on the species *Spondias mangifera* Willd., *Spondias bipinnata* Airy-Shaw & Forman, and *Spondias cytherea* Sonn. (Acari: Eriophyoidea) (de Lillo and Amrine 2006). Among the

Tetranychidae, only *Eotetranychus mastichi* De Leon has been reported on *Spondias* sp. (Bolland *et al.* 1998).

In the municipality of Porto Grande (00°36'13.3" N, 51°27'19.5" W), state of Amapá (Figure 1), a preliminary survey of mites associated with the hog plum tree was conducted in a commercial plantation with approximately 1,000 plants. Ten samples were collected, each consisting of three leaves from the middle third of the plant (M.S.M. Sousa, 11/21/2010). The leaves were taken into the laboratory, where the material was screened. The mites were mounted in Hoyer's solution on permanent slides, for subsequent identification. We obtained a total of 15 specimens of *Tenuipalpus uvae* De Leon, 1962 (Acari: Tenuipalpidae) (immatures and female adults) from seven of the samples. Over the same period, at the campus of the Federal Rural

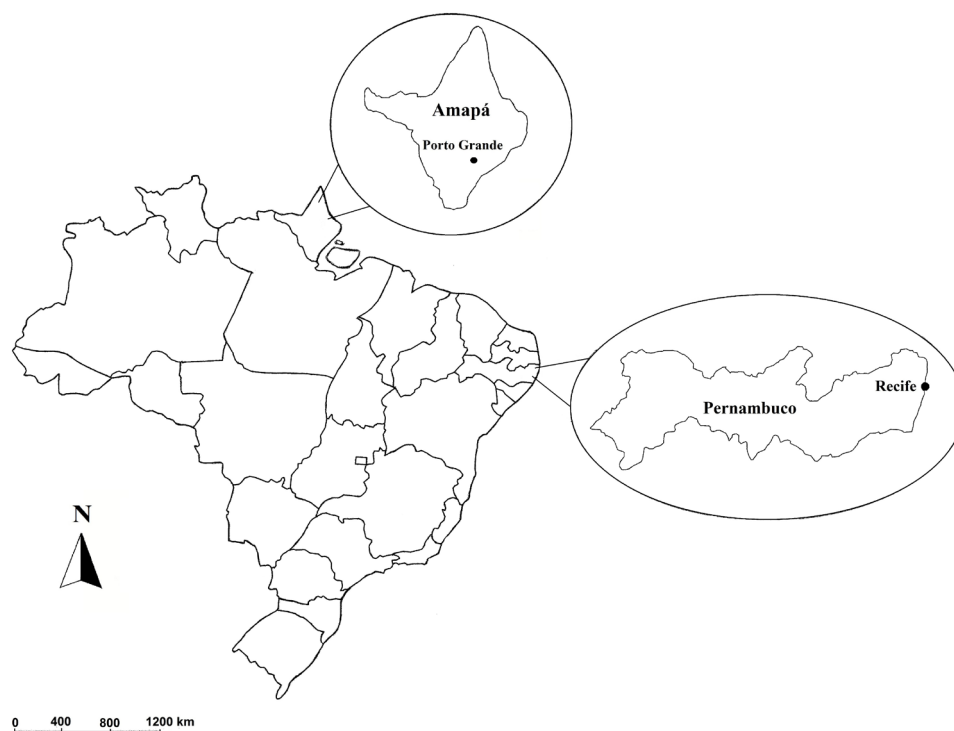


FIGURE 1. Map showing the first records of *Tenuipalpus uvae* De Leon, 1962 in Brazil, states of Amapá and Pernambuco.

University of Pernambuco (8°00'59.0" S, 34°56'39.7" W) in Recife, Pernambuco (Figure 1), one female and one immature of *T. uvae* were obtained in a single sampling event on *S. mombin* (D.B. de Lima, 10/07/2010).

Tenuipalpus uvae is characterized by the rodlike dorsal setae *Sci* and *Sce* on the propodosoma; dorsal surface rugose, with sculptured polygonal design on dorsalcentral area; hysterosomal setae *c3* and *e3* short, sublanceolate, serrate; ventral surface finely strigate; genital setae slightly shorter than pregenitals.

Voucher specimens (7799 and 7800) are deposited in the "Geraldo Calcagnolo" Reference Collection of Mites at the Acarology Laboratory of the Biological Institute in Campinas, São Paulo, Brazil (ICMBio collection permit 35919-1).

In the family Tenuipalpidae, the genus *Tenuipalpus* presents the highest number of known species (306) (Mesa et al. 2009), of which only nine have been reported in Brazil (Flechtmann 1976; 1994; Feres and Hernandez 2006; Mesa et al. 2009). This report of *T. uvae* in Amapá (northern Brazil) and in Pernambuco (northeast) is the first for this species in Brazil, expanding the number of *Tenuipalpus* species reported to date in the country. This report also expands the known geographic distribution of *T. uvae*, which has already been reported in Mexico and Puerto Rico (De Leon 1962; 1967; Baker and Tuttle 1987; Mesa et al. 2009).

Knowing the distribution of this phytophagous species is vital on account of its relevance to the fields of ecology, zoogeography and pest control, especially in areas of agricultural interest.

ACKNOWLEDGMENTS: We thank Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq for the post-doctoral fellowship granted to JLCM (151579/2010-5), and also Patrícia Ramos Ferreira at the Reference Collection for technical support provided.

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RECEIVED: April 2012

ACCEPTED: December 2013

PUBLISHED ONLINE: February 2014

EDITORIAL RESPONSIBILITY: Regiane Saturnino