

# **Article**



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# New species of *Tenuipalpus* (Acari: Tenuipalpidae) from Semidecidual Forest remnants in the State of São Paulo, Brazil

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#### **Abstract**

Three new species of the genus *Tenuipalpus* (Acariformes: Tenuipalpidae), *T. tapiae* **sp. nov.**, *T. apichai* **sp. nov.**, and *T. nambii* **sp. nov.** collected in Semidecidual Forest native plants in the northwest of the state of São Paulo, Brazil are described and illustrated. A key of the Brazilian species of *Tenuipalpus* based on females is presented.

Key words: flat mites, false spider mites, plant feeding mites, Euphorbiaceae, Malvaceae, Ulmaceae

## Introduction

*Tenuipalpus* Donnadieu is the most numerous genus of the family Tenuipalpidae (Acariformes) with 306 species and 11 of them are described from Brazil (Mesa *et al.* 2009; Flechtmann & Noronha 2013).

During investigations of the mite fauna associated with native plants in Semidecidual Forest remnants in the northwest of the state of São Paulo, three new species of *Tenuipalpus* were recorded and are described herein: *T. tapiae* **sp. nov.**, *T. apichai* **sp. nov.**, and *T. nambii* **sp. nov.** 

# Material and methods

Measurements for the holotype of each species are given in micrometers (μm), with the range of measurements for the paratypes shown in parentheses. The body length was measured from the apex of the rostrum to the posterior apex of the body, and the width was measured at the level of the sejugal furrow. Setal nomenclature follows that of Grandjean (1939), as applied by Kethley (1990). Photographs of differential interference contrast (DIC) microscopy are included in the illustrations. Type specimens are deposited in the collection of Acari, Departamento de Zoologia e Botânica, UNESP, São José do Rio Preto, State of São Paulo, Brazil (DZSJRP, http://www.splink.cria.org.br) and in the National Insect and Mite Collection, National Museum of Natural History, Smithsonian Institution, located in the Systematic Entomology Laboratory, USDA, Beltsville, Maryland, USA (NMNH).

# Tenuipalpus tapiae Castro and Feres sp. nov.

(Figs. 1-11)

**Description**. FEMALE: (holotype, Figs. 1–8). Body length 270 (265–275 in 12 paratypes); width 170 (160–170). *Dorsum* (Figs. 1–2). Prodorsal setae *ve* 5 (5–6) reduced, setae *sci* 14 (10–13) and *sce* 9 (9–11) larger; prodorsal

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