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## A new species of *Ultratenuipalpus* (Acari: Tenuipalpidae) from Cook Islands, with a key to the known species

YUN XU<sup>1</sup>, QING-HAI FAN<sup>2,4</sup> & ZHI-QIANG ZHANG<sup>3,4</sup>

<sup>1</sup> Key Laboratory of Integrated Pest Management for Fujian-Taiwan Crops, Ministry of Agriculture; Fujian Provincial Key Laboratory of Insect Ecology; Fujian Agricultural and Forestry University, Fuzhou 350002, China

<sup>2</sup> Plant Health & Environment Laboratory, Ministry for Primary Industries, Auckland, New Zealand

<sup>3</sup> Landcare Research, Private Bag 92170, Auckland, New Zealand

<sup>4</sup> Corresponding author: Zhi-Qiang Zhang: [ZhangZ@landcareresearch.co.nz](mailto:ZhangZ@landcareresearch.co.nz); Qing-Hai Fan: [qhfanacari@gmail.com](mailto:qhfanacari@gmail.com)

### Abstract

The genus *Ultratenuipalpus* (Acari: Tenuipalpidae) was represented by 24 species prior to this study. In this paper, we describe and illustrate *Ultratenuipalpus avarua* sp. nov., from *Cocos* sp. (Arecaceae) in Avarua, Rarotonga, the Cook Islands. A key to the world species of *Ultratenuipalpus* is provided.

**Key words:** Flat mite, false spider mite, Arecaceae, *Cocos* sp., *Ultratenuipalpus*, new species, key

### Introduction

The genus *Ultratenuipalpus* was erected by Mitrofanov (1973) with the type species *Tenuipalpus meekeri* (De Leon) collected on ferns in a mangrove swamp from San Blas, Nayarit, Mexico. Mitrofanov (1973) defined *Ultratenuipalpus* based only on the characters on the dorsal idiosoma. Meyer (1979) redefined the genus using characters of the genito-anal area which were neglected by Mitrofanov.

To date, 24 species of *Ultratenuipalpus* have been described in the world: 2 from Mexico (De Leon 1957; Mesa *et al.* 2009), 3 from South Africa (Meyer 1979, 1993), 1 from India (Sadana & Sidhu 1990), 3 from Chile (Gonzalez 1968), 2 from Philippines (Rimando 2001), 2 from China (Wang 1980, 1983), 1 from Australia (Pritchard & Baker 1958) and 10 from New Zealand (Collyer 1964, 1973a, b). In this paper, we describe and illustrate *Ultratenuipalpus avarua* sp. nov., from *Cocos* sp. (Arecaceae) in Avarua, Rarotonga, the Cook Islands. A key to the world species of *Ultratenuipalpus* is provided.

### Material and methods

Mites were mounted in Hoyer's medium, and examined at 1000 times using a DIC Nikon E800 microscope. All measurements were made from slide-mounted specimens using a stage-calibrated ocular ruler and are given in micrometers ( $\mu\text{m}$ ) (Zhang & Fan 2004). Measurements of the holotype are presented, followed by a range in brackets. Setae were measured from the centre of the setal base to the tip of the seta; distances between setae were measured as the distance from the centre of one setal base to the other. Legs are measured from the basal end of trochanter to the distal end of tarsus. Terminology follows that applied to the Tetranychidae by Lindquist (1985).

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