



## A new flat mite (Acari: Prostigmata: Tenuipalpidae) from date palm in the Sultanate of Oman

G.J. DE MORAES<sup>1,2</sup>, A. AL-SHANFARI<sup>3</sup> & R. V. DA SILVA<sup>1</sup>

<sup>1</sup>Departamento de Entomologia e Acarologia; Escola Superior de Agricultura “Luiz de Queiroz” (ESALQ) - Universidade de São Paulo; 13418-900 Piracicaba — S.P.; Brazil. E-mail: gjmoraes@esalq.usp.br; renan.venancio.silva@usp.br

<sup>2</sup>CNPq Researcher

<sup>3</sup>Ministry of Agriculture, Agricultural and Livestock Research - Dhofar Region, P.O. Box 1286, 211, Salalah, Sultanate of Oman

### Abstract

*Tenuipalpus omani* n. sp. (Acari: Tenuipalpidae) is described from the Sultanate of Oman, based on adults of both sexes collected on date palm, *Phoenix dactylifera* L. (Arecaceae). This new species is most similar to *T. eriophyoides* Baker, *T. pareriophyoides* Meyer & Gerson and *T. yarensis* Hasan, Bashir & Wakil, also collected from date palm.

**Key words:** taxonomy, date palm, Oman

### Introduction

The genus *Phoenix* L. (Arecaceae) comprises 32 species (USDA, ARS, National Genetic Resources Program 2010) most of which are native to Africa and Asia. Although *Phoenix canariensis* hort. ex Chabaud, *P. lourerii* Kunth, *P. reclinata* Jacq., *P. roebelenii* O’Brien and *P. sylvestris* (L.) Roxb. are cultivated in relatively restricted areas, the “true” date palm, *P. dactylifera* L., is widely cultivated across the world. In northern Africa and western Asia, it is found mostly in oases, because of its requirement for an intense hot summer with little rain and low humidity, with abundant underground water (Krueger & Chao 2007). The USA is a large producer of date palms, with most cultivation occurring in the states of Arizona and California (USDA, National Resources Conservation Service, 2010). *Phoenix* species are attacked by a variety of arthropods, including tenuipalpid mites of the genera *Brevipalpus* Donnadieu, *Raoiella* Hirst and *Tenuipalpus* Donnadieu. Three *Tenuipalpus* species have been reported on *P. dactylifera* in the Middle East and western Asia, namely *T. eriophyoides* Baker, *T. pareriophyoides* Meyer & Gerson and *T. yarensis* Hasan, Bashir & Wakil. A new species of this genus was recently found in low population levels on *P. dactylifera* leaves in the Sultanate of Oman. The objective of this paper is to describe this new species based on adults of both sexes.

### Material and methods

Adult female and male specimens used in this description were collected in Hasik, Dhofar Region, Sultanate of Oman. They were mounted in Hoyer’s medium for later examination under phase contrast microscopy. Measurements were made with a graded eye piece, and illustrations were made with a drawing tube attached to the microscope. Measurements are given in micrometers and represent the average measurements (nearest integer) for the specimens observed, followed (in parentheses) by the corresponding ranges.