



Eriophyoid mites (Acari: Prostigmata: Eriophyoidea) from fruit trees in Northeastern Brazil—a new genus, three new species and a redescription

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Abstract

A new genus and two new species of eriophyoid mites in the family Diptilomiopidae associated with *Spondias mombin* L. (Anacardiaceae), namely *Solvivagus* n. gen. *alpha* n. sp. and *Davisella spondias* n. sp., are described. In addition, a new species of Eriophyidae associated with *Eugenia uniflora* L. (Myrtaceae), namely *Dichopelmus ibapitanga* n. sp., is described and *Aculus pitangae* Boczek & Davis, also from *E. uniflora*, is redescribed including a description of the male, and its classification is discussed. All material studied was collected in the State of Pernambuco, Northeastern Brazil.

Key words: Eriophyidae, Diptilomiopidae, *Spondias mombin*, *Eugenia uniflora*, taxonomy, new genus, new species, Neotropical

Introduction

A high diversity of native and exotic fruit trees is cultivated in Northeastern Brazil largely due to a wide range of tropical climates between the coastal and inland areas. Two fruit trees generally cultivated in this area are *Spondias mombin* L. (Anacardiaceae), commonly known as *cajá-mirim* or yellow mombin, and *Eugenia uniflora* L. (Myrtaceae), commonly known as *pitanga* and Surinam, Brazilian or Cayenne cherry.

Spondias mombin is native to the tropical Americas and occurs naturally in the moist lowland forests of the Amazon in South America, and in Southern Mexico, Central America and the Caribbean. In Brazil, this large deciduous tree, is mainly distributed in the northern and northeastern States. Yellow mombin fruit is often used to prepare juice, ice cream and jelly (Souza 2000).

So far, no eriophyoid mite species have been described or reported from *S. mombin*. Four species are, however, known from other *Spondias* species in Asia (India and Thailand). They were described from *Spondias mangifera* Willd., *Spondias bipinnata* Airy-Shaw & Forman and *Spondias cytherea* Sonn., and belong to the genera *Diptilomiopus* Nalepa, 1916, *Tegolophus* Keifer, 1961 and *Vasates* Shimer, 1869 (de Lillo & Amrine 2006).

Eugenia uniflora, a large shrub or small tree up to 10 metres tall (Gomes 1975) and native to Brazil, is disseminated largely throughout the country (Bezerra *et al.* 2000). Its fruit is eaten *in natura* or used to prepare juice, ice cream, jelly, liqueur and wine (Bezerra *et al.* 2000).

Four eriophyoid species are known from *E. uniflora*: *Aculus eugeniae* Keifer, 1977 from Florida, USA; *Aculus pitangae* Boczek & Davis, 1984, *Calacarus kleithria* Flechtmann, 2003 and *Diptilostatus nudipalpus* Flechtmann, 2003 (Flechtmann and de Moraes 2003) from Southeastern Brazil.