



Article

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A new eriophyoid mite genus and species, *Gymnaceria cupuassu* (Acari: Eriophyidae), described from the cupuaçu tree in Brazil

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Abstract

A new eriophyoid mite genus and species, *Gymnaceria cupuassu* n. sp. et n. gen. (Acari: Eriophyidae: Eriophyinae: Aceriini), is described from young fruits and other plant parts of the cupuaçu tree, *Theobroma grandiflorum* (Willd. Ex Spreng.) K. Schum. (Sterculiaceae), from the State of Bahia, northeastern Brazil. No visible damage symptoms were observed.

Key words: taxonomy, eriophyid mites, Aceriini

Introduction

The commercial production of tropical fruits has been growing considerably in the southeastern coast region of the State of Bahia, Brazil. Cupuaçu, *Theobroma grandiflorum* (Willd. Ex Spreng.) K. Schum. (Sterculiaceae), a relative of cacao, was introduced from the Amazon rain forest in Bahia by Gregorio Bondar in 1930 (Lopes *et al.* 1999). Fruit from this plant is available throughout the year, since it flowers continuously, and its sweetened fruit pulp is of high commercial value. For this reason, the determination of the phytophagous mites on this plant is of interest. The objective of this paper is to describe a new genus and species of Eriophyidae collected from the immature fruits and other young plant parts of *T. grandiflorum*.

Materials and methods

Immature fruits (ranging from 3 to 5 cm in length), buds, flowers, young leaves and branches still having abundant trichomes, were collected from cupuaçu trees at the campus of the Universidade Estadual de Santa Cruz (UESC) and from the campus of the Comissão Executiva do Plano da Lavoura Cacaueira (CEPLAC), in the municipality of Ilhéus, Bahia, northeastern Brazil. Older fruits, leaves and branches were also collected. These plant parts were taken to the laboratory for examination under a stereomicroscope Olympus SZX7. The eriophyoid mites found were mounted in modified Berlese's medium (Amrine & Manson 1996) and heated at 55 °C for 14 days for later study under a phase-contrast microscope Leitz Dialux 20 at 1,250× magnification (oil immersion).

Morphology and nomenclature follow that of Lindquist (1996). Systematic classification follows that of Amrine *et al.* (2003). All measurements are given in micrometres. For each structure, the measurement for the holotype is given followed by the respective ranges, in parentheses, when measurements varied. For the male, nymph and larva the ranges of particular characters are provided. The count of ventral opisthosomal annuli started from the rear margin of the genitalia for adults and from the seta 3a for immatures. The dorsal opisthosomal annuli count started from the mid prodorsal shield rear margin. Leg length was measured from the trochanteral basis to the tip of the tarsus, not including the solenidion and empodium.