



## Article

### Eriophyoid mites (Acari: Prostigmata: Eriophyoidea) on palms (Arecaceae) from the Brazilian Amazon: a new genus and four new species

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#### Abstract

A new genus and four new species of eriophyoid mites associated with native palm trees (Arecaceae) are described and illustrated from the Brazilian Amazon in the State of Roraima, Brazil. They include a new genus and two new species in the family Eriophyidae, namely, *Reginesus* **n. gen. et macuxi** **n. sp.** from *Bactris* aff. *maraja* Mart. and *Nasuchus socratea* **n. sp.** from *Socratea exorrhiza* (Mart.) H. Wendl. and *Bactris gasipaes* Kunth. Two new species were also described in the family Phytoptidae: *Propilus bactris* **n. sp.** from *Bactris maraja* Mart. and *Retracrus pupunha* **n. sp.** from *Bactris gasipaes* Kunth.

**Key words:** Phytoptidae, Eriophyidae, taxonomy, Neotropical, Brazil

#### Introduction

Palm trees, making up the family Arecaceae, are widely distributed in the tropics and subtropics, growing naturally in almost all areas of those regions (Lima *et al.* 2003). Palms are more diverse in form than other monocotyledon plant families, perhaps even more so than any other family of seed plants (Dransfield *et al.* 2008), including nearly 3500 species and more than 240 genera (Lorenzi 1996). They also represent a group of plants of huge socio-economic and ornamental importance (Lorenzi 1996).

Navia *et al.* (2007) presented a review on the Eriophyoidea mites found on palms worldwide. The authors listed 62 eriophyoid species belonging to 31 genera that were associated with 54 palm tree species from 25 genera. In the Americas, 40 eriophyoid species associated with palm trees are known. Although there is a high diversity of palms in the Amazon landscape, only 5 eriophyoid mites were known from palms in this South American biome (Navia & Flechtmann 2005). Surveys for eriophyoid mites in Brazil showed that at least one mite species was found on each of the majority of the native palm species that were evaluated (Navia *et al.* 2007). Information about eriophyoid mites on palm trees is still scarce, thus efforts should be directed towards obtaining better knowledge about these mites on such an important group of plants.

In this paper, a new genus and four new species of Eriophyoidea mites that were collected from palm trees in the Brazilian Amazon, State of Roraima, extreme northern Brazil, are described and illustrated as follows: within the family Eriophyidae, a new genus and a new species in the Nothopodinae, namely *Reginesus* **n. gen. et macuxi** **n. sp.** from *Bactris* aff. *maraja* Mart. and a new species in the Phyllocoptinae, namely *Nasuchus socratea* **n. sp.** from *Socratea exorrhiza* (Mart.) H. Wendl. and *Bactris gasipaes* Kunth; and in the family Phytoptidae, two new Sierraphytoptinae species, namely *Propilus bactris* **n. sp.** from *Bactris maraja* Mart. and *Retracrus pupunha* **n. sp.** from *B. gasipaes*.