



Three new species of Phyllocoptinae mites (Prostigmata: Eriophyidae) associated with ornamental plants in Brazil

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Abstract

Three new species of Phyllocoptinae mites (Prostigmata: Eriophyidae) from Brazil namely *Acaricalus souzae* n. sp. (Acaricalini), from common morning glory, *Ipomoea purpurea* (Convolvulaceae); *Aculops fenestratus* n. sp. (Anthocoptini), from royal poinciana or flamboyant, *Delonix regia* (Fabaceae); and *Porcupinotus costaspinosus* n. sp. (Anthocoptini), from *Abarema cochliacarpus* (Mimosaceae) are described. The eriophyoid mite species were causing no apparent damage.

Key words: Acari, Eriophyoidea, plant feeding mites, taxonomy, South America

Introduction

The transportation of ornamental plants represents an important way for the dissemination of plant pests around the world. Phytosanitary aspects of this group of plants must be further investigated. Phytophagous mites, including Eriophyoidea, are among pests of ornamental plants. In this study three new eriophyid species infesting ornamental plants in Brazil are described. The common morning glory, *Ipomoea purpurea* (L.) Roth. (Convolvulaceae), is an annual deciduous vine with purple flowers and probably originates from Mexico and is pantropically cultivated (Connecticut Botanical Society 2005). The royal poinciana or flamboyant, *Delonix regia* (Bojer ex Hook.) Raf. (Fabaceae), is a deciduous tropical tree with fern-like leaves that originates from Madagascar and is largely cultivated throughout the tropics (Vozzo 2003). *Abarema cochliacarpus* (Gomes) Barneby & J. W. Grimes (Mimosaceae) is an ornamental and medicinal species that is native to Brazil (USDA 2006).

The mites were mounted in Berlese modified medium (Amrine Jr. & Manson 1996). Genera identification was based in Amrine Jr. *et al.* (2003). Measurements are given in micrometers. For females, each measurement of the holotype precedes the corresponding range for the paratypes. Some measurements of paratypes could not be taken because of the orientation of the slide-mounted specimens. For the descriptions of the eriophyid mites presented here, the counts of the ventral opisthosomal annuli starts from the genitalia rear margin and the counts of the dorsal opisthosomal annuli start from the prodorsal rear shield margin.

***Acaricalus souzae* n. sp. (Fig. 1)**
(Eriophyidae, Phyllocoptinae, Acaricalini)

Diagnosis — *Acaricalus souzae* is distinctive in the richness of the prodorsal shield ornamentation: median