



Key to the Species of Cosmetidae (Arachnida, Opiliones) of Central America, with Notes on Penis Morphology and Sexual Dimorphisms

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Abstract

To facilitate identification of harvestmen of the family Cosmetidae in Central America, we developed dichotomous keys that distinguish the 33 known genera and the 133 described species for this region. Couplets are based upon characters found in the literature and examinations of museum specimens. Important characters include the number of tarsomeres on leg I, armature of the dorsal scutum, free tergites and legs, as well as the coloration and relative length of the body and legs. In addition, we provide a summary of sexually dimorphic features and comment on the potential usefulness of penis morphology and coloration as characters for distinguishing taxa.

Key words: Arachnida, Central America, Cosmetidae, Laniatores, Opiliones, taxonomic key

Resumen

Para facilitar la identificación de Opiliones de la familia Cosmetidae en Centroamérica, nosotros desarrollamos una clave dicotómica que distingue los 33 géneros conocidos y las 133 especies descritas para esta región. Cada par de opciones esta basadas en caracteres que se encontraron en la literatura y revisión de especímenes de museo. Entre los caracteres de importancia están el número de tarsómeros de la pata I, armadura de el escudo dorsal, tergitos libres y patas, así como la coloración, tamaño relativo del cuerpo y patas. Además, nosotros suministramos un resumen de caracteres sexuales dimorficos y comentarios en la utilidad potencial de la morfología del pene y su coloración como caracter para distinguir taxones.

Palabras clave: Arachnida, Centroamérica, Cosmetidae, Laniatores, Opiliones, clave taxonómica

Introduction

In Neotropical forests, harvestmen (Arachnida, Opiliones) are among the most commonly encountered arthropods, particularly after dusk, when individuals are frequently seen in the leaf litter or climbing tree buttresses, lianas and other vegetation (Acosta & Machado 2007; Townsend *et al.* 2008). Most species are generalist predators, feeding upon a diverse array of invertebrates (Acosta & Machado 2007), but their diets may also include fungi, flowers, or fruits (Machado & Pizo 2000). In contrast to insects and spiders (for a review see Bragagnolo *et al.* 2007), harvestmen have seldom been used to assess the impact of forest management practices. In the Atlantic forests of Brazil, the abundance and presence of rare species of harvestmen from the families Gonyleptidae and Sclerosomatidae were strongly affected by the absolute size