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Abstract

Twenty-one species of *Atrichopogon* are described from Costa Rica, based primarily on distinctive males. Of these, females are also described for six species. A key to the males of these species allows for their identification within at least the New World. Three of the species are previously named and described: *A. lacajae* Macfie, *A. didymothecae* Macfie, and *A. longicornis* Ewen. The following are new species: *A. bicuspis, A. colossus, A. spinosus, A. carnatus, A. lobatus, A. magnus, A. granditibialis, A. barbatus, A. yolancae, A. gamboai, A. granditergitus, A. tirzae, A. asuturus, A. quartibrunneus, A. beccus, A. redactus, A. setosilateralis*, and *A. tapantiensis.* A lectotype is designated for *A. didymothecae*.

Resumen

Sobre la base de machos característicos, se describen 21 especies de *Atrichopogon* de Costa Rica, describiéndose también hembras de 6 de ellas. La clave para machos de estas especies permite, al menos, su identificación dentro del Nuevo Mundo. Tres especies fueron previamente nominadas y descritas: *A. lacajae* Macfie, *A. didymothecae* Macfie, and *A. longicornis* Ewen. Las siguientes son especies nuevas: *A. bicuspis, A. colossus, A. spinosus, A. carnatus, A. lobatus, A. magnus, A. granditibialis, A. barbatus, A. yolancae, A. gamboai, A. granditergitus, A. tirzae, A. asuturus, A. quartibrunneus, A. beccus, A. redactus, A. setosilateralis,* and *A. tapantiensis.* Se designa el lectotipo para *A. didymothecae*.

Key words: Diptera, Ceratopogonidae, *Atrichopogon*, new species, Costa Rica

Introduction

Nearly all taxonomists who work on large groups have their pet example of one or more large genera which clearly include many members but which display a depressingly low level of morphological divergence between species. Examination of a given sample reveals several or more morphotypes which differ in small but consistent ways, strongly suggesting the presence of several species; yet compiling all the material from many localities results in an increasing confusion of diagnostic features. A prime example within the Ceratopogonidae is the genus *Atrichopogon* Kieffer. Although 455 species have been described worldwide, most of these cannot be confidently identified. In addition, seven subgenera are currently recognized but appear to apply only on a local level or are recognized as a small group of distinctive species (with the likelihood that a paraphyletic group remains). Not too much has changed since Edwards (1926:399), in his analysis of the British ceratopogonid fauna, pointed out, "The species of *Atrichopogon* are mostly very similar in appearance and difficult to distinguish satisfactorily".

Work by Ewen and Saunders (1958) strongly suggests that there is greater morphological divergence in the larval and pupal stages and therefore that adults need to be reared with associated stages before a good understanding of species characteristics and their

