Three new species of Anchylorhynchus Schoenherr, 1836 from Colombia (Coleoptera: Curculionidae; Curculioninae; Acalyptini)

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Abstract

Three new species of the genus Anchylorhynchus from Colombia, are described: Anchylorhynchus pinocchio sp. nov., A. centrosquamatus sp. nov., and A. luteobrunneus sp. nov. A morphological description, including the male genitalia, is provided for each species as well as a comparison with similar species within the genus. All three species are found in inflorescences of species of Syagrus Mart. (Arecaceae). The adults are pollinators and the larvae develop inside fruits and feed on the endosperm, interrupting seed formation and causing fruit abortion.

Key words: palm, inflorescence, Arecaceae, Derelomina, biodiversity

Introduction

Anchylorhynchus Schoenherr, 1836 is a Neotropical genus distributed from Panama to Argentina. Among its 19 recognized species (O’Brien & Wibmer, 1982; Wibmer & O’Brien, 1986; Vanin, 1995), only four are found in the Amazon region (Anchylorhynchus amazonicus Voss, 1943; A. bicornatus O’Brien, 1981; A. gottsbergerorum Vanin, 1995 and A. tricarinatus Vaurie, 1954), two of them (A. tricarinatus and A. bicornatus) recorded from Colombia. They are classified within the subtribe Derelomina Lacordaire, 1865 (Franz, 2006), currently placed within the tribe Acalyptini, subfamily Curculioninae (Bourchard et al., 2011). Following a general trend among the genera in the tribe (Franz, 2006; Franz & Valente, 2005), these weevils are pollinators specializing on palm flowers (Núñez-Avellaneda & Rojas-Robles, 2008), feeding and ovipositing in species of Butia (Becc.) Becc., Cocos L., Oenocarpus Mart. and Syagrus Mart. (Vaurie, 1954). The adults are pollinators and the larvae develop inside pistillate flowers. They consume the endosperm, causing fruit abortion and thus affecting the reproductive success of each palm. Species of Anchylorhynchus consume seeds which are suited for human consumption, and also reduce the reproductive potential of palms (Núñez et al., unpublished data).

We have been conducting complementary research projects on the genus Anchylorhynchus. BASM is working on the taxonomic revision of the entire genus and LANA on the biology of these weevils and their role in palm pollination in Colombia. After getting in contact with each other, we exchanged material and recognized among the samples three new species from that country. Since there is a need for making the names available for an ongoing study of palm pollination, we consider that they deserve prompt description before the revisionary work is concluded. Herein we describe three new species of Anchylorhynchus from Colombia, and provide information on their biology and host plant species.