



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. bicarinatus* O'Brien, 1981; *A. gottsbergerorum* Vanin, 1995 and *A. tricarinatus* Vaurie, 1954), two of them (*A. tricarinatus* and *A. bicarinatus*) 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seeds which are suited for human consumption, and also reduce the reproductive potential of palms (Núñez *et al.*, unpublished data).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.