Madoxychara gen. nov. (Hemiptera: Fulgoromorpha: Flatidae), a new genus of the tribe Phantiini Melichar from Madagascar

ADAM STROIŃSKI¹ & DARIUSZ ŚWIERCZEWSKI²
¹Museum and Institute of Zoology PAS, ul. Wilcza 64, 00-697 Warszawa, Poland. E-mail: adam@miiz.waw.pl
²Department of Zoology and Animal Ecology, Jan Długosz University, Al. Armii Krajowej 13/15, 42-201 Częstochowa, Poland. E-mail: dswier@ajd.czest.pl

Abstract

Madoxychara unicornis gen. et sp. nov. (Hemiptera: Fulgoromorpha: Flatidae) is described and illustrated from Madagascar.

Key words: taxonomy, Auchenorrhyncha, Fulgoroidea

Introduction

Madagascar's biodiversity ranks among the most remarkable in the world. The island has been famously called "the naturalist's promised land" because of its large number of endemic species. More than 92% of the island's mammals are endemic, as are nearly 60% of birds, 90% of plants and 97% of reptiles and amphibians (Goodman & Patterson 1997; Ganzhorn et al. 2001; Wilmé et al. 2006)

The data on the flatid fauna of Madagascar, when compared with those of the African continent, seems extremely scarce with 39 species of Flatinae and 37 species of Flatoidinae (Synave 1956; Metcalf 1957; Stroiński & Świerczewski 2011; Stroiński & Świerczewski 2012b). Preliminary studies based on the material from several museum collections indicate that the biodiversity of Flatinae in Madagascar is much higher than previously estimated (Świerczewski & Stroiński 2011; Świerczewski & Stroiński 2012). Phantiini Melichar 1923 is a small flatid tribe containing 13 genera with 36 species distributed worldwide. In Afrotropical Region, it is represented by 7 genera and 12 species and species of the tribe are usually short, globular insects, nearly as broad as long, with overall color brown or rarely green and body length not exceeding 6 mm.

For Madagascar the first Phantiini record recently described by Stroiński and Świerczewski (2012a) was Soares testudinarius Stroiński et Świerczewski, 2012, occurring in the northern part of the island. Medler (2001) in his revision of south African Flatidae mentioned from Madagascar another genus Paroxychara Lallemant et Synave, 1952 known originally from Belgian Congo and south Africa (Lallemant & Synave 1952), however, without any additional information. Paroxychara was assigned to the tribe Phantiini by Metcalf (1957) and in Africa is represented by two species P. capeneri Lallemant et Synave, 1952 and P. cowla Medler, 2001.

Our recent examination of genital structures of several specimens of a Madagascar's flatid species looking externally similar to Paroxychara showed that the genital structures of this species are completely different from those of any known African species and it represents an undescribed genus and species. In this paper, we describe this new genus and species.

Material and methods

Material. The studied material comes from the collection of the Muséum national d'Histoire naturelle, Paris, France (MNHN) and part of the material is deposited in the Museum and Institute of Zoology PAS, Warszawa, Poland (MIZ).