



Two new species of Dilaridae (Insecta: Neuroptera) with additional notes on Brazilian species

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Abstract

Herein we describe two new species of lacewing in the family Dilaridae from northeastern Brazil: *Nallachus furcatus*, n. sp. and *N. potiguar*, n. sp. We also describe range expansions for three species: *N. adamsi* Penny, 1982 from Manaus to the border of the states of Amazonas and Pará; *N. bicolor* Adams, 1970 from the state of Santa Catarina to the states of Goiás and Minas Gerais; *N. limai* Adams, 1970 from Santa Catarina to Paraná. An identification key to adults and a checklist of Brazilian species are presented.

Key word: *Nallachus*, pleasing lacewings, taxonomy, key

Introduction

Dilaridae, the pleasing lacewings, is one of the smallest families in the Neuroptera and comprises 67 described species globally, 18 of which are from the New World (Oswald 1998; Monserrat 2005). Males are easily recognized by their pectinate antennae and females by their long ovipositor (Grimaldi & Engel 2005). Most often collected in light traps (Penny 2002), almost nothing is known of their biology (Oswald 1998), except for the immature stages of *Nallachus americanus* (McLachlan, 1881) (Gurney, 1947).

Two subfamilies are recognized: Dilarinae Newman, 1853 and Nallachiinae Navás, 1914. Only the latter subfamily, with one genus (*Nallachus* Navás, 1909), occurs in the New World (Oswald 1998). With the addition of the two new species described here, 10 species are now known from Brazil.

Recent collections from northeastern Brazil of some specimens of Dilaridae have prompted this study. The last report about Dilaridae in Brazil was published nearly 30 years ago (Penny 1981). Here we report the first records for this family in northeastern Brazil and, in so doing, describe two new species.

Materials and methods

All specimens used in this study are held in the Invertebrate Collection of the Institute for Amazonian Research (*Coleção de Invertebrados do Instituto Nacional de Pesquisas da Amazônia – INPA*). Specimens were identified by the use of keys by Adams (1970) and Penny (1981) as well as by comparisons with additional specimens that were previously identified and are held in the same collection at INPA.

The terminalia, when dissected, were macerated in hot 85% lactic acid following Cummings (1992), then placed in glycerin. Specimens were then examined and illustrated using stereomicroscope with a camera lucida. Most external characters were digitally photographed and then edited in CombineZM software. Terminology follows Adams (1970).