

Article



Bergiantina, a new genus of agaristid moth (Lepidoptera: Noctuidae)

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Abstract

Bergiantina, a new Agaristinae genus, is described. The genus contains 8 species. Three were previously assigned to Aucula Walker: Metagarista hilzingeri Berg, Euthisanotia magnifica Schaus, and Aucula schausi Jörgensen. Two were previously assigned to Erocha Walker: Heterocampa dolens Druce and Erocha trita Druce. Three new species are described: Bergiantina intermedia, B. parva, and B. familiae. Bergiantina can be distinguished from other Agaristinae by its distinctive forewing pattern with white patches or stripes associated with the postmedial line. Other diagnostic characters include: male genitalia with moderately asymmetric valves, aedoeagus with an apical sclerotized horn-like dorsal projection, and female genitalia with a thin, membranous ductus bursae 3x as long as anterior apophysis. Adults and male and female genitalia are described and illustrated, and a key to species provided. One new synonymy is established and two lectotypes are designated.

Key words: Agaristinae, morphology comparison, male genitalia, distribution maps

Introduction

The Agaristinae (Lepidoptera: Noctuidae) includes brightly colored, day-flying moths, with a predominantly tropical distribution (Holloway, 1989). The South American fauna was studied by Kiriakoff (1977) and a total of 20 genera and 87 species was reported by Poole (1989). During the course of a study of the Agaristinae moths from Argentina and neighboring countries, we had the opportunity to examine a large series of different species of this region. Among them, we found three species (*Metagarista hilzingeri* Berg, *Euthisanotia magnifica* Schaus, and *Aucula schausi* Jörgensen) of the genus *Aucula* Walker and two species (*Heterocampa dolens* Druce and *Erocha trita* Druce) traditionally placed in the genus *Erocha* Walker. The former three species were removed from *Aucula* by Todd & Poole (1981); they stated those species should be placed in a new genus. Examination of the coloration, wing pattern, and male genitalia showed that these species lacked diagnostic characters of either *Aucula* or *Erocha* and belong to a new genus. The purpose of the present paper is to describe this new genus, redescribe its species, and describe three new species.

Material and methods

The adult images were taken with an Olympus D-545 digital camera. The genitalic images were taken with an Olympus SZ-PT stereoscopic microscope using an Olympus DP11 digital camera. Genitalic images were stacked using CombineZP (Hadley, 2008). Images were enhanced with Adobe PhotoShop 6.0. Dissections of genitalia were conducted as in Holloway *et al.* (1987). The stains used in the dissections were 1% Mercurochrome for male genitalia and Chlorazol Black E for female genitalia. Forewing length measurements were made with an ocular micrometer mounted in an Olympus SZ-PT stereoscopic microscope. Genitalic morphological terminology follows Holloway (1989). Lafontaine (2004) was followed