



A new *Cocos*-eating moth of *Acria* Stephens, 1834 (Lepidoptera, Peleopodidae) from China, with descriptions of its adult, larva and pupa

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Abstract

A species of *Acria* Stephens, 1834 is reported as new to science, namely *Acria cocophaga* **sp. nov.** Descriptions and illustrations of adults, genital, larval and pupal structures are all provided. The types of the species are deposited at the Institute of Zoology, Chinese Academy of Sciences (IZCAS).

Key words: new species, Lepidoptera, Peleopodidae, *Acria*, larva, pupa

Introduction

The genus *Acria* was erected by Stephens (1834) in the family Yponomeutidae. The genus was included in the "Cryptophasidae" by Fletcher (1929), and then transferred to the subfamily Depressariinae of the family Oecophoridae by Hodges (1978). Minet (1986) and Hodges (1998) designated the genus *Acria* to belonging to Peleopodidae. However, some works were still keeping the treatment of Hodges (1978) (Pitkin & Jenkins 2004; Yuan, Zhang & Wang 2008).

The genus *Acria* is characteristic by the following (Yuan, Zhang & Wang 2008): the third segment of labial palpus not shorter than the second segment; forewing with a concavity at middle of costa, R₄ absent, CuA₁ and CuA₂ separated; the female with a bulla seminalis present.

Currently, there are about 12 species reported as belonging to *Acria* (Meyrick 1905–1930; Yuan, Zhang & Wang 2008). It is mainly distributed throughout the Oriental Region (India, Sri Lanka and China), with some species located in Africa and Australia. Five species have been recorded in China (Yuan, Zhang & Wang 2008). In this paper, an additional species from Hainan Province is described as new to science and descriptions of its adult, larval and pupal structures are provided.

Material and methods

The specimens examined were provided by the Coconut Research Institute, Chinese Academy of Tropical Agricultural Sciences and deposited at the Institute of Zoology, Chinese Academy of Sciences (IZCAS). Illustrations of genital, larval and pupal structures were made with a camera lucida, and post-corrected with Adobe Illustrator® and Adobe Photoshop®. Photos of adult and genital structures were taken with a digital camera with help of Zeiss® Stereo Microscope and complied with Auto-Montage software version 5.03.0061 (Synoptics Ltd). Terminology of larval and pupal structures follows Peterson (1948) and Scoble (1992).