Notes on the tribe Nygmiini (Lepidoptera: Erebidae: Lymantriinae) from Nanling National Nature Reserve, with description of a new species

HOUSHUAI WANG1, MIN WANG1 & XIAOLING FAN1,2
1Department of Entomology, College of Natural Resources & Environment, South China Agricultural University, Guangzhou 510642, China
2Corresponding author. E-mail: fanxiaoli66@scau.edu.cn

Abstract

Thirteen species belonging to seven genera of the tribe Nygmiini are recognized from Nanling National Nature Reserve, Guangdong province, China. A new species, Arna bicostata sp. nov., is described, and two species are transferred as new combinations: Artaxa angulata comb. nov. and Toxoproctis croceola comb. nov. Adults and their genitalia are illustrated.

Key words: Guangdong, Arna bicostata sp. nov., new combinations, Euproctis, genitalia

Introduction

The tribe Nygmiini of Lymantriinae proposed by Holloway (1999) is a group occurring primarily in the Old World, and comprises 16 genera. The group is well defined by the seventh abdominal segment of the female, which is expanded and membranous, with a strong corethrogyne, the scales from which are used to protect the egg mass (Holloway, 1999, 2001). The purpose of this paper is to describe a new species of Arna from the Nanling National Nature Reserve in China, and transfer two other taxa into Artaxa and Toxoproctis. The Nanling National Nature Reserve (between 24°37′–24°57′ N latitude and 112°30′–113°04′ E longitude) lies in the north of Guangdong Province of China. The region is characterized by a subtropical humid monsoon climate, is endowed with abundant biological resources, and has been the subject of interest of many researchers (Pang, 2003). However, the lymantrine fauna of the region remains poorly known (Chao, 2003; Wang & Kishida, 2004a, b). In the present paper, thirteen species of the Nygmiini are recognized based on collecting in the Nanling National Nature Reserve from 2005 to 2009.

Specimens were collected by light trapping and photos of adults were taken using a Nikon Coolpix 990 digital camera. Genitalia were dissected and photographed following Wang et al. (2010), except that some genital images were captured with the Nikon camera attached to a Leica MZ–12, binocular stereoscope. Dissected genitalia were subsequently stored in a 0.2 ml centrifugal tube with a drop of glycerin and pinned with the specimen. Species identification was mostly based on descriptions and photos of the type species in relevant literatures, with examination of type specimens of Arna pseudoconspersa, Euproctis sakaguchii and E. piperita. Taxonomic arrangement follows Holloway (1999) and Zahiri et al. (2010). Type specimens are deposited in the Insect Collection of the Department of Entomology, South China Agricultural University, Guangzhou, China.

Species accounts

Arna bipunctapex (Hampson, 1891)
(Figs. 1–2, 27, 41)

Somea bipunctapex Hampson, 1891: 57.
Artaxa bipunctapex: Kirby, 1892: 453.