



Two new species of the genus *Sorolopha* Lower (Lepidoptera: Tortricidae) from northern Thailand

NATHAPHAN PATIBHAKYOTHIN¹, NANTASAK PINKAEW^{1,2,3} & NUTCHAYA SUKPRAKOB¹

¹Department of Entomology, Faculty of Agriculture at Kamphaeng Saen, Kasetsart University, Kamphaeng Saen Campus, Nakhon Pathom, Thailand, 73140. E-mail: yaiair@gmail.com, mo_por_k@hotmail.com

²Center for Advanced Studies in Tropical Natural Resources, NRU-KU, Kasetsart University, Chatuchak, Bangkok, 10900, Thailand. E-mail: agrnsp@ku.ac.th.

³Corresponding author

Abstract

Two new species of *Sorolopha* Lower (i.e., *S. suthepensis*, n. sp., and *S. undula*, n. sp.) are described and illustrated from male specimens collected in agricultural areas and natural forest in Doi Suthep-Pui National Park, Chiang Mai Province, Thailand.

Key words: Doi Suthep-Pui National Park, Khun Chang Khian Highland Agricultural Research Station, new species, Olethreutinae, Olethreutini

Introduction

Sorolopha was established by Lower (1901) with *Sorolopha cyclotoma* Lower, 1901 from Australia as the type species. The genus is characterized by conspicuously coloured forewings, often greenish or brownish grey and pink, frequently with a large roundish subapical mark, and by male genitalia with extremely long and pendant socii. Nineteen species of *Sorolopha* have been reported from Thailand: sixteen by Kawabe (1989), two by Pinkaew (2007), and one by Promwong and Pinkaew (2011). Field work to establish the diversity of olethreutine moths was undertaken in different habitat types of the Doi Suthep-Pui National Park, Chiang Mai Province, during 2013–2014. The two new species of *Sorolopha* described herein were collected in the Highland Agricultural area of Khun Chang Khian Highland Agricultural Research Station (Fig. 1) and in natural forest of Doi Suthep-Pui National Park (Fig. 2). Both new species share the conspicuous character of asymmetrical valvae in the male genitalia. In his treatment of *Sorolopha*, Diakonoff (1973) remarked that the two known males of his *sphaerocopa* group of species, *S. asphaeropa* Diakonoff, 1973, from southern New Guinea and *S. sphaerocopa* Meyrick, 1930, from northern Vietnam (as Tonkin) and Indonesia, both have asymmetrical valvae. Kuznetsov (2003) added *Sorolopha asymmetrana* Kuznetsov, 2003, from Vietnam; and with the two new species from Thailand, *S. suthepensis* and *S. undula*, the *sphaerocopa* group now comprises five species with asymmetrical valvae.

Materials and Methods

Specimens used in the present study are all from the Kasetsart Kamphaeng Saen Insect Collection (KKIC). A Leica MZ95 stereomicroscope was used for examination and specimen measurement and a Leitz Dialux 20 compound microscope was used to examine the genitalia. Forewing length was measured from the outer edge of the tegula at wing base to the outermost edge of the fringe scales at apex. Genitalia preparation methods were adapted from Common (1990). Terminology for forewing pattern and genitalic structures follows Horak (1991, 2006).

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