

# **Article**



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# A survey of the genus *Sorolopha* Lower, 1901 in the northern part of Vietnam (Lepidoptera: Tortricidae, Olethreutinae)

XUANVI LE<sup>1</sup>, MU JIE QI<sup>1</sup>, KYU-TEK PARK<sup>2</sup> & YANG-SEOP BAE<sup>1,3</sup>

<sup>1</sup>Division of Life Sciences, College of Life Sciences and Bioengineering, Incheon National University, Incheon, 406-772 Korea <sup>2</sup>McGuire Center for Lepidoptera and Biodiversity, Florida Museum of the Natural History, University of Florida, Gainesville, FL 32611 USA

#### **Abstract**

A survey of the genus *Sorolopha* Lower, 1901 in the northern part of Vietnam revealed the presence of 10 species, including *S. cucphuongensis* Bae & Le, sp. nov. Most of the species previously were reported by various authors, but *S. rubescens* Diakonoff, 1973 and *S. cyclotoma* Lower, 1901 are newly recorded for the country. All species are diagnosed, and figures of the adults and genitalia are provided, along with a key to species of *Sorolopha* in Vietnam.

Key words: Lepidoptera, new species, Olethreutinae, Sorolopha, Tortricidae, Vietnam

## Introduction

Sorolopha Lower, 1901 is the largest genus in the tribe Olethreutini (Tortricidae: Olethreutinae), with 64 described species. It is most diverse in the Oriental Region where 60 species are recorded (Brown 2005, Horak 2006); six species are known from the Australian Region and two from the Palaearctic. In a review of Sorolopha from mainland China, Yu & Li (2009) treated 17 species, of which S. dactyloidea and S. identaeolochloca were described as new. Morphological characters of Sorolopha are similar to those of the closely related Eudemis (Diakonoff 1973).

The *Sorolopha* species of Vietnam were reviewed by Kuznetzov (1988, 2000, 2003) and Razowski (2009a, 2009b). Kuznetzov (1988) recorded one new species, *S. ghilarovi* Kuznetzov, in a study on the Lepidoptera fauna of the northern part of Vietnam, and he (Kuznetzov 2000) also recorded nine species from the country based on the collection of the Zoological Institute, St. Petersburg. Another new species, *S. asymmetrana* Kuznetzov, was described from the Central Highlands of Vietnam in 2003. Razowski (2009a) reported four species from Vietnam: *S. herbifera* (Meyrick), *S. sphaerocopa* (Meyrick), *S. satoi* Kawabe, and *S. chiangmaiensis* Kawabe. He also described two new species, *S. brunnorbis* Razowski and *S. dorsichlora* Razowski, from the collection of the Berlin Museum. In the present study, 10 species of the genus are reviewed, including one new species, *S. cucphuongensis* Bae & Le, **sp. nov.**, and two species, *S. rubescens* Diakonoff and *S. cyclotoma* Lower, that are recorded for the first time from Vietnam.

### Material and methods

Specimens examined in this study were collected by using light traps in five national parks in the northern part of Vietnam (Fig. 1) from 2004 to 2010. Ba be National Park includes evergreen forest on the highest mountain (about 1554 m), and moths were collected at elevations ranging from 400 m to 800 m. Tamdao National Park includes tropical and subtropical moist evergreen forest where moths were collected at elevations from 500 m to 800 m on three mountain peaks that reached elevations above 1300 m. Bavi National Park is similar to the former park, but

<sup>&</sup>lt;sup>3</sup>Corresponding author. E-mail: baeys@incheon.ac.kr; vinipp3880@yahoo.com