New or little known taxa of the plant bug tribe Hallodapini (Hemiptera: Heteroptera: Miridae: Phylinae) from Thailand, with descriptions of three new species of the genus Acrorrhinium Noualhier

TOMOHIDE YASUNAGA1, KAZUTAKA YAMADA2 & TAKSIN ARTCHAWAKOM3

1Research Associate, Division of Invertebrate Zoology, American Museum of Natural History, New York; c/o Nameshi 2-33-2, Naga-saki 852-8061, Japan. E-mail: tyasunaga@amnh.org
2Tokushima Prefectural Museum, Bunka-no-Mori Park, Mukōterayama, Hachiman-chō, Tokushima, 770-8070 Japan. E-mail: yamada.kaz@gmail.com
3Sakaerat Environmental Research Station (SERS), Sakaerat Biosphere Reserve, Thailand Institute of Scientific & Technological Research (TISTR), Ministry of Science and Technology, 1 Moo 9, A. Udom Sab, Wang Nam Khieo, Nakhon Ratchasima 30370, Thailand. E-mail: sakaerat@tistr.or.th

Abstract

New or little known genera and species of the phyline plant bug tribe Hallodapini are documented. The genus Acrorrhinium Noualhier is reported from Thailand for the first time and diagnosed. Three new species, Acrorrhinium kranion, A. lancialium and A. tritonion, are described. The immature forms are confirmed for A. lancialium (5th instar) and A. tritonion (4th instar); the latter species was found to be associated with Hibiscus tiliaceus L. The little known hallodapines in Asia, Alloeomimus muiri Schuh and Clapmarius thailandana Schuh, are also diagnosed. An annotated check list of the Hallodapini in Thailand and color digital images in life for all currently known Thai species are provided. Hallodapus brunneus (Poppius) is reported from the Oriental Region for the first time.

Key words: Miridae, taxonomy, Phylinae, Hallodapini, Acrorrhinium, new species, Thailand

Introduction

The phyline plant bug tribe Hallodapini is composed of 46 genera and approximately 250 nominal species (Kerzhner & Josifov, 1999; Schuh, 1995; Schuh, 2002–2012; Wyniger, 2012). Twenty-five genera are currently restricted to the Afrotropical Region, and most of the species are known from Africa and the Middle East. Two genera, Cyrtopeltocoris Reuter and Phoradendrepulus Polhemus & Polhemus, are known only from the Nearctic Region. Species of the Hallodapini are likely to be at least partially predaceous (Wheeler, 2001). Some hallodapines are known to live directly on the soil surface and appear to have nearly no plant associations, whereas others are found on tree barks and trunks, or herbs (Wagner, 1974; Yasunaga, 2001).

Only Schuh (1984) comprehensively treated the Asian fauna of the Hallodapini. In Thailand, four species were previously recorded in this eminent work, namely Alloeomimus muiri Schuh, Clapmarius thailandana, Hallodapus albofasciatus (Motschulsky) and H. ravenar (Poppius). During our continuing field investigations in central Thailand, four additional hallodapines were collected. Of these, three were found to represent undescribed species of the genus Acrorrhinium, and one is identical to Hallodapus brunneus (Poppius) originally described from Taiwan.

Except for the genus Hallodapus, known widely from the Old World, Acrorrhinium, Alloeomimus and Clapmarius have scarcely been studied since Schuh (1984), and their identities remain little known in Asia. This paper represents part of recent attempt to document the phyline plant bug faunas in Thailand, subsequent to Yasunaga (2010, 2012a, 2012b), and Yasunaga & Schuh (2013), and treats new and little known taxa of the Hallodapini.

In the present paper, these little known genera are diagnosed and discussed. Three new species of