Contribution to the taxonomy of scaly crickets (Orthoptera: Mogoplistidae: Mogoplistinae) from Southeast Asia

MING KAI TAN1, PATTARAWICH DAWWRUENG2 & TAKSIN ARTCHAWAKOM3

1Department of Biological Sciences, National University of Singapore, 14 Science Drive 4, Singapore 117543, Republic of Singapore. E-mail: orthoptera.mingkai@gmail.com
2Natural History Museum, National Science Museum, Technopolis, Klong 5, Klong Luang, Pathum Thani, 12120, Thailand. E-mail: mapormail@hotmail.com
3Sakaerat Environmental Research Station, Thailand Institute of Scientific and Technological Research, Wang Nam Khiao District, Nakhon Ratchasima Province 30370, Thailand. E-mail: sakaerat@tistr.or.th

Abstract

Three new species of scaly crickets are described: Ornebius xinyao sp. n. from Singapore; Ornebius dowwiangkanae sp. n. and Terraplistes ingrishi sp. n. from Thailand. Ornebius insculptus Tan & Ingrisch, 2013 from Singapore is also corrected for nomenclatural error from the original name Ornebius insculpta.

Key words: new species description, nomenclature change, Singapore, Thailand

Introduction

Mogoplistinae (Insecta: Orthoptera), often referred to as scaly crickets, have small scales covering the whole body. These little crickets are found to be a very dominant group of Orthoptera in tropical forests (Floren et al., 2001). In fact, they inhabit all strata from the canopy cover to the leaf litter. Yet, they remain little known and poorly represented in many collections (Ingrisch, 2006).

This is also very true for the scaly crickets in Southeast Asia. Although a taxonomic revision of the scaly crickets from the regions provided a great deal of information (Ingrisch, 2006), more undescribed species continue to be discovered (Tan & Robillard, 2012; Tan & Ingrisch, 2013; Tan & Nizam, 2013; Tan, 2014). Thus it is unlikely that new species discovery of scaly crickets is reaching a plateau. Indeed, with new collected material, three new species from two genera of scaly crickets are described here.

It is also important to mention that the generic relationship still requires work to be done to resolve possibly non-monophyletic genera (Ingrisch, 2006). Increasing species sampling and discovery is a first step to providing more information for such revisionary work. The objective of this paper is to document and contribute to the understanding of diversity of scaly crickets in Southeast Asia.

Material and methods

Opportunistic collection, sweep-netting and light-trapping were carried out by PD and MKT in Sakaerat Biosphere Reserve, Thailand in 2014 and 2015. Opportunistic collection was carried out by MKT in Pulau Ubin, Singapore in 2014. Photographic images were made using the Visionary Digital System. Specimens were preserved by drying and pinning or in absolute analytic alcohol.

For the measurements, the following abbreviations are used: BL = body length; FRW = frontal rostrum width; SW = scapus width; PL = pronotum length; PW = pronotum width; TL = tegmen length; TW = tegmen width; HFL = hind femur length; HTL = hind tibia length; HML = hind metastarsus length; OL = ovipositor length.

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