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Three new species of the subfamily Cladonotinae (Orthoptera: Tetrigidae) from Thailand

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Abstract

The pygmy grasshopper subfamily Cladonotinae and genera *Epitettix* Hancock, 1907, *Pseudepitettix* Zheng, 1995 and *Tuberfemurus* Zheng, 1992 are firstly recorded from Thailand. Three new species, namely *Epitettix obtusus obtusus* **sp. nov.** from provinces Nakhon Ratchasima and Chiang Mai, *Pseudepitettix pimkarnae* **sp. nov.** from province Saraburi and *Tuberfemurus kanokwanae* **sp. nov.** from province Saraburi, are described.

Key words: Orthoptera, Tetrigidae, Cladonotinae, *Epitettix*, *Pseudepitettix*, *Tuberfemurus*, new species, South-East Asia

Introduction

The Tetrigidae (Orthoptera: Caelifera) of Thailand are almost completely unknown, with only seven species recorded from the country, namely: *Amphibotettix abotti* (Rehn, 1904), *Hyboella angulifrons* Brunner von Wattenwyl, 1893, *Zhengitettix albitarsus* Storozhenko, 2013 and *Z. extraneus* Storozhenko, 2013 of the subfamily Scelimeninae; *Ergatettix interruptus* Brunner von Wattenwyl, 1893 and *Hedotettix gracilis* (Haan, 1842) of the subfamily Tetriginae; and *Clinophaestus robustus* Storozhenko, 2013 of the subfamily Tripetalocerinae (Blackith, 1992; Storozhenko, 2013a,b). In contrast, more than five hundred species are known from the Oriental region (Eades *et al.*, 2014). Here, we describe three new species of the genera *Epitettix* Hancock, 1907, *Pseudepitettix* Zheng, 1995 and *Tuberfemurus* Zheng, 1992 of the subfamily Cladonotinae from Thailand.

Material and methods

The present paper is based on specimens collected in Thailand by A.V. Gorochoy and L.N. Anisyutkin in 2000 deposited in the Zoological Institute (St. Petersburg, Russia), and by P.D. and his assistants in 2013 deposited in the Kasetsart University (Bangkok, Thailand). The specimens deposited in the Zoological Institute are dried and pinned. The specimens kept in the Kasetsart University are preserved in alcohol. Photographs were made using a Dino-Lite Premier Digital Microscope AM-7013MZTS and Canon EOS 600D with Canon MPE-65 macro lens and MT24EX flash unit. Terminology follows Storozhenko & Paik (2007).

Taxonomy

Family Tetrigidae Rambur, 1838

Subfamily Cladonotinae Bolívar, 1887

median carina of the pronotum is triangular in cross-section and the lower outer keel of the hind femora lack projections). By its small size and the position of the base of the antennae between the lower margins of eyes, the new species is separated from *Tuberfemurus laminatus* and *T. zhengi* (in these species length of pronotum is 7–10 mm and the base of antennae are situated distinctly below the lower margins of eyes). In the above mentioned features, the new species is similar to *T. liboensis*, but clearly distinguished from the latter by the shape of the pronotum, female subgenital plate, and the ovipositor, and the color of the hind tibiae (in *T. liboensis* the posterior process of the pronotum is narrowly rounded at the apex, the female subgenital plate is elongated approximately 1.5 times as long as wide, the valves of ovipositor are narrow, and the hind tibiae are black with two light rings, one near the base and another near the middle).

Habitats. The new species was collected in moist areas on stones and between fallen leaves at elevation 50–150 m.

Etymology. The specific epithet honors Miss Kanokwan Yimyoo, who assisted in the collecting of the pygmy grasshopper specimens.

Discussion

The present paper is only the first step of our investigation of pygmy grasshoppers in Thailand. Undoubtedly a more in-depth survey is needed to clarify the composition of tetrigid fauna of this country. Here we describe from Thailand three new species in different genera. Until now genera *Pseudepitettix* and *Tuberfemurus* were known from South China only, whereas genus *Epitettix* is widely distributed from Madagascar to India, Vietnam, Malaysia, Indonesia and New Guinea but unknown in China. It allows us to propose that the tetrigid fauna of Thailand will be consisting of the taxa, which are different in origin and distribution.

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