



## Taxonomic review of *Kuzicus* Gorochov, 1993 (Tettigoniidae: Meconematinae), with two new species from Thailand and key to species

MING KAI TAN<sup>1</sup>, PATTARAWICH DAWWRUENG<sup>2</sup> & TAKSIN ARTCHAWAKOM<sup>3</sup>

<sup>1</sup>Department of Biological Sciences, National University of Singapore, 14 Science Drive 4, Singapore 117543, Republic of Singapore. E-mail: orthoptera.ming kai@gmail.com

<sup>2</sup>Department of Entomology, Faculty of Agriculture, Kasetsart University, Bangkok, Thailand. E-mail: mapormail@hotmail.com

<sup>3</sup>Sakaerat Environmental Research Station, Thailand Institute of Scientific and Technological Research, Wang Nam Khieo District, Nakhon Ratchasima Province 30370, Thailand. E-mail: sakaerat@tistr.or.th

### Abstract

The taxonomy of genus *Kuzicus* Gorochov, 1993 (Tettigoniidae: Meconematinae) is reviewed. Two new species are described from Thailand: *Kuzicus pakthongchai* sp. n. Tan *et al.* and *Kuzicus multidenticulatus* sp. n. Tan *et al.* *Kuzicus denticuloides* (Kevan, 1993) **comb. nov.** is transferred from genus *Xiphidiopsis*. *Parakuzicus* is removed as a subgenus and considered a distinct genus. A key to species of *Kuzicus* is provided.

**Key words:** Meconematinae, *Kuzicus*, new species, key, Thailand

### Introduction

The Meconematinae is a speciose subfamily of katydids. Progress in documenting the diversity of these katydids remain an immense task in a biodiversity rich Asiatic region. Many new species and genera of this subfamily were described recently (Gorochov, 1993, 1998; Gorochov *et al.*, 2005; Gorochov & Tan, 2011; Bian *et al.*, 2014; Di *et al.*, 2014; Wang *et al.*, 2014; Wang, *et al.*, 2014, 2015). Here, the taxonomy of genus *Kuzicus* Gorochov, 1993 is reviewed. This includes the description of two new species from Thailand. The Hennigian species concept is applied and morphology is used to test species boundaries. Male and female abdominal characters, including the epiphallus, provide strong indirect evidence for reproductive isolation. Additionally, the review also rendered some changes in nomenclature. A key to species of *Kuzicus* is also provided. Given that more new species are expected to be described, it is likely that the subgeneric system requires changes for the diagnosis. The objective of the paper is also to provide a stepping platform for a future taxonomic revision of the genus to resolve the subgeneric problems.

### Material and methods

Opportunistic collection, sweep-netting and light-trapping were carried out by MKT and PD in Sakaerat Environmental Research Station, Thailand. Photographic images were made using the Visionary Digital System. Specimens were preserved by either drying and pinning or storing in absolute analytic-grade ethanol. Measurements of specimens were made using a 0.05 mm vernier caliper. In the measurements, the following abbreviations are used: BL = body length; BWL = body with wing length; PL = pronotum length; TL = tegmen length; HWT = hind wing tail length (part of hind wing surpassing tegmen); HFL = hind femur length; HTL = hind tibia length; OL = ovipositor length.