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## A new species of spine-headed katydid *Mesagraecia* Ingrisch, 1998 (Conocephalinae: Agraeciini), with key to species

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### Abstract

The taxonomy of poorly known *Mesagraecia* Ingrisch, 1998 is reviewed. A new species of *Mesagraecia* spine-headed katydid (Conocephalinae: Agraeciini) is described from Bukit Larut, Perak, Peninsular Malaysia: *Mesagraecia larutensis* sp. n. A key to species is also presented.

**Key words:** Orthoptera, *Mesagraecia*, new species, key, Bukit Larut, Southeast Asia

### Introduction

Documentation of the diversity of orthopterans in Southeast Asia has a long history but remains incomplete. This can be reasoned by the fragmented sampling in a biodiversity rich region (Ingrisch, 1998). As such, new species are still continuously discovered with more intensive sampling. This holds true for the spine-headed katydids (Conocephalinae: Agraeciini). A comprehensive treatment of the taxonomy of this tribe revealed as many as 160 species from Southeast Asia (Ingrisch, 1998). Since then numerous new discoveries have been made (Gorochov, 2008; Gorochov, 2011; Ingrisch & Tan, 2012; Tan & Ingrisch, 2014; Gorochov, 2015).

The genus *Mesagraecia* was described by Ingrisch (1998). Since then, there were very few reports or findings regarding this cryptic genus which is known only from Thailand, Vietnam and Peninsular Malaysia (Kim & Pham, 2014). During a recent survey in Peninsular Malaysia by MKT and KNK, we discovered a new species of *Mesagraecia* that is described here. We also constructed a key to all known species of *Mesagraecia*.

### Material and methods

Opportunistic collecting and sweep-netting during the day (0830 to 1500 hours) and during night (1930 to 2300 hours) were carried out by MKT and KNK in Bukit Larut from 17<sup>th</sup> to 21<sup>st</sup> June 2015. Bukit Larut, previously known as Maxwell Hill, is a hill station in Peninsular Malaysia. Located in the state of Perak, Bukit Larut is at the southern tip of the Bintang Range and reaches an elevation of about 1250 m above sea level. The specimen was preserved by storing in absolute analytic-grade ethanol before being pinned and dry-preserved. Photographic images were performed with a digital SLR camera with compact-macro lens or using the Visionary Digital System, then edited using Adobe Photoshop. Scales are provided with the images. Measurements of the dried-pinned specimen were made from these images. In the measurements, the following terms are used: BL = body length; BWL = body with wing length; PL = pronotum length; PW = pronotum width; TL = tegmen length; HWL = hind wing length; HFL = hind femur length; HTL = hind tibia length. The specimen will be deposited in the Zoological Reference Collection (ZRC), Lee Kong Chian Natural History Museum (former Raffles Museum of Biodiversity Research).