



## New taxa of Elimaeni (Orthoptera: Tettigoniidae: Phaneropterinae) from South East Asia

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### Abstract

Based on specimens in various museum collections one new subgenus and six new species of Elimaeni are described: *Poaefoliana* subgen. n. (type species *Locusta poaefolia* De Haan, 1842) of *Elimaea* Stål, 1874; *Elimaea (Poaefoliana) albimaculata* sp. n., *E. (P.) jitra* sp. n., *E. (P.) kutu* sp. n., *Elimaea (Schizelimaea) singgalang* sp. n., *Orthelimaea kanburi* sp. n., *O. volsella* sp. n. Three classical species were also combined with the new subgenus: *Elimaea (Poaefoliana) poaefolia* (De Haan, 1842) comb. n., *E. (P.) rosea* Brunner v. Wattenwyl, 1878 comb. n., *E. (P.) jacobsoni* Karny, 1926 comb. n. A lectotype for *E. rosea* is fixed as the type series is not homogenous.

**Key words:** Orthoptera, Phaneropterinae, Elimaeni, new subgenus, new species, new combinations, Peninsular Malaysia, Sabah, Sumatra, Thailand

### Introduction

The Elimaeni were introduced as group Elimaee by Brunner von Wattenwyl (1878) and by that time contained three genera: *Elimaea* Stål, 1874, *Hemielimaea* Brunner, 1878, and *Ectadia* Brunner, 1878. The species included are rather uniform in general appearance with often linear tegmina with parallel anterior and posterior margins and the central veins radius, radius sector and media running parallel and in equal distance to each other, while the cross veins are regularly arranged and nearly vertical to these veins. In contrast to this uniformity exists a great variation with regard to the stridulatory apparatus including the stridulatory vein and the male abdominalia. Unlike in many other Phaneropterinae, the male phallus is often provided with sclerites that are also due to variation. The first comprehensive treatment of the group was that of Karny (1926a) who divided the genus *Elimaea* into three subgenera, *Orthelimaea*, *Rhaebelimaea* and *Elimaea* s. str., based on the shape of the anterior femur being straight or phasmid like curved and the branching of the radius sector in or before middle of tegmen length. He also recognised that most species especially those of *Rhaebelimaea* inhabit geographically very restricted ranges and are recognisable by external morphology although at that time the stridulatory apparatus did not play an important role in Orthoptera taxonomy and the presence of phallus sclerites in Elimaeni was not investigated. Based on phylogenetic considerations and adding phallus sclerites as diagnostic characters in Elimaeni, Ingrisch (1998) proposed that either *Hemielimaea* should become a subgenus of *Elimaea* or that *Orthelimaea* should become a separate genus. The first alternative was officially introduced, but shortly after, *Hemielimaea* was raised to full genus again (Gorochov 2004, Ingrisch & Gorochov 2007) with a new subgenus *Pseudelimaea* Gorochov, 2004 added. Also *Orthelimaea* became full genus status (Gorochov 2009). Recently Gorochov (2009) gave us an idea how rich the diversity in *Elimaea* really is and how restricted the ranges of the species might be, when he described 52 new species of *Elimaea* from South East Asia, and proposed three new subgenera: *Schizelimaea*, *Pseudectadia*, *Bornelimaea*. As the differential characters to delimitate the species are usually very delicate, it underlines the importance that the classical species are re-examined since the characters now thought to be of importance to identify a species were often not or not in enough detail considered in the classical publications.