



The lanternfly genus *Penthicodes*: key to the species and review of the “*Ereosoma* group” with two new species and one new subspecies (Hemiptera: Fulgoromorpha: Fulgoridae)

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Abstract

Penthicodes celebica n. sp., is described from Sulawesi, *P. warleti* n. sp. from India (Assam) and *P. caja malayana* n. ssp. from peninsular Malaysia. They are compared with the allied species of the subgenus *Ereosoma* Kirkaldy, 1906, as treated by Nagai & Porion (1996): *P. astraea* (Stål, 1864), *P. atomaria* (Weber, 1801) *P. bimaculata* (Schmidt, 1905), *P. caja* (Walker, 1851), *P. pulchella* (Guérin-Méneville, 1838), *P. quadrimaculata* Lallemand, 1963, *P. rugulosa* (Stål, 1870) and *P. variegata* (Guérin-Méneville, 1829). *Penthicodes quadrimaculata* is removed from synonymy with *P. bimaculata*. Male genitalia of all treated species are illustrated and described. New geographical records, distribution maps, behaviour data and photographs of habitus are given. An illustrated identification key to all 12 species of the genus, including *P. farinosa* and *P. nicobarica*, is proposed. *Penthicodes basigera* (Walker, 1870) is transferred to the genus *Scamandra* Stål, 1863 and the new combination *Scamandra basigera* (Walker, 1870) n. comb. is proposed. The subgenus *Ereosoma* is regarded as heterogenous and the species are separated in 2 new species-groups on the base of the male genitalia and colour pattern: group *astraea*+ (*astraea*, *bimaculata*, *caja*, *celebica*, *quadrimaculata*, *rugulosa* and *variegata*) and group *atomaria*+ (*atomaria*, *pulchella*, *warleti*).

Key words: Lanternbug, Fulgoroidea, Aphaeninae, Oriental Region

Introduction

Blanchard (1845) described the genus *Penthicodes* widely distributed in South Eastern Asia (from India to Vietnam and Southern China, and southwards to Sulawesi and Taliabu) with the species *farinosa* Weber, 1801 and *variegata* Guérin-Méneville, 1829, partly including species from *Aphaena* Guérin-Méneville, 1834. Gradually species were added, until Metcalf’s catalogue (1947) included two subgenera: *Penthicodes* with ten species, and *Ereosoma* Kirkaldy, 1906 with one species. Eight other species later attributed to *Penthicodes* were placed by Metcalf (1947) in his artificial, heterogenous genus *Aphaenina* Metcalf, 1947.

Lallemand (1963) in his revision of the Asian and Australian species, recorded three species in the subgenus *Penthicodes* (with seven subspecies and one variety in *P. farinosa*), nine in *Ereosoma* and put *atomaria* in a third group.

Ten species are presently recognized in the genus *Penthicodes* (Nagai & Porion, 1996): two in the subgenus *Penthicodes* (*farinosa* with five subspecies and *nicobarica*) and eight in the subgenus *Ereosoma* (*astraea*, *atomaria*, *basigera*, *bimaculata*, *caja*, *pulchella*, *rugulosa*, *variegata*).

During the identification of recent material of *Penthicodes* in the accessions of RBINS, ZMAN and CAS, two undescribed species and one subspecies have been found. The three new taxa are members of the subgenus *Ereosoma* Kirkaldy, 1906, as treated in Lallemand, 1963.

The present paper aims to describe the new taxa and compare them to the other species of the subgenus *Ereosoma*. An illustrated key to all species of *Penthicodes* is given, while the status of the numerous “forms” of *P. farinosa* (Weber, 1801) (see Lallemand, 1963 and Nagai & Porion, 1996) is currently being revised by our German colleagues Sophia Seidel and Andreas Wessel (Seidel & Wessel, *pers. comm.*).

Also, *P. quadrimaculata* Lallemand, 1963 is removed from synonymy with *P. bimaculata* (Schmidt, 1905).