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Contributions to the genus *Ulonemia* Drake and Poor (Hemiptera: Heteroptera: Tingidae) from China, with descriptions of three new species

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Abstract

The genus *Ulonemia* Drake and Poor, 1937 from China is treated. Three species are described as new to science, namely *Ulonemia jingae* sp. nov., *U. angusta* sp. nov., and *U. magna* sp. nov., as well as a redescription of the known species *U. assamensis* (Distant, 1903a). Illustrations of habitus and diagnostic characters of these species are provided, together with a key to the species of *Ulonemia* occurring in the Oriental region.

Key words: tingid, lace bug, *Ulonemia*, photographs, key

Introduction

The genus *Ulonemia* (Hemiptera-Heteroptera: Tingidae) was erected as a subgenus of *Perissonemia* Drake and Poor, 1937 by Drake and Poor (1937) based on the subgenotype *Perissonemia (Ulonemia) dignata* found in the Philippine Islands (Luzon). Later, Drake (1942) raised *Ulonemia* to the generic rank, and added three new species from Australia: *Ulonemia concava*, *U. decoris* and *U. leai*. Drake and Ruhoff (1960a) moved five described species, *Tingis mjobergi* Horváth, 1925, *Teleonemia assamensis* Distant, 1903, *Perissonemia electa* Drake and Poor, 1937, *P. dignata* Drake and Poor, 1937, and *P. malacciae* Drake, 1942, into the genus. Drake and his colleagues also added four new species to the genus in that same work: *U. aptata* Drake, 1960 from the Northeast of New Guinea, *U. plesia* Drake and Ruhoff, 1961 from the Queensland of Australia, *U. aota* Drake and Ruhoff, 1965b from the Southwest of New Guinea and *U. ermaea* Drake and Ruhoff, 1965b from the Northeast of New Guinea. In 1992, Péricart added one more new species, *U. burckhardti*, from New South Wales of Australia to the genus. Currently, the genus *Ulonemia* is represented by 13 species distributed in Oriental and Australian regions. In the fauna of China, the genus *Ulonemia* was only represented by *U. assamensis*, distributed in Taiwan, Fujian (Fukien), Guangdong (Kwantung), Hainan and Guangxi (Takeya 1962; Drake and Ruhoff 1965a; Jing 1981); moreover, it is known also from Borneo, India, and Vietnam (Péricart and Golub 1996).

Despite the many taxonomic papers on *Ulonemia* mentioned above, the host plants of these species were rarely recorded. In a recent paper, Tomokuni (2007) recorded for the firstly time *Helicia formosana* Hemsl. (Proteaceae) as the host plant of *U. assamensis* in Taiwan (from the Fushan Botanical Garden). However, no other host plants of the *Ulonemia* species have been recorded.

In this paper, we present four Chinese species of *Ulonemia*. Three of them, *U. jingae* sp. nov., *U. angusta* sp. nov., and *U. magna* sp. nov., are described as new to science, and *U. assamensis* (Distant, 1903a) is redescribed based on the specimens from Guangxi of Jing (1981). Photographs and illustrations of the main characters of these species are provided, together with a key to species of *Ulonemia* occurring in the Oriental region.

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