



## A review of the Oriental planthopper genus *Sogana* Matsumura 1914 (Hemiptera: Fulgoromorpha: Tropiduchidae) with descriptions of three new species

AI-PING LIANG<sup>1,3</sup> & RONG-RONG WANG<sup>1,2</sup>

<sup>1</sup>Institute of Zoology, Chinese Academy of Sciences, Datun Road, Chaoyang District, Beijing 100101, P.R. China and Key Lab of Insect Evolution & Environmental Changes, Capital Normal University, Beijing 100037, P.R. China

<sup>2</sup>Graduate School of Chinese Academy of Sciences, Beijing 100039, P.R. China

<sup>3</sup>Corresponding author. E-mail: liangap@ioz.ac.cn

### Abstract

The Oriental planthopper genus *Sogana* Matsumura, 1914 (Hemiptera: Fulgoromorpha: Tropiduchidae) is reviewed and seven species including three new species are recognized in the genus: *S. clara* **sp. nov.** (Laos: Vientiane), *S. extrema* Melichar, 1914 (Burma, China), *S. hopponis* Matsumura, 1914 (type species, China, Japan), *S. longiceps* Fennah, 1978 (China, Vietnam), *S. pseudohopponis* **sp. nov.** (Laos: Nam Kading), *S. robustocarina* **sp. nov.** (Malaysia: Borneo) and *S. stimulata* Melichar, 1914 (Indonesia: Mentawai Islands). The genus and its included species are described and illustrated. A key to the known species in the genus is provided.

**Key words:** planthopper, Oriental Region

### Introduction

The tropiduchid planthopper genus *Sogana* was established by Matsumura (1914) for *S. hopponis* Matsumura, 1914 from Taiwan. Matsumura (1914) originally placed *Sogana* in the subfamily Lophopinae (now the family Lophopidae). Melichar (1914) redescribed the genus and the type species, added to the genus two new species, *S. extrema* Melichar from Tenasserim and *S. stimulata* Melichar from Mentawai Islands, Indonesia and correctly moved the genus from Lophopinae into Tropiduchidae. Fennah (1982) placed *Sogana* in the tribe Isporisini Fennah, 1982. The Isporisini includes four Oriental genera, *Sogana*, *Isporisa* Walker, 1857, *Isporisella* Baker, 1927 and *Eilithyia* Distant, 1912. Members of Isporisini are distributed in southern China (including Taiwan) and southeastern Asia.

While sorting and identifying Tropiduchidae from material in the Bernice P. Bishop Museum, Honolulu, Hawaii, USA and elsewhere, we found three new species of *Sogana* from Laos (Nam Kading, Vientiane) and Malaysia (Borneo). In this paper we redescribe and illustrate the genus *Sogana* and its previously described species, in addition to describing the three newly found species. A key is given for the separation of the known species in the genus. A checklist of all known species in the genus is also provided.

### Material and methods

The specimens studied in the course of this work are deposited in the following institutions whose names are abbreviated in the text as follows: Bernice P. Bishop Museum, Honolulu, Hawaii, USA (BPBM); Laboratory