



***Heleocoris* (Heteroptera: Naucoridae: Laccocorinae) of Thailand, with description of a new species**

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Abstract

The genus *Heleocoris* in Indochina has languished for more than a century with no substantial history of taxonomic, biological, or ecological research since the original descriptions of the species, despite its abundance and ubiquity in streams throughout the region. This is largely because of the inability to assign specific identities to these insects and the need for taxonomic revision. Presented here is a comprehensive treatment on the taxonomy and faunistics of the four species now known to occur in Thailand, including the description of *Heleocoris mcphersoni*, **n. sp.** Diagnostic information, records from Thailand and other Southeast Asian countries, ecological notes, habitus photographs, and a taxonomic key to identify the four species are presented.

Key words: *Heleocoris*, new species, Naucoridae, Laccocorinae, Thailand, Indochina

Introduction

The genus *Heleocoris* is one of 10 genera in the subfamily Laccocorinae (Sites et al. 2011) and was described by Stål (1876) in the division Laccocoraria, which later was elevated to the subfamily Laccocorinae by Montandon (1897a). Currently, 25 species of *Heleocoris* are known, most of which are distributed in India and Southeast Asia, although a few species are known from the Middle East, Africa, and the Neotropics (La Rivers 1971, 1974, 1976).

Three species of *Heleocoris* have been described from Indochina: two from Myanmar (Montandon 1897a, b) and one from Laos (Montandon 1897a). Although Montandon (1897a) included a key to distinguish the 12 species of *Heleocoris* known at that time, interspecific distinctions are subtle and remain poorly understood. Thus, the inability to identify species of *Heleocoris* has been an impediment to research on the group. In a treatment of the naucorids of southern Thailand, Sites et al. (1997) were unable to identify two species of *Heleocoris* and agreed with Nieser and Chen (1992) of the need for generic revision. Other than a treatment detailing the aquatic Heteroptera in "The fauna of British India, including Ceylon and Burma" (Distant 1906), there has been no treatment of the *Heleocoris* fauna for most of Indochina since the original descriptions by Montandon in 1897. Thus, presented here are details of the genus in Thailand, with data on distribution and habitat, the description of a new species, and a key for identification of the species.

Material and methods

We have been conducting field work for various projects throughout all major regions of Thailand during the past 15 years and have amassed a substantial collection of aquatic insects. Included in these samples are numerous specimens of *Heleocoris* from throughout the country. Because of the difficulty in accurate species-level identifications, RWS compared specimens from our collections with type specimens housed in European museums, thereby