



Contribution to the knowledge on the Oriental genus *Perittopus* Fieber, 1861 (Hemiptera: Heteroptera: Veliidae) with descriptions of four new species from China and Thailand

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Abstract

Five species of the genus *Perittopus* Fieber, 1861 from China and Thailand are treated in this paper including four new species: *P. crinalis* **sp. nov.**, *P. falciformis* **sp. nov.**, and *P. yunnanensis* **sp. nov.** are from Yunnan Province, China; and *P. zhengi* **sp. nov.** from Chiang Mai, Thailand. The morphological descriptions are given for all the treated species. The photographs and the drawings of female habitus and male and female diagnostics are provided. A key to these five species is provided. The discussion on the identity of *P. asiaticus* Zettel, 2001 is given.

Key words: Hemiptera, Heteroptera, Veliidae, *Perittopus*, new species, China, Thailand

Introduction

The Oriental genus *Perittopus* belongs to Veliidae: Perittopinae, and is the single genus of the subfamily. The genus was established by Fieber in 1861, based on the type species *P. breddini* Kirkaldy, 1901, which was collected from the Tengger Mountains in East Java, Indonesia. Prior to this study, *Perittopus* contains twelve species distributed from southern India to Bali and Borneo (Lundblad 1933; Andersen 1982; Chen *et al.* 2005; Zettel 2001a, 2001b & 2011). Until 2012, only one species was recorded from China and Thailand, namely *P. asiaticus* Zettel, 2001, which signals the presence of the subfamily Perittopinae in China. Based on the material collected recently during several excursions, the area in Southwestern and Southern China has showed an interesting result for the species of *Perittopus*. In this paper, we add *P. crinalis* **sp. nov.** (Yunnan, China), *P. falciformis* **sp. nov.** (Yunnan, China), *P. yunnanensis* **sp. nov.** (Yunnan, China), and *P. zhengi* **sp. nov.** (Chiang Mai, Thailand) as new to science. Sequentially, there are so far four species of *Perittopus* that have been found in China, and two species have been found in Thailand. All together, this shows again the close faunistic link between SW China, especially Yunnan Province, northern Thailand, and Myanmar in their rich speciation activities.

Perittopus is typical inhabitant of mountainous streams, and especially prefers the downstream edges of the small pool with running water. They can be found massively in one shaded places in tropical and subtropical Asian countries (personal observations by second author). However, *P. yunnanensis* **sp. nov.** was collected from an almost un-flowed minor groove on both sides of a mountain road, which covered with dense grasses (Fig. 46) (personal observation of the first author).

Depository, material, and methods

The descriptions of the species are based on material collected recently in China and Thailand. The descriptions of *P. asiaticus* are based on materials collected in China. The genitalia dissection followed the methods and techniques given by Chen *et al.* (2005). All measurements are in millimeters (mm). The photographs are from a