



Description of two new damselflies, *Protosticta zhengi* and *Sinosticta sylvatica*, from China (Odonata: Zygoptera: Platystictidae)

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Abstract

Two new species of Platystictidae (*Sinosticta sylvatica*, holotype male: China, Hainan, Diaoluoshan Nature Reserve, 620m, 29-V-2007; and *Protosticta zhengi*, holotype male: China, Yunnan, Xishuangbanna, Menghun, 750m, 30-V-1958; both deposited in Institute of Entomology, Nankai University, Tianjin, China) are described, and a key is provided for the identification of all described species of *Sinosticta* Wilson.

Key words: Odonata, Platystictidae, *Protosticta*, *Sinosticta*, new species, China

Introduction

Sinosticta was established by Wilson (1997) to accommodate *Drepanosticta ogatai* Matsuki & Saito (1996), found in Hong Kong, China. Wilson believed that the wing venation of *Sinosticta ogatai* was archaic and similar to Palaemnematinae Tillyard & Fraser, which is restricted to the New World. Accordingly, he established a new subfamily, Sinostictinae, to accommodate the newly established genus *Sinosticta*, characterized by two principal diagnostic features: (1) MP extending beyond the mid-point of wing and (2) males with stout, relatively simply caudal appendages. van Tol *et al* (2009) confirmed the archaic nature of Sinostictinae as the most basal clade of all Platystictidae and sister group to all other Platystictidae. According to Wilson (1997), diagnostic characters of *Sinosticta* were: (1) MP extending beyond the mid-point of the wing; (2) the presence of at least two cross-veins proximal to Cu crossing (Fig. 1); and (3) males with stout, relatively simply caudal appendages. Three species of *Sinosticta* have thus far been described, all restricted to southern China: *S. ogatai* (Matsuki & Saito, 1996) from Hong Kong, *S. hainanense* Wilson & Reels, 2001 from Hainan, and *S. debra* Wilson & Xu, 2007 from Guangdong.

Protosticta was established by Selys (1885), who included 35 species mostly from Southeast Asia. Three species of *Protosticta* have been recorded from China: *P. beaumonti* Wilson, 1997, *P. kiautai* Zhou, 1986, and *P. taipokauensis* Asahina & Dudgeon, 1987. Here, we describe two new species, *Sinosticta sylvatica* and *Protosticta zhengi* from Hainan and Yunnan province, China, respectively. Diagnostic features for each of these new species and a key for *Sinosticta* Wilson are provided.

Key to species of *Sinosticta* Wilson

- 1 Antehumeral stripe complete, as long as mesothoracic pleural suture 2
- Antehumeral stripe incomplete, only half as long as mesothoracic pleural suture..... *S. ogatai*
- 2 Postocular spots present, lateral synthorax mainly pale 3