



## Description of three new species related to *Themus (Haplothemus) coriaceipennis* (Fairmaire, 1889) (Coleoptera: Cantharidae)

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### Abstract

The male of *Themus (Haplothemus) coriaceipennis* (Fairmaire, 1889) is discovered and described for the first time. Three new species related to this species are described from China: *T. (H.) rectus* **sp. nov.**, *T. (H.) bimaculaticollis* **sp. nov.** and *T. (H.) licentimimus* **sp. nov.**, which are provided with the illustrations of habitus and genitalia of both sexes and abdominal sternites VIII of female. A key to the species related to *T. (H.) coriaceipennis* is also provided.

**Key words:** taxonomy, Cantharidae, *Themus*, *Haplothemus*, new species, China

### Introduction

During our recent study on *Themus (Haplothemus)* Wittmer, 1973 (sensu Švihla 2008), the male of *T. (H.) coriaceipennis* (Fairmaire, 1889) is discovered from its type locality “Thibet, Tatsiélou” (now located in China, Sichuan, Kangding) for the first time. At the same time, we also examined a large number of specimens similar to this species and finally discovered three new species in these material, namely *T. (H.) rectus* **sp. nov.** (CHINA: Hubei, Hunan, Fujian, Guangxi), *T. (H.) bimaculaticollis* **sp. nov.** (CHINA: Sichuan, Yunnan) and *T. (H.) licentimimus* **sp. nov.** (CHINA: Sichuan). According to our study, this species complex should also include three other previously known species, *T. (H.) licenti* Pic, 1938, *T. (H.) ruficollis* Wittmer, 1995, and *T. (H.) nigropolitus* Wittmer, 1995. All the species of this complex could be distinguished by their differences in coloration, genitalia morphology of both sexes and abdominal sternite VIII of female, as summarized in the following key.

### Material and methods

The specimens included in this study are preserved in the following collections:

IZAS	Institute of Zoology, Chinese Academy of Sciences, Beijing, China;
MHBU	Museum of Hebei University, Baoding, China;
MNHN	Muséum national d’Histoire naturelle, Paris, France;
NAFU	Northwest A&F University, Yangling, China;
NHMB	Naturhistorisches Museum Basel, Switzerland.

The method used in this study and the description format follow that of Yang *et al.* (2014). Morphological terminology of female genitalia follows that of Brancucci (1980) and abbreviations in the figures are listed as follows: ag: accessory gland; co: coxite; di: diverticulum; sp: spermatheca; sr: sclerotized ring; tg9: abdominal tergite IX; ov: median oviduct; va: vagina.