



## Two new species of *Chelifera* Macquart from China (Diptera: Empididae)

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### Abstract

Two new *Chelifera* species, *C. liuae* **sp. nov.** from Sichuan and *C. tibetensis* **sp. nov.** from Tibet, are described. The genus *Chelifera* is recorded from Tibet for the first time. *Chelifera tibetensis* is assigned to the *C. rhombicercus*-group. An updated key to the species of *Chelifera* from China is provided.

**Key words:** Diptera, Empididae, Hemerodromiinae, *Chelifera*, new species, China, Tibet

### Introduction

The genus *Chelifera* Macquart is characterized by the following features: arista one-segmented, nearly spine-like, shorter than antennal segment 3; scutum without discal setae; laterotergite bare; crossvein bm-cu present, Sc free apically, not reaching C; R<sub>4+5</sub> forked; discal and anal cells present, and anal cell distinctly shorter than basal cell (Yang *et al.* 2005). For detailed description of the genus see Collin (1961) and Yang & Yang (2004). The adults of *Chelifera* occur mainly near running waters on riparian vegetation and stones where they prey on Chironomidae, Mycetophilidae and other small insects, while the larvae live in all sorts of freshwater microhabitats, such as sand, gravel, macrovegetation and mosses where they prey on chironomid and simuliid larvae (Horvat 2002; Ivković *et al.* 2012).

This genus is distributed nearly worldwide except the Afrotropical Region with 77 known species (Yang *et al.* 2007). Seven species were known to occur in China (Yang & Yang 1995, 2004; Horvat 2002; Saigusa & Yang 2002; Yang *et al.* 2005). In the present paper two new species of *Chelifera*, *C. liuae* **sp. nov.** from Sichuan and *C. tibetensis* **sp. nov.** from Tibet, are added to the fauna of China, and this genus is newly recorded from Tibet. An updated key to the species of *Chelifera* from China is provided.

### Material and methods

Types are deposited in the Entomological Museum of China Agricultural University, Beijing (CAU). Morphological terminology follows McAlpine (1981) and Cumming & Wood (2009). The following abbreviations are used: av = anteroventral seta(e), oc = ocellar seta(e), psa = postalar seta(e), pv = posteroventral seta(e), sa = supraalar seta(e), sc = scutellar seta(e), vt = vertical seta(e).

### Key to species (primarily males) of *Chelifera* from China

(modified from Yang *et al.* 2005)

- |   |   |   |
|---|---|---|
| 1 | Thoracic dorsum entirely or mostly black, or brownish yellow with 2 black longitudinal stripes on mesonotum; pterostigma present except <i>C. sheni</i> ..... | 2 |
|---|---|---|

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