



## The orb-weaving spider genus *Eriovixia* (Araneae: Araneidae) in the Gaoligong Mountains, China

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### Abstract

Four species of the araneid spider genus *Eriovixia* are reported from the Gaoligong Mountains (Yunnan Province, southwest China), including a new species: *Eriovixia sticta* **n. sp.**, and three known species: *E. excelsa* (Simon, 1889), *E. pseudocentrodes* (Bösenberg & Strand, 1906) and *E. yunnanensis* (Yin *et al.*, 1990). *E. excelsa* is first recorded from Chinese Mainland, while the males of both *E. pseudocentrodes* and *E. yunnanensis* are described for the first time, and the male of *E. pseudocentrodes* described before is actually the male of *E. sticta* **n. sp.** Distributional data and illustrations of somatic and genitalic morphology are provided. The differences between these four species and related taxa are discussed.

**Key words:** taxonomy, orb-weaving spiders, new species, *Eriovixia*, China

### Introduction

Members of the genus *Eriovixia* Archer, 1951 are medium sized orb-weaving spiders from the African-Asian region. These spiders inhabit shrubs. At present, a total of 13 species are described, including 10 species from China (Platnick 2010) (Table 1).

The Gaoligong Mountains of Yunnan Province lie in the southwest of China. This region is a biodiversity hotspot (Conservation International 2010). In order to document the flora and fauna (bryophytes and vascular plants, diatoms, arthropods, and vertebrates) of Gaoligong Mountains, experts from the USA and China launched the “Biotic survey of the Gaoligongshan, a biodiversity hotspot in western Yunnan, China” Project. While examining the specimens collected in the Gaoligong Mountains by the Sino-American Expeditions (1998–2008), a new species and three known species of the genus *Eriovixia* were identified and are described in this paper: *E. sticta* **n. sp.**, *E. excelsa* (Simon, 1889), *E. pseudocentrodes* (Bösenberg & Strand, 1906), and *E. yunnanensis* (Yin *et al.*, 1990). *E. excelsa* is newly recorded from the Chinese Mainland and the male of *E. yunnanensis* is described for the first time. The male palp of *E. sticta* **n. sp.** in this paper is same to that of the male of *E. pseudocentrodes* published before (Yaginuma 1986; Chikuni 1989; Tanikawa, 1999, 2007, 2009), but the coloration and patterns on prosoma, opisthosoma and legs positively match those of the female of *E. sticta* **n. sp.**; and the coloration and patterns on prosoma, opisthosoma and legs of the male of *E. pseudocentrodes* described in this paper are positively matched to those of the female of *E. pseudocentrodes*. Based on our data, we conclude that the male of *E. pseudocentrodes* described by previous authors (Yaginuma 1986; Chikuni 1989; Tanikawa 1999, 2007, 2009) is in fact the male of *E. sticta* **n. sp.**, and the real male of *E. pseudocentrodes* is described here for the first time also. Although originally we intended to revise of ten Chinese species of the *Eriovixia*, we could not study specimens of all ten species. We examined specimens of the following six *Eriovixia* species: *E. pseudocentrodes* (Bösenberg & Strand, 1906) *E. yunnanensis* (Yin *et al.*, 1990), *E. cavaleriei* (Schenkel, 1963), *E. enshiensis* (Yin & Zhao, 1994), *E. hainanensis* (Yin *et al.*, 1990) and *E. menglunensis* (Yin *et al.*, 1990). This paper just deals with the 4 species in Gaoligong Mountains.