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The first description of the male *Euophrys atrata* and *E. bulbus* from southern China (Araneae: Salticidae)

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Abstract

The males of *Euophrys atrata* Song & Chai, 1992 and *Euophrys bulbus* Bao & Peng, 2002 are described and illustrated for the first time from southern China.

Key words: spiders, taxonomy, *Euophrys*

Introduction

The genus *Euophrys* was established by C. L. Koch in 1834, with the type species *Aranea frontalis* Walckenaer, 1802. Members of the genus are small (less than 5 mm) in the family Salticidae, with characteristic white markings on the black abdomen (Li & Wang, 2014; Zhang & Maddison, 2012a, b). Currently it contains 117 species mainly found in the Palaearctic Region and only 13 species have been reported from China (Song & Chai, 1992; Peng *et al.*, 1993; Song, Zhu & Chen, 1999; Platnick, 2014). However, more than half of the species in this genus were described from a single sex (Platnick, 2014).

While examining spider specimens collected from Jiulong Mountains, Zhejiang, China, we found 3 male and 1 female *Euophrys* specimens in the same location. Based on the epigyne morphology, we identified the female as *Euophrys atrata* Song & Chai, 1992. The habitus and markings of the male specimens are similar to female *E. atrata* (Figs. 1–2) and palpal structures are conform to the genus *Euophrys*. As a result, we believe both male and female are the species *E. atrata*. The same is true for another 3 male and 4 female specimens from Mt. Wuyi, Fujian, China, which have also been identified as *E. atrata* in this study.

In the same way, the male *E. bulbus* Bao & Peng, 2002 are also described from the Qingliang (Anhui Province) and Wuyi Mountains (Fujian Province) in southern China. We re-described the female *E. bulbus* and report the male for the first time.

Materials and methods

Terminology is standard for Araneae. All measurements are given in millimeters. Carapace length was measured from the anterior margin to the posterior margin of the carapace medially. Eye sizes were measured as the maximum diameter of the lens in dorsal or frontal view. The measurements of legs are shown as total length (femur, patella, tibia, metatarsus, tarsus). All specimens are kept in 75% ethanol and were examined, drawn, and measured under a Leica M165C stereomicroscope equipped with an Abbe drawing device. Photographs were taken using the Leica M205A stereomicroscope equipped with a DFC450 CCD. The epigyne was cleared in a solution of potassium hydroxide (KOH) and transferred to 75% ethanol for drawing. All specimens studied in this paper are deposited in the Museum of Hebei University (MHBU), Baoding, China.

The following abbreviations are used: AERW, anterior eye row width; ALE, anterior lateral eyes; AME,

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References

- Bao, Y.H. & Peng, X.J. (2002) Six new species of jumping spiders (Araneae: Salticidae) from Hui-Sun Experimental Forest Station, Taiwan. *Zoologica Studies*, 41, 403–411.
- Koch, C.L. (1834) Arachniden. In: Herrich-Schäffer, G.A.W. (Ed.), *Deutschlands Insekten*. Heft, 127 pp.
- Li, S.Q. & Wang, X.P. (2014) *Endemic spiders in China, version 1.0*. Available from: <http://www.amaurobiidae.com/araneae/index.php> (accessed 9 January 2014)
- Peng, X.J., Xie, L.P., Xiao, X.Q. & Yin, C.M. (1993) *Salticids in China (Arachnida: Araneae)*. Hunan Normal University Press, Changsha, 270 pp.
- Platnick, N.I. (2014) *The world spider catalog, version 14.0*. American Museum of Natural History. Available from: <http://research.amnh.org/entomology/spiders/catalog/index.html> (accessed 10 January 2014)
- Song, D.X. & Chai, J.Y. (1992) On new species of jumping spiders (Araneae: Salticidae) from Wuling Mountains area, southwestern China. *Journal of Xinjiang University*, 9 (3), 76–86.
- Song, D.X. & Li, S.Q. (1997) Spiders of Wuling Mountains area. In: Song, D.X. (Ed.), *Invertebrates of Wuling Mountains Area, Southwestern China*. Science Press, Beijing, 448 pp.
- Song, D.X., Zhu, M.S. & Chen, J. (1999) *The Spiders of China*. Hebei Science and Technology Publishing House, Shijiazhuang, 640 pp.
- Yang, Y.T. & Tang, Y.Q. (1997) Two new species of the family Salticidae from China (Araneae). *Journal of Lanzhou University*, 33, 93–96.
- Zhang, J.X. & Maddison, W.P. (2012a) New euophryine jumping spiders from the Dominican Republic and Puerto Rico (Araneae: Salticidae: Euophryinae). *Zootaxa*, 3476, 1–54.
- Zhang, J.X. & Maddison, W.P. (2012b) New euophryine jumping spiders from Papua New Guinea (Araneae: Salticidae: Euophryinae). *Zootaxa*, 3491, 1–74.
- Zhu, M.S. & Zhang, B.S. (2011) *Spider Fauna of Henan: Arachnida: Araneae*. Science Press, Beijing, 558pp.