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Description of *Atrocalopteryx fasciata* spec. nov. from Yunnan, China (Odonata: Calopterygidae)

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Abstract

Atrocalopteryx fasciata Yang, Hämäläinen & Zhang, **spec. nov.** (holotype ♂, from China, Yunnan, Dehong, Yingjiang, deposited at Odonata Collection of College of Agriculture and Life Sciences, Dali University, Dali, Yunnan, China) is described and illustrated from the male sex. It is compared with *Atrocalopteryx laosica* (Fraser, 1933).

Key words: Odonata, Calopterygidae, *Atrocalopteryx*, new species, Yunnan, China

Introduction

During a trip to Yunnan surveying dragonflies in December 2012, the third author Hao-miao Zhang (HMZ) visited Guo-hui Yang (GHY) at Dali University and studied odonate specimens in her personal collection. The material originated mainly from the following areas of Yunnan: Bai Autonomous Prefecture of Dali, Dai-Jingpo Autonomous Prefecture of Dehong, Zang Autonomous Prefecture of Diqing, Baoshan City, Lijiang City and Zhaotong City. The collection contained many interesting species, especially of the families Gomphidae, Libellulidae and Calopterygidae. Among the calopterygid material was one envelope that contained three male specimens of a strange calopterygid species. One specimen was retained by HMZ collection for further study. As it was thought to represent a potential new species, he sent photographs of it to Matti Hämäläinen (MH). MH provisionally determined it as a new species of *Atrocalopteryx*, this opinion being confirmed when another male specimen from Yang's collection was sent to him for examination in late November 2013.

Atrocalopteryx fasciata Yang, Hämäläinen & Zhang, sp. nov.

(Figs. 1–2, 4–5, 8–10)

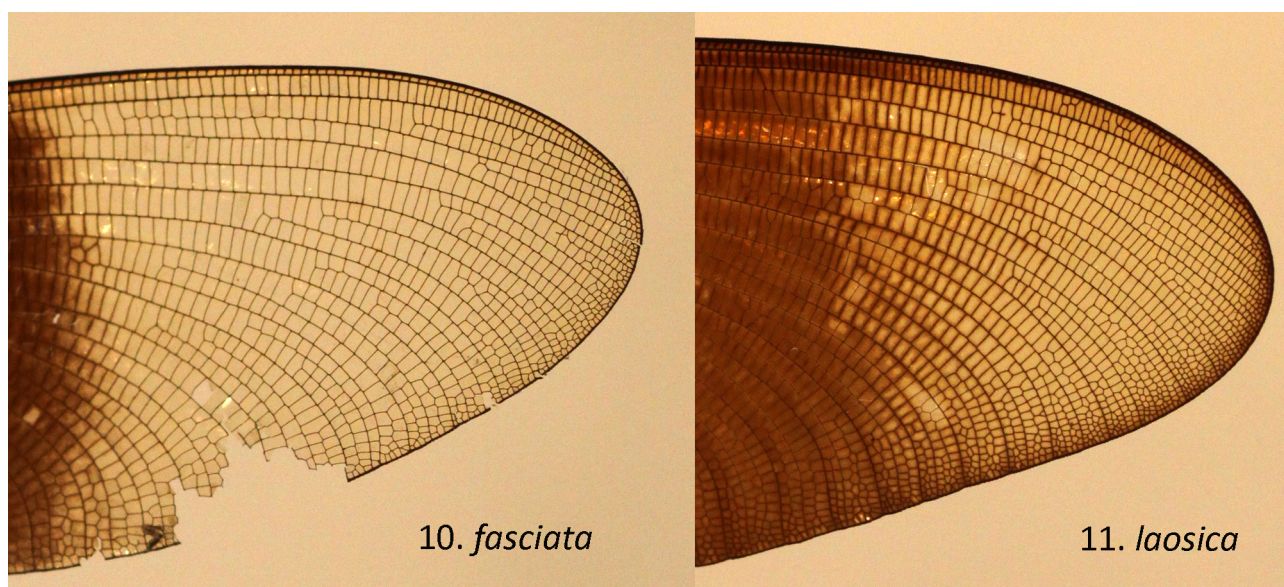
Material studied: **Holotype** ♂: China, Yunnan Province, Dai-Jingpo Autonomous Prefecture of Dehong, Yingjiang County, 18 August 1998, Ying-ju Zhang leg. Deposited in the Odonata Collection of the College of Agriculture and Life Sciences, Dali University, Yunnan, China.

Paratypes: 2 ♂, same data as for the holotype. Deposited in the collections of M. Hämäläinen and H-m. Zhang, respectively.

Etymology. The specific epithet *fasciata*, a Latin adjective meaning 'banded', refers to the opaque, brownish transverse band in the central part of the wings.

Description of holotype male (Fig. 1). Head: Labium yellow and black; middle lobe largely black with lateral borders yellow; lateral lobes largely yellowish with black areas, the hooks being black. Labrum black with a pair of conspicuous yellow spots; base of mandibles yellow; clypeus, frons and vertex dark metallic green; anteclypeus

venation of *A. fasciata* is distinctly more “open” than that of *A. laosica*, i.e. there are fewer cross veins throughout the wings. This is best seen in the tips of wings (cf. Figs. 10–11). Other structural differences include the presence of a tiny postocular tubercle in *A. fasciata*; in *A. laosica* it is absent. In *A. laosica* the yellowish markings on head, thorax and abdomen are somewhat more restricted.



FIGURES 10–11. Tip of forewing. **10)** *Atrocalopteryx fasciata* spec. nov., paratype male; **11)** *Atrocalopteryx laosica*, a male specimen from Vietnam (Sapa).

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