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Article



# A description of *Echo perornata* spec. nov. from Xizang (Tibet), China (Odonata: Calopterygidae)

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### Abstract

*Echo perornata* Yu & Hämäläinen, spec. nov. (holotype 3, China, Xizang Autonomous Region [Tibet], Motuo [Medog], alt. 850m, 1 vii 1983) is described and illustrated for both sexes. The new species has a pale pterostigma shaped quite similarly to that of *Echo margarita* Selys, 1853, but it differs in wing colour pattern and structure of the penis. *E. margarita* is recorded from China (Yunnan, Ruili) for the first time.

Key words: Odonata, Calopterygidae, Echo, perornata, new species, China, Xizang, Tibet

### Introduction

*Echo* Selys, 1853 is a small genus of oriental calopterygids. In recent checklists of world Odonata four species have been included in this genus, namely *Echo margarita* Selys, 1853 (with its subspecies *tripartita* Selys, 1879), *E. uniformis* Selys, 1879, *E. modesta* Laidlaw, 1902 and *E. maxima* Martin, 1904. However, the latter species is clearly misplaced in this genus (cf. Fraser 1929, Fraser 1934, Phan & Hämäläinen 2011).

While studying the odonate collections of the Institute of Zoology, Chinese Academy of Sciences in Beijing and those of the Shanghai Entomological Museum, Chinese Academy of Sciences in Shanghai, the first author came across two male and three female specimens of an *Echo* species, collected in Motuo [Medog], Xizang [Tibet] in 1979–1983. These specimens, incorrectly identified as *Echo m. margarita* in both museums, represent a new species, which is described here.

#### Echo perornata Yu & Hämäläinen, spec. nov.

Figs. 1-8, 13

**Material studied**: **Holotype** ♂: China, Xizang [Tibet], Motuo, alt. 850m, 1 vii 1983, Han Yinheng leg. Deposited at Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

**Paratypes**: 1Å, China, Xizang [Tibet], Motuo, alt. 850m, 2 vii 1980, Jin Gentao & Wu Jianyi leg.; 1  $\bigcirc$ , China, Xizang [Tibet], Motuo, alt. 800m, 3 vi 1983, Lin Ran leg.; 1 $\bigcirc$ , China, Xizang [Tibet], Motuo, alt. 900m, 20 vi 1980, Jin Gentao & Wu Jianyi leg; 1 $\bigcirc$ , China, Xizang [Tibet], Motuo, alt. 1200m, 16 ix 1979, Jin Gentao & Wu Jianyi leg. The paratypes collected in 1979–1980 are deposited in the Shanghai Entomological Museum, Chinese Academy of Sciences, Shanghai, China and the specimen collected in 1983 is deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China.

**Etymology.** The Latin adjective *perornata* means 'very ornate' and refers to the coloured wing pattern, which is the finest in the genus.

**Diagnosis.** A middle sized *Echo* species with wings with a brownish apical patch and a brownish transverse band just beyond the nodus.