



<http://dx.doi.org/10.11646/zootaxa.3941.3.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:1F01CF04-B6BD-4A80-A779-F3A22BEA4564>

Description of two new species of the genus *Devadatta* from northern Vietnam and central Laos (Odonata: Devadattidae)

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Abstract

Two new species of the genus *Devadatta* Kirby, 1890, *D. kompierei* sp. nov. from northern Vietnam (holotype: male, Mu Cang Chai district, Yen Bai Province) and *D. yokoi* sp. nov. from central Laos (holotype: male, Vang Vieng, Vientiane Province) are described. These new species are allied to *D. ducatrix* Lieftinck, 1969, but are distinguished by specific characteristics of their wings and anal appendages. The other Indochinese species are also briefly discussed.

Key words: Odonata, Devadattidae, *Devadatta*, new species, Vietnam, Laos

Introduction

At present the damselfly genus *Devadatta* Kirby, 1890, includes six described species and two named subspecies, *D. argyroides argyroides* (Selys, 1859), *D. a. tiomanensis* Laidlaw, 1934, *D. cyanocephala* Hämäläinen, Sasamoto & Karube, 2006, *D. ducatrix* Lieftinck, 1969, *D. glaucinotata* Sasamoto, 2003, *D. multinervosa* Fraser, 1933, *D. podolestoides podolestoides* Laidlaw, 1934, and *D. p. basilanensis* Laidlaw, 1934. Kitagawa & Katatani (2013) presented an illustrated review of all species in the genus. All *Devadatta* species are medium-sized damselflies. They have generally robust and dark-coloured bodies with some pale maculation on the thorax and/or abdomen, and well-petiolated wings with numerous cross veins in both the ante- and postnodal costal spaces. Wings are normally darkened only at tip. This genus was formerly placed in the family Amphipterygidae, but recent phylogenetic analysis based on mitochondrial and nuclear DNA sequences indicates it is clearly separate from other genera previously included in the Amphipterygidae (Dijkstra *et al.* 2014). A new family Devadattidae was erected by Dijkstra *et al.* (2014), including only this genus.

The ranges of the known *Devadatta* species are restricted to the tropical and subtropical region of southeastern Asia, covering southern China (Guangxi and Yunnan), Indochina Peninsular to southern Thailand, the Malay Peninsula, Singapore, Borneo, Sumatra, and the Philippines (Kitagawa & Katatani 2013). These damselflies are usually found along clear well-shaded headwaters surrounded by dense vegetation in pristine natural forests. So far four species, *D. multinervosa*, *D. glaucinotata*, *D. cyanocephala*, and “*D. ducatrix*”, have been recorded from Laos (Fraser 1933; Kitagawa & Katatani 2013; Sasamoto 2003; Yokoi 1999). The latter two species are also known from Vietnam (Lieftinck 1969; Hämäläinen *et al.* 2006); however, those specimens from Laos formerly placed in *D. ducatrix* in fact represent another species new to science, which is described below.

In our survey of damselflies of the Indochinese region, we have found two new species of *Devadatta*, including “*D. ducatrix*” noted above, both of which are described in this paper. Both are allied to *D. ducatrix* in male body coloration and the shape of penile organs, but the three species can be distinguished from each other by differences in wing shape, wing colour pattern and form of the anal appendages.

Specimens for the present study are deposited in the insect collection of Laboratory of Systematic Zoology, Department of Biology, Tokyo Metropolitan University, Tokyo (TMUZ), Quoc Toan Phan personal collection, Danang (PQTC), and Akihiko Sasamoto personal collection, Nara (SAC). Terminology follows Hämäläinen *et al.* (2006), and the abbreviations are as follows: Fw, forewing; Hw, hindwing; and S1–4, abdominal segments 1–4.

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