



<http://dx.doi.org/10.11646/zootaxa.4033.3.1>

<http://zoobank.org/urn:lsid:zoobank.org:pub:2576327B-E225-467E-BBF4-B5E5A6A64649>

Revision of the genus *Devadatta* Kirby, 1890 in Borneo based on molecular and morphological methods, with descriptions of four new species (Odonata: Zygoptera: Devadattidae)

RORY A. DOW¹, MATTI HÄMÄLÄINEN² & FRANK R. STOKVIS³

Naturalis Biodiversity Center, P.O. Box 9517, 2300 RA Leiden, The Netherlands.

E-mail: ¹rory.dow230@yahoo.co.uk; ²matti.hamalainen@helsinki.fi, ³frank.stokvis@naturalis.nl

Table of contents

Abstract	301
Introduction	302
Material and methods	302
<i>Devadatta podolestoides</i> -group	304
Molecular analysis	304
Taxonomic part	315
<i>Devadatta aran</i> spec. nov.	315
<i>Devadatta basilanensis</i> Laidlaw, 1934 stat. nov.	324
<i>Devadatta clavicauda</i> spec. nov.	327
<i>Devadatta podolestoides</i> Laidlaw, 1934	333
<i>Devadatta somoh</i> spec. nov.	335
<i>Devadatta tanduk</i> spec. nov.	337
Material of uncertain status	339
Partial key to the Bornean species	339
Discussion	340
Acknowledgements	341
References	342
Appendix	344

Abstract

Species of *Devadatta* from Borneo are studied using both morphological and molecular methods. As well as *D. podolestoides* Laidlaw, four new species are recognised from the island: *D. aran* **spec. nov.** (holotype ♂, from Pulong Tau National Park, Miri division, Sarawak, Malaysia, deposited in RMNH), *D. clavicauda* **spec. nov.** (holotype ♂, from Bukit Mina, Bukit Mina Wildlife Corridor, Sarawak Planted Forest Project, Bintulu division, Sarawak, Malaysia, deposited in RMNH), *D. somoh* **spec. nov.** (holotype ♂, from the Sungai Kahei area, Ulu Balui, Kapit division, Sarawak, Malaysia, deposited in RMNH) and *D. tanduk* **spec. nov.** (holotype ♂, from Poring Hot Springs, Kinabalu National Park, West Coast division, Sabah, Malaysia, deposited in RMNH). The Philippine taxon *D. basilanensis* Laidlaw is considered a good species rather than a subspecies of *D. podolestoides*. The Bornean species plus *D. basilanensis* are provisionally considered to form a species group, the *podolestoides*-group, within *Devadatta*. The species of the *podolestoides*-group are so similar in morphology and colouration that they are close to truly cryptic species. Two species appear to exhibit character displacement where their ranges overlap with other *Devadatta* species. A molecular analysis using four markers (COI, 16S, ITS and 28S) is presented. This analysis includes specimens of all species from the *podolestoides*-group and two *Devadatta* species from mainland Asia.

Key words: Odonata, *Devadatta*, Borneo, Philippines, new species, near cryptic species, character displacement, COI, 16S, 28S, ITS