



## New fishfly species of the *Neochauliodes bowringi* group (Megaloptera: Corydalidae: Chauliodinae)

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### Abstract

Two new species of the fishfly genus *Neochauliodes* from Cambodia and China are described and both of them belong to the *Neochauliodes bowringi* species group. A key to the males of the *N. bowringi* group is also given.

**Key words:** Chauliodinae, *Neochauliodes*, new species, Cambodia, China

### Introduction

The fishfly genus *Neochauliodes* van der Weele, 1909 is the most diverse group among the genera of the subfamily Chauliodinae, including 44 described species. All *Neochauliodes* species have sexually dimorphic antennae (pectinate in males, subserrate in females) and feebly sinuate 1A and 2A veins of the forewing. Most *Neochauliodes* species occur in subtropical and warm temperate areas of Asia, while a few species can overcome some unrealistic habitats and be found in cold temperate regions, high elevated plateau, or small islands. The taxonomy of *Neochauliodes* was well studied by a series of revisions focusing on the fauna from East Asia, South Asia, Indochina, and Malesia (Liu & Yang 2005a, b, 2006; Liu *et al.* 2007, 2010a, b; Liu *et al.* 2010; Yang & Liu 2010). Currently, three species groups of *Neochauliodes* have been recognized: the *N. sinensis* group (primarily distributed in East Asia, especially China), the *N. bowringi* group (primarily distributed in Indochina and southern China), and the *N. sundaicus* group (endemic to Malesia) (Asahina 1988; Liu *et al.* 2007, 2010b; Yang & Liu 2010). The *N. bowringi* group was first recognized by Asahina (1988), originally including three species, i.e. *N. bowringi* (McLachlan, 1867), *N. moriutii* Asahina, 1988, and *N. azumai* Asahina, 1988. Yang and Liu (2010) redefined the *N. bowringi* group on basis of the diagnosis: forewing proximally with a number of dark spots on costal area and all branches of Rs without distinct curves, and thereafter *N. azumai* was excluded from this group while *N. tonkinensis* (van der Weele, 1907) was considered to be a new group member (Liu & Yang 2010a).

Here we describe two new species, namely *N. cambodianus* **sp. nov.** and *N. guixianus* **sp. nov.**, which belong to the *N. bowringi* group. A key to all five species of *N. bowringi* group is also given.

### Material and methods

The specimens for the present study are deposited in the Royal Belgian Institute of Natural Sciences, Brussels (IRSNB) and the Institute of Plant Protection, Guangxi Academy of Agricultural Sciences, Nanning (GAAS). Genitalia preparations were made by clearing the apex of the abdomen in a cold, saturated potassium hydroxide (KOH) solution for 8–10 h. After rinsing the KOH with acetic acid and water, the apex of the abdomen was transferred to glycerin for further dissection and examination. After examination it was moved to fresh glycerin and stored in a microvial pinned below the specimen. The terminology of the genitalia follows that of Aspöck and Aspöck (2008).