



## Descriptions of two new species of the genus *Planaeschna* from China (Odonata: Anisoptera: Aeshnidae)

HAO-MIAO ZHANG<sup>1</sup>, WEN-CHI YEH<sup>2</sup> & XIAO-LI TONG<sup>1,3</sup>

<sup>1</sup>Department of Entomology, College of Natural Resources and Environment, South China Agricultural University, Guangzhou, 510642, Guangdong Province, P. R. of China. E-mail: zhanghaomiao6988@gmail.com

<sup>2</sup>Division of Forest Protection, Taiwan Forestry Research Institute, 53 Nan-hai Road 10016 Taipei, Taiwan. E-mail: wcyeh@tfri.gov.tw

<sup>3</sup>Corresponding author. E-mail: xtong@scau.edu.cn

### Abstract

Two new species of *Planaeschna* McLachlan, *P. laoshanensis* sp. nov. from Shandong, China and *P. nankunshanensis* sp. nov. from Guangdong, China are described and illustrated and diagnosed from their congeners. Description of the final stadium larva of *Planaeschna nankunshanensis* is also provided.

**Key words:** Odonata, *Planaeschna*, China, new species

### Introduction

The genus *Planaeschna* was erected by McLachlan (1896) with *P. milnei* (Selys, 1883) as type species which had originally been placed in the genus *Aeshna* Fabricius. Most *Planaeschna* species are crepuscular flyers or only active during low light conditions. They usually occur in the habitats of flowing water located in mountain forests and tend to hide in jungles along streams and creeks in the daytime (personal observations). The cryptic body patterns of the *Planaeschna*, which are usually black or deep-brown with yellow or greenish-yellow maculations, are well-camouflaged with shaded and mottled surroundings while they perch among dense thickets.

The genus presently includes 22 species (Schorr *et al.* 2009; Xu *et al.* 2009) which are mostly distributed in Indo-China and the southern part of East Asia. Of these, 12 have been reported from mainland China and Taiwan (Table 1). In this study, we describe two additional new species recently collected respectively from Shandong and Guangdong Provinces of China.

Terminology used to describe morphology of both adult and larva follows Sugimura *et al.* (2001). Abbreviations of abdominal maculation are adopted from Walker (1912) include: S = abdominal segment, AD = antero-dorsal, AL = antero-lateral, AML = antero-lateral+medio-lateral, MD = medio-dorsal, PD = postero-dorsal, and PL = postero-lateral

### Descriptions

#### *Planaeschna laoshanensis* sp. nov.

(Figs. 1–8, 28)

**Material examined. Holotype:** male, Mt. Laoshan (36°09'N, 120°37'E), Shandong Province, China. Wang Yang leg., 25.IX.2008. **Paratype:** male, same data as holotype. Types are deposited in the Collection of Aquatic Insects and Soil Animal, Department of Entomology, South China Agricultural University, Guangzhou, China.