

A New Species of the Genus Epophthalmia (Odonata: Corduliidae) from China 【Research report】

麗大蜻屬一新種記述(蜻蛉目: 偽蜻蛉科)【研究報告】

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Abstract

Epophthalmia Ruani n. sp. (Corduliidae) from Yuntai Mountain, northern Jiangsu Province, China is described and illustrated. This species is characterized by having penis end with 3 long flagella.

摘要

Epophthalmia Kuani為蜻蜓目、偽蜻蛉科、麗大蜻屬 (Epophthalmia) 之一新種,此種採自江蘇省北部雲台山,其特徵主要為陽具末端具有3條長鞭。

Key words: Odonata, Epophthalmia, new species, Yuntai Mountain.

關鍵詞: 蜻蜓目、麗大蜻屬、新種、雲台山

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A New Species of the Genus *Epophthalmia* (Odonata: Corduliidae) from China

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ABSTRACT

Epophthalmia kuani n. sp. (Corduliidae) from Yuntai Mountain, northern Jiangsu Province, China is described and illustrated. This species is characterized by having penis end with 3 long flagella.

Key words: Odonata, Epophthalmia, new species, Yuntai Mountain.

Introduction

Burmeister (1839) erected a new genus Epophthalmia, with Epophthalmia vittata Burmeister as its type species. Until now, Epophthalmia Burmeister (1839) (Lieftinck, 1931; Allen et al., 1985) has been represented by 5 species and 4 subspecies distributed in the world. One of these, Epophthalmia elegans (Brauer, 1865), is found only in China (Needham, 1930; Sui and Sun, 1984; Ishida, et al., 1991; Wilson, 1995). In this paper the author describes a new species from Yuntai Mountain, northern Jiangsu Prov., China.

Description

Epophthalmia kuani Jiang n. sp. (Fig. 1)

Abdomen: length (including appendages) 55mm in male. Hind wing length 48mm in male.

Head: Face with short black hairs, labrum with black margins and a yellow spot at base, labium with median lobe yellow, lateral lobes with yellow spot at

base; anteclypeus black, postclypeus yellow, front margins black, sides with 2 symmetric concavities. Frons black, with greenish reflection and front with great prominences, center with a vertical ditch, sides of frons with triangular yellow spots, between lateral ocelli with 2 small prominences, also with greenish reflection. Antennae black, occiput black, but somewhat with a triangular carina-shape, with brown hairs.

Prothorax: Pronotum black with a little touches of yellow on anterior margin of anterior lobe, synthorax black, with vellowish hairs, also with green reflection, sides of synthorax with yellow stripes, each connected to katepisternum; between fore wing and hind wing with a vellow stripe which covers spiracle, end of vellow stripes of hind margins of metathoracic epimeron becomeing thinner. connected to marks. Legs black, coxa and trochanter of front legs with yellow marks, remainder black. Keel white. Wings hyaline, a little smoky at anal angle, vein and stigma of wings black, with a little citron-yellow tinge on upper side of costal vein. Nodal index of fore

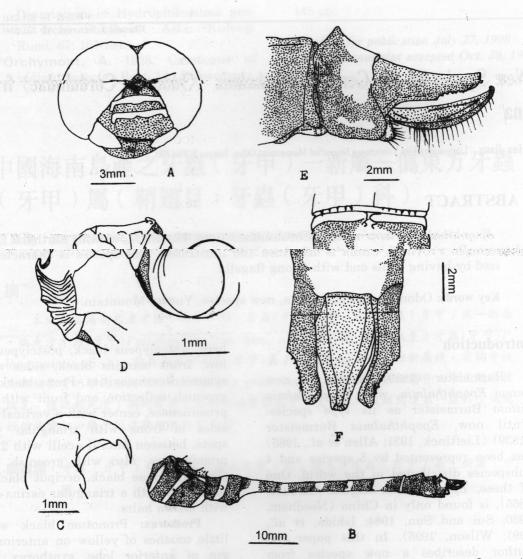


Fig. 1. Characteristics of *Epophthalmia kuani*. A: head; B: color pattern of abdomen and synthorax; C: posterior hamulus, lateral view; D: aedeagus, lateral view; E, F: anal appendages, lateral and dorsal views.

wings 7:14 / 15:7; hind wings 9:11 / 7:9. Anal loop of 9 cells, membranule white.

Abdomen: Abdomen black, with yellow marks, segments I-II inflated, segment I black, with yellow transverse band; dorsal mark narrower than lateral ones, occupying complete auricle; segment III with yellow transverse band extending to base on both sides; segments IV and V with yellow marks, separated by black mid-

dorsally, segment VI with 4 yellow spots at base; posterior 2 spots somewhat rectangular, mid-dorsal mark more separated than those on preceding 2 segments; segment VII with yellow stripes, covering 1/2 of segment, base with a narrow yellow stripe; segment IX black, with a small yellow spot on lower sides at base; segment X with a big prominent dorsal spot, and 2 little towers at top,

yellow marks extending from towers to posterior margins; small black spot invading irregular yellow mark at sides below. Anal appendages completely black.

Genitalia: Anterior hamule short, posterior hamule robust, arc-shaped at end, with curved teeth on venter; penis end with 3 long flagella, middle 1 longest. Superior appendages curved toward inside, outer margin contracted at mid-way, outer margin with teeth on apical half. Inferior appendage longer than superiors, with a small yellow spot at tip, entire anal appendages black, with black hairs, inferior appendage with long hairs on lower sides.

Holotype: Male adult, CHINA: JIANG-SU: Yuntai Mt., Donlei 250m. 15-V-1994, Y. H. Jiang, deposited in Nanjing Forestry Univ.

Paratypes: (males adult) 4 &, CHINA: JIANGSU: Yuntai Mt., Linzhou, 15m. 1-VI-1996, Y. H. Jiang, deposited in Nanjing Forestry Univ.

Distribution: China Jiangsu.

Taxonomic discussion: This new species is probably most closely related to *E. elegans* (Brauer, 1865) (Needham, 1930) and *E. frontalis frontalis* Selys, 1871 (Asahina, 1987), but can be differentiated from both by: (1) spperior appendages without yellow spots at base; (2) pronotum with little touches of yellow on anterior margin of anterior lobe; (3) posterior hamule arc-shaped at end, with curved teeth on venter and (4) the end of penis with 3 long flagella. (Needham, 1930; Lieftinck, 1931; Sui and Sun, 1984; Asahina, 1987; Wilson, 1995).

Etymology: This new species is named after Prof. Chung-Chich Kuan of the Department of Entomology, National Chung Hsing Univ., Taichung, Taiwan.

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摘 要

Epophthalmia Kuani為蜻蜓目、偽蜻蛉科、麗大蜻屬(Epophthalmia)之一新種,此種採自江蘇省北部雲台山,其特徵主要為陽具末端具有3條長鞭。

關鍵詞:蜻蜓目、麗大蜻屬、新種、雲台山。