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A NEW SPECIES OF BITING MIDGE OF THE GENUS CULICOIDES (DIPTERA: CERATOPOGONIDAE) FROM CHINA

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ABSTRACT

A new species of bloodsucking Culicoides Latreille of the subgenus Avaritia is described and illustrated based on female specimens from China. The new species is compared with its congener, C. trimaculatus McDonald and Lu, 1972.

Key Words: Culicoides (Avaritia), bloodsucking midges, new species, China

MATERIALS AND METHODS

The specimens described herein as a new species were collected by light trap in Zunyi, China. The methods and morphological terminology used in this study follow Spinelli et al. (2005) and Yu (2006). The specimens were mounted in phenol-balsam in the manner described by Wirth & Marston (1968). Diagnostic characters were illustrated using a Leica MZ 12.5 stereomicroscope. The type specimens and examined specimens are deposited in the Insect Collection at the Institute of Entomology, Zunyi Medical University, Zunyi, Guizhou Province, China (IEZU).

The measurements of the spermathecae and the wings are in millimeters. Meristic information is given as the range followed by the mean and number of specimens examined.

CULICOIDES (AVARITIA) SUIYANGENSIS SP. NOV.

(FIGS. 1-6)

HOLOTYPE: Female, Xiangshuwan, Kuankuoshui National Nature Reserve of Guizhou Province, China, 1-IV-2012, leg. Fei He. Paratypes: 6 females, same data as holotype; 2 females, Baishaogou, Kuankuoshui National Nature Reserve, Guizhou Province, China, 2-IV-2012, leg. Fei He. The type specimens are deposited in the Department of Cell Biology and Genetics, College of Basic Medicine, Zunyi Medical University, Zunyi, China.

Description

Large-sized midge species, wing length 1.69 mm. Antenna with sensory pattern 3, 11-15. Palpus with...

3rd segment moderately swollen, a large, round, shallow, sensory pit on distal segment. Wing mostly dark with distinct light and dark patches at the leading edge of the wings. Two of the dark patches are most distinct, others are blurred. Spermathecae 2, plus a rudimentary 3rd, and a sclerotized ring, subspherical to ovoid with short slender necks.

Specimens Examined

Female

Wing length 1.69 mm (n = 9), width 0.8 mm (n = 9).


Wing. Mostly dark. With mostly distinct pattern of 2 dark spots at the leading edge of the wings, other spots are blurred. A trace of a pale spot extends over the r-m cross vein and extends to the edge of cell M2. A pale spot in the distal ⅓ of cell R2. Distal pale spot in cell R5 transverse more and less emarginated on distal side. A blurred pale spot extends to the middle of cell M2 and costal cell M1, over vein M2. Three blurred pale spots elongate in the cell M2 distal side, cell M4, the costal cell Cu1 extending to base of wing. Macrotrichia sparsely spread on distal ⅓ of wing, CR 0.61.

Abdomen. Light brown. Spermathecae 2 plus rudimentary 3rd and sclerotized ring; subspherical to ovoid with short slender necks; measuring 0.069 by 0.050 mm and 0.065 by 0.055 mm.

Male

Unknown.

Distribution

China (Guizhou Province).

Remarks

This new species is similar to C. trimaculatus McDonald & Lu 1972, but it differs clearly in wing length of 1.69 mm, distal pale spot in cell R5 transverse emarginated on distal side, a blurred pale spot on the middle of cell M2 and costal cell M1.

Etymology

The species is named after the type locality.

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