Ten new species of the genus Phortica from the Afrotropical and Oriental regions (Diptera: Drosophilidae)

HONGWEI CHEN¹ & JAN MÁCA²*
¹ Department of Entomology, South China Agricultural University, Wushan 483, Tianhe, Guangzhou, 510642 China
² Czech Entomological Society, CZ-12843 Praha, Czech Republic
* Corresponding author, e-mail: janxmaca@seznam.cz

Abstract

Ten new species of the genus Phortica are described from the Afrotropical and Oriental regions: P. (Allophortica) chingolaensis Chen & Máca, sp. nov., P. (Ashima) eseta Chen, sp. nov., P. (Ashima) mediarista Chen, sp. nov., P. (Ashima) nakanoi Chen, sp. nov., P. (Ashima) biclavata Chen, sp. nov., P. (Phortica) anciestria Chen, sp. nov., P. (Phortica) monocoeaena Chen, sp. nov., P. (Phortica) dirhopala Chen, sp. nov., P. (Phortica) ryukyuensis Chen, sp. nov. and P. (Phortica) sumatraensis Chen, sp. nov. A species list of the genus Phortica is provided.

Key words: Afrotropical region, Drosophilidae, new species, Oriental region, Phortica

Introduction

Up to the present, 122 known species of the genus Phortica Schiner, 1862 have been reported from the world (Appendix; Chen et al., 2007; Brake & Bächli, 2008; Cheng et al., 2008; Prigent & Chen, 2008; He et al., 2009), including 13 spp. from the Afrotropical region, 4 spp. from Australasian region, 3 spp. from Nearctic region, 1 sp. from Neotropical region, 16 spp. from Palearctic region and 92 spp. from the Oriental region. Recently, the phylogenetic relationships of African and Asian Phortica species were investigated based on DNA sequence data of two mitochondrial (COI, ND2) and one nuclear (28S rRNA) genes by Cao et al. (2011); the result showed that five monophyletic clades were strongly supported as subgenera, i.e. Allophortica Máca, 2003, Alloparadisa Chen, 2011, Ashima Chen, 2011, Phortica (s. str.) and Shangrila Chen, 2011; the subgenus Sinophthalmus Coquillett, 1904 from Central and North America was not included in the study. This study describes ten new species, which belong to the subgenera Allophortica, Ashima and Phortica (s. str.).

Most specimens examined were males captured while hovering in front of people’s eyes in the forest, or resting on tree trunks. The examined specimens are deposited at the following institutions: Forest Research Center, Kuching, Sarawak, Malaysia (FRCK); Museum Zoologicum Bogoriense, Bogor, Indonesia (MZB); Coll. J. Máca, to be deposited in the Entomology Department, National Museum, Praha, Czech Republic (NMP); Department of Entomology, South China Agricultural University, Guangzhou, China (SCAU); Department of Systematic Entomology, Hokkaido University Museum, Sapporo, Japan (SEHU). We followed McAlpine (1981) for the morphological terminology, and Zhang & Toda (1992) and Chen & Toda (2001) for the definitions of measurements, indices and abbreviations.

Systematic Account

Genus Phortica Schiner

Phortica Schiner, 1862: 433; Máca, 2003: 251 (revised status); Cao et al., 2011: 682. Type species: Drosophila variegata Fallén, 1823.