



Description of six new species of Oriental *Paduniella* (Insecta: Trichoptera: Psychomyiidae)

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Abstract

Six new species of *Paduniella* (Insecta, Trichoptera, Psychomyiidae) from Asia are described and illustrated: *P. burmana* (Burma), *P. dongdata* (Vietnam), *P. monga* (Vietnam), *P. nama* (Vietnam), *P. sabarmata* (India), and *P. taya* (Vietnam). The male genitalia of *P. sampati* Malicky & Chantaramongkol and *P. semarangensis* Ulmer are re-described and illustrated based on new material from Vietnam.

Key words: Taxonomy, Burma, India, Vietnam, new species, *Paduniella*, Trichoptera

Introduction

The genus *Paduniella* was established as monotypic by Ulmer (1913) to receive *P. semarangensis* Ulmer from Indonesia (Java). The year after, Martynov (1914) described *P. uralensis* from the southern part of the Ural Mountains in Russia, a species temporarily placed in a monobasic new genus *Mesopaduniella* by Lestage (1926), and restored into *Paduniella* by Li & Morse (1997). Ulmer (1915) described the first species from Sri Lanka as *P. ceylanica* Ulmer, which Lestage (1926) temporarily classified into another new monotypic genus, *Propaduniella* Lestage. Li and Morse (1997) demonstrated that this species forms the sister species to *P. uralensis*, and synonymized also the genus *Propaduniella* with *Paduniella*. The next species to be described in the genus was *P. africana* (Ulmer) from Cameroon, originally classified in the monotypic genus *Psychomyiodes* Ulmer (1922), which was established as monotypic, and represented the first record of the genus from the Afrotropical Biogeographical Region. Martynov (1934) synonymized *Psychomyiodes* with *Paduniella* and subsequently described species were all correctly assigned to that genus. Previous to this report, 64 *Paduniella* species have been described (Morse 2008, Johanson & Oláh 2010) and the genus is the third largest in the Psychomyiidae, after *Tinodes* Curtis (more than 220 species) and *Psychomyia* Latreille (more than 140 species). The genus has highest species diversity in the Oriental Biogeographical Region, with 50 species representing nearly 80% of the total diversity described till now. In this region, three quarters of the species were described from four countries: 12 from Thailand (Malicky 1995, 2009, Malicky & Chantaramongkol 1993, 1996), 11 from Sri Lanka (Chantaramongkol & Malicky 1986, Schmid 1958), 8 from Indonesia (Malicky 1995, 2004, 2008, Mey 2006, Ulmer 1913) and 6 from the Oriental part of China (Li & Morse 1997). Nine species have so far been recorded from the Afrotropical Biogeographical Region (Johanson & Oláh 2010), 4 from the Palearctic Biogeographical Region, and 1 species, *P. nearctica* Flint, is known from the Nearctic Biogeographical Region. With the description of 6 more Oriental species below, the total number of known *Paduniella* species is 70. Most of the herein examined and described species were collected in Vietnam.