



Description of seven new *Tinodes* species from Asia (Trichoptera: Psychomyiidae)

KJELL ARNE JOHANSON¹ & JÁNOS OLÁH²

¹Swedish Museum of Natural History, Entomology Department, Box 50007, SE-104 05 Stockholm, Sweden.

E-mail: kjell.arne.johanson@nrm.se

²Department of Environmental Management, Tessedik College, Szarvas, Hungary. Residence Address: I. kk. 10, H-5540 Szarvas, Hungary. E-mail: saker@szarvasnet.hu

Abstract

Seven new *Tinodes* species are described from South-East Asia. *Tinodes kemnoungea*, new species, *Tinodes caolana*, new species, *Tinodes gapbona*, new species, and *Tinodes dactringa*, new species are described from Vietnam. *Tinodes samkuca*, new species, *Tinodes kebala*, new species, and *Tinodes sukxa*, new species are described from Peninsular Malaysia.

Key words: Trichoptera, Psychomyiidae, *Tinodes*, new species, Oriental Region, Malaysia, Vietnam

Introduction

Eighty-seven species of the psychomyiid genus *Tinodes* have been recorded from the Oriental Region (Morse 1999). The other area rich in *Tinodes* species is the West Palaearctic Region from where 85 species have been recorded (Malicky 2004a). The high diversity in the Oriental and West Palaearctic Regions is especially evident when compared to the Nearctic Region that has 13 recorded extant species, and the East Palaearctic Region that has 7 recorded species. The genus has not been recorded from the Neotropical Region, and three species are known from the Australian Region, of which two species are from Papua New Guinea. The Afrotropical Region has 23 described *Tinodes* species restricted to areas south of Sahara (Johanson & Oláh 2007). The first *Tinodes* species being described from the Oriental Region was *T. flavopunctatus* Ulmer 1910 from Java, and more species were subsequently described in the 1920's, i.e. *T. retirtus* Ulmer 1927 and *T. formosae* Iwata 1928 from Taiwan, and in the 1930's, i.e. *T. pullulans* Navás 1932 from India, *T. adjunctus* Banks 1937 and *T. tagalicus* Banks 1937 from the Philippines, and *T. sumatrensis* Ulmer 1930 from Sumatra. The largest addition to the knowledge on the Oriental *Tinodes* species was given by Schmid (1972) who described 23, mainly Indian species. Altogether 12 species were described from Thailand (Malicky & Chantaramongkol 1989, 1993, 1996, 2003). Also the Philippines and Indonesia have 12 species recorded each (Banks 1937, Mey 1990, 1995, 1998a, b and Ulmer 1910, 1930, 1951, Malicky 1995, 1998, 2004b, respectively).

The 5 known Vietnamese *Tinodes* species, *T. apteryx*, *T. meleagris*, *T. micrapteryx*, *T. physetes* and *T. triomdys*, were described by Malicky (1995) and collected from a single locality about 80 km NW Hanoi in May and June 1995. The *Tinodes* fauna of Malaysia has been described by Kimmins (1955) (*T. igok*, *T. silvicolus* and *T. tricalcaratus* from Sarawak), Schmid (1972) (*T. multispinodus* from Pahang), Malicky (1995) (*T. anakkunci* from Perak) and Johanson (2001) (*T. malickyi* and *T. fulvus* from Sabah).