New Species of *Stictochironomus*, *Tanytarsus* and *Conchapelopia* (Diptera: Chironomidae) from Korea

Kuk Bon Na¹ and Yeon Jae Bae¹,²

¹Entomological Research Institute, Korea University, Seoul, Korea
²Division of Life Sciences, College of Life Sciences and Biotechnology, Korea University, Seoul, Korea

Abstract

Four new species of non-biting midges (Diptera: Chironomidae) are described from Korea: *Stictochironomus han* n. sp., *Tanytarsus reei* n. sp., *Conchapelopia garim* n. sp., and *Conchapelopia seoulpia* n. sp. Descriptions of male adults, line drawings, diagnoses, and examined materials are provided.

Key words: *Conchapelopia garim*, *Conchapelopia seoulpia*, description, non-biting midges, *Stictochironomus han*, *Tanytarsus reei*

Introduction

The non-biting midge family Chironomidae has a worldwide distribution and is the most abundant group of insects in fresh or blackish waters (Oliver, 1971; Pinder, 1989). The number of species is estimated as many as 15,000 species in the world (Cranston, 1995).


The purpose of this study is to newly describe Chironomidae species from South Korea.

Taxonomic Accounts

Family Chironomidae

Subfamily Chironominae

Genus *Stictochironomus* Kieffer

The species of the genus *Stictochironomus* Kieffer, 1919 are distinguished among members of the subfamily Chironominae by the combination characters of the frequent markings on the wings and legs, lack of frontal setae, conical scutal tubercle, fused tibial combs, usually with only one spur, FCu often proximal to RM, hypopygium with mobile and distally flattened gonostylus, superior volsella nearly always with subapical seta and inferior volsella bent lateral-
Abdomen entirely dark brown. Hypopygium (Fig. 1B, C): Ninth tergite with numerous setae on both sides of anal point along posterior margin. Anal point very long, slender, nearly parallel-sided, with rounded apex. Superior volsellar digitiform, with board basal part and long distal process; basal part with microtrichiae, with 3 long setae on inner margin; distal process slightly curved, bare, with hooked apex, with a long seta on dorsal surface in distal 1/3. Digitus absent. Inferior volsella cylindrical, long, parallel-sided, nearly straight, without swollen apical part, with 25-26 strong recurved setae on dorsal surface of distal 1/2, with a long apical setae toward inner-posterior direction. Median volsella absent. Gonostylus stout, rounded apically, not tapering toward apex, with numerous branched setae on inner margin of apical part. 

Female: Unknown.

Diagnosis: The male adult of S. han n. sp. can be distinguished from other congeners by the characters of several dark markings on wing membrane, stout gonostylus (not slender), and slightly curved superior volsella (not strong curved).


Etymology: This species is named after the type locality “Han River”, the largest river in Korea.

Distribution: Korea.

Habitat. Adults of S. han n. sp. were collected from the banks of the Han River. The river is more than 1 km wide, slow flowing, and the sediments consist of silt and sand.

Discussion: This is the first record of the genus Stictochironomus in Korea.

Genus Tanytarsus van der Wulp

The genus Tanytarsus van der Wulp, 1874 can be distinguished by the combined characters of the spines between anal crests, well separated tibial combs, at least one of which bears a spur, end of vein R4 distal to the tip of vein M1+2, and lack of lamellae setae on median volsella. The immature stages of Tanytarsus occur in all types of freshwater and some species are marine (Pinder and Reiss, 1983, 1986; Cranston et al., 1989). Tanytarsus is a large genus among the family Chironomidae. Only one species, T. seosanensis, was recorded from Korea (Ree and Kim, 2003).