



***Kloosia* Kruseman, *Chernovskiiia* Sæther, *Robackia* Sæther, and *Saetheria* Jackson (Chironomidae: Chironominae) in Japan**

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Abstract

Kloosia koreana Reiss, 1988 is recorded from Japan for the first time and redescribed. Japanese material of other little known genera within the *Harnischia* complex are reexamined and identified. *Beckidia* sp. is assigned to the genus *Kloosia*; *Chernovskiiia orbicus* (Townes, 1945) is reconfirmed based on the larvae; *Robackia* sp. is allotted to *R. pilicauda* (Sæther, 1977), and the presumed larva described for the first time; and *Saetheria* sp. is allotted to *S. tylus* (Townes, 1945).

Key words: Chironomidae, Chironominae, *Harnischia* complex, *Chernovskiiia orbicus*, *Kloosia koreana*, *Robackia pilicauda*, *Saetheria tylus*, Japan

Introduction

The family Chironomidae is one of the most abundant components of freshwater insects. About 1,700 species of Chironomidae are recorded from Japan. Among the 11 subfamilies which are known worldwide, 7 are found in Japan, namely Telmatogetoninae, Podonominae, Tanypodinae, Diamesinae, Prodiamesinae, Orthocladiinae, and Chironominae.

Among the genera of Chironominae, *Beckidia* Sæther, *Chernovskiiia* Sæther, *Kloosia* Kruseman, *Robackia* Sæther, and *Saetheria* Jackson are sporadically recorded from Japan. They are all members of the *Harnischia* group (Cranston *et al.* 1989), and except for *Kloosia*, all have male hypopygia lacking or having a small inferior and/or superior volsella. Previous Japanese records of these genera are all based on larvae. The purpose of this study is to identify these immatures to species level.

Material and methods

Larvae and males of *Chernovskiiia*, *Kloosia*, *Robackia*, and *Saetheria* were collected, preserved in 70% ethyl-alcohol, and mounted in Hoyer's solution, Canada balsam, or "Aquatex" (Merck) following the procedure outlined by Pinder (1989). Furthermore, the slide-mounted specimens used by N. Kitagawa in earlier studies were re-examined.

The general terminology follows Sæther (1980). In the figures of the male hypopygium the dorsal aspect is shown to the left, the ventral aspect and apodeme to the right. The measurements are given as ranges, followed by the mean when more than 3 specimens were measured, followed by the number of specimens measured in parentheses.

With the exception of Kitagawa's material, all specimens are deposited at the National Science Museum, Tokyo. Specimen codes are given in parenthesis.