



<http://dx.doi.org/10.11646/zootaxa.3755.5.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:FB58D45E-59EC-4408-9F15-93DDD799401E>

A new species of *Bilyjomia* Niitsuma *et* Watson from Japan, with keys to species of the genus (Diptera: Chironomidae)

HIROMI NIITSUMA

Department of Biology, Faculty of Education, Shizuoka University, 836 Ôya, Suruga-ku, Shizuoka, 422-8529 Japan.

E-mail: edhniit@ipc.shizuoka.ac.jp

Abstract

Descriptions of the male, female imagos, pupa and larva are given for *Bilyjomia parallela* n. sp. collected from Japan. This is the third known species belonging to the genus *Bilyjomia*. Keys to species of the genus are provided.

Key words: Diptera, Chironomidae, Tanypodinae, *Bilyjomia*, new species, Japan

Introduction

Some larvae bearing unique morphological characters were recently captured from bottom muddy sediment of a cool spring in Udo Hills, Shizuoka City, Japan. The reared larva shared the same features with the one captured in another spring in Yaguki, Iwaki City, Fukushima Prefecture. Consequently the material of all developmental stages of the species is now available. Close examination of morphological characters allowed concluding that the species belongs to *Bilyjomia* Niitsuma *et* Watson, 2009, and is new to science. Thus a new species can now be added to the genus *Bilyjomia*, which up to date was represented by only two species, *i.e.*, Nearctic *algens* (Coquillett, 1902) and Japanese *fontana* Niitsuma *et* Watson, 2009. The third species is here described with keys to species of the genus in all three stages.

Material and methods

The pupae were obtained from mass-rearing larvae in glass containers. Pupae and larvae were transferred into a small dish, and reared to the adult stage. Each specimen was preserved in 70% ethanol, subsequently dissected and slide-mounted with its exuvial cast in Canada balsam, according to Pinder (1989).

In this paper, the total length of the adult is given by measuring from the anterior tip of the thorax to the posterior tip of the abdomen. The measurement of the wing length is taken from the base to apex. Wherever the adult humerals merge with the dorsocentrals, the delineation is made at the level of the parapsidal suture. The length of the larval ligula is given including the granulose area length.

Measurements and counts are given as ranges, followed by the means when three or more specimens were measured or counted. The number of specimens observed (n) is given at the beginning of the species description, except when otherwise stated.

Terminology and abbreviations follow Sæther (1980), except the term phallapodeme substituted with strut 2 (Roback 1971) and the arrangement of the larval cephalic setae which follows Kowalyk (1985).

The type material is deposited in the collection of the Shizuoka University Museum (SUM).

References

- Kowalyk, H.E. (1985) The larval cephalic setae in the Tanypodinae (Diptera: Chironomidae) and their importance in generic determinations. *Canadian Entomologist*, 117, 67–106.
<http://dx.doi.org/10.4039/ent11767-1>
- Niitsuma, H. & Watson, C.N. (2009) *Bilyjomyia*, a new genus of the tribe Macropelopiini from the Holarctic (Diptera: Chironomidae). *Zootaxa*, 2166, 57–68.
- Pinder, L.C.V. (1989) The adult males of Chironomidae (Diptera) of the Holarctic region. Introduction. *Entomologica scandinavica*, Supplement, 34, 5–9.
- Roback, S.S. (1971) The adults of the subfamily Tanypodinae (= Pelopiinae) in North America (Diptera: Chironomidae). *Monographs of the Academy of Natural Sciences of Philadelphia*, 17, 1–410.
- Roback, S.S. (1984) Tanypodinae (Diptera: Chironomidae) from Afognak and Kodiak Islands, Alaska. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 136, 12–23.
- Sæther, O.A. (1980) Glossary of chironomid morphology terminology (Diptera: Chironomidae). *Entomologica scandinavica*, Supplement, 14, 1–51.
- Watson, C.N. (1998) Description of the larva of *Apsectrotanypus algens* (Coquillett) with a review of the generic placement of the species (Diptera: Chironomidae). *Journal of the Kansas Entomological Society*, 71, 241–246.