



The genus *Hydroptila* Dalman (Trichoptera, Hydroptilidae) in Japan

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Abstract

The Japanese species of *Hydroptila* Dalman (Trichoptera, Hydroptilidae) are reviewed, confirming 10 described species, and introducing 2 new species. For clear comparisons and to include new details, males and females of all species, including the 2 new species, *H. ogasawaraensis* Ito and *H. nanseiensis* Ito, are redescribed or described anew. *Hydroptila itoi* Kobayashi is synonymized with *H. dampfi* Ulmer and *H. thuna* Oláh and *H. botosaneanui* Kumanski are recorded for the Japanese fauna for the first time. *Hydroptila usuguronis* Matsumura is reassigned to the genus *Psychomyia* Latreille (Psychomyiidae).

Key words: new species, new synonyms, reassignment

Introduction

Hydroptila Dalman, 1819, is a large cosmopolitan genus of Trichoptera (Marshall 1979). For Japan, 9 named species were recorded (Ito 2010). However, several taxonomic problems remained: (1) Unidentified adults have been collected (Tanida *et al.* 1999, Satake & Kuranishi 2007); (2) the taxonomic status of *Hydroptila usuguronis* Matsumura, 1931, is unclear due to the lack of information on the genitalia; and (3) the true identity of some species may have been overlooked as they were described without adequate reference to published names.

As a consequence of this study on a large number of recently collected specimens of *Hydroptila*, 12 species are now recognized in the Japanese fauna. Males and females of all named species are redescribed to enable clear, unambiguous comparisons, and 2 new species are described. One name is newly synonymized and the true nature of *Hydroptila usuguronis* is resolved.

Material and methods

Association of the male and female of each species was established by rearing larvae to adults. When rearing larvae was impossible, the association was based on similar general body characteristics from among specimens collected together. Male and female genitalia were figured after treatment in dilute KOH. Morphological terms mainly follow Wells (1979) and Marshall (1979). The type series of the new species are deposited in the collections of the Natural History Museum and Institute, Chiba (CBM–ZI). Other specimens are deposited in the collection of the first author unless otherwise indicated in parentheses. All specimens are preserved in 70–80% ethyl alcohol. The depositories of the specimens, collecting methods and collectors are abbreviated as follows: Lake Biwa Museum (LBM), Minakuchi Kodomo-no-kuni Nature Museum (MKNM), light trap (L), Malaise trap (M), light pan trap (P), reared from pupae or larvae (R), sweep net (S), Ayuko Ohkawa (AO), Hiroyuki Nishimoto (HN), Kazumi Tanida (KT), Mikio Takai (MT), Naoki Kawase (NKA), Naotoshi Kuhara (NK), Ryoichi B. Kuranishi (RBK), Toshio Hattori (TH), Tomiko Ito (TI), Takao Nozaki (TN).