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On taxonomy of *Hydrobaenus* Fries, 1830 (Diptera: Chironomidae: Orthoclaadiinae) from the Russian Far East, with a key to species

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Abstract

Additions and corrections to the diagnosis of the genus *Hydrobaenus*, a redescription for adult male and immature stages of *H. distinctus* (Makarchenko *et* Makarchenko) **comb. n.**, a taxonomic notes to *H. jacuticus* Makarchenko *et* Makarchenko and identification keys of adult males, pupae and larvae of *Hydrobaenus* species from the Russian Far East are given.

Key words: Diptera, Chironomidae, *Hydrobaenus*, taxonomy, redescription, key, Russian Far East

Introduction

While performing the taxonomic revision of the genus *Bryophaenocladus* Thienemann some years ago, we described a new species *B. distinctus* Makarchenko *et* Makarchenko from Primorye Territory of the Russian Far East (Makarchenko & Makarchenko 2006a) based on adult male. In the spring of 2013 we collected a mature pupa of Orthoclaadiinae with larval skin, in which the male hypopygium of *B. distinctus* was clearly visible, but the characters of pupa and larva were very different from the ones described in the genus *Bryophaenocladus*. The re-analysis of adult male, pupa and larva, allowed to conclude that the species *distinctus* should be placed in *Hydrobaenus*, despite some features of adult, larva and pupa, did not allow to assign this species to the genus *Hydrobaenus* using available identification keys (Cranston *et al.* 1983, 1989; Coffman *et al.* 1986; Sæther *et al.* 2000). The reason may be the long time spent since the revision of the genus *Hydrobaenus* (Sæther 1976) and the above mentioned monographs. In fact in the last decades new species were described, including the use of features not only of adults, but also of immature stages (Asari *et al.* 2004; Cranston *et al.* 2007; Makarchenko *et al.* 2009; Makarchenko & Makarchenko 2010, 2011, 2012; Zerguine & Rossaro 2010). To sum up, up to date, the genus *Hydrobaenus* includes at least 44 species (Ashe & O'Connor 2012). In the Russian Far East, we found 16 species, 11 of which were described as new to science.

Analyzing our original data and literature data during the last 13 years, it was emphasized that the descriptions of some species included characters not considered in the diagnosis of the genus *Hydrobaenus*. For this reason the diagnosis of the genus must be emended, especially for what concerns the characters of pupae and larvae. An emended diagnosis of *Hydrobaenus* including new characters from larvae is just published in the new edition of "The larvae of Chironomidae (Diptera) of the Holarctic Region" (Andersen *et al.* 2013).

In the present paper we present additions and corrections to the diagnosis of the genus *Hydrobaenus*, a redescription of adult male and immature stages of *H. distinctus* (Makarchenko *et* Makarchenko) **comb. n.**, taxonomic notes to *H. jacuticus* Makarchenko *et* Makarchenko, as well as identification keys of *Hydrobaenus* species from the Russian Far East.

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