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A new species of *Nilothauma* Kieffer from China, with a key to known species of the genus (Diptera: Chironomidae)

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Abstract

A new species of the genus *Nilothauma* Kieffer, *N. pandum* sp. n., is described, and its morphological descriptions and illustrations are also given. A key to the males of *Nilothauma* is given. The adult male of *N. pandum* sp. n. can be distinguished from known species of the genus by the following combination of characters: anal point very broadly lanceolate with microtrichia in median ridge and apical margin, rounded at apex; superior volsella pad-like, expanded distally; median volsella curved, rounded at apex, with 2 long basal setae and 1 long median seta.

Key words: *Nilothauma*, new species, key

Introduction

The genus *Nilothauma* was established by Kieffer (1921). The type species is *Nilothauma pictipenne* Kieffer, 1921. Most males of *Nilothauma* can be separated from all other Chironomini by the presence of at least one dorsal projection on tergite IX; some Neotropical species lack dorsal projection on tergite IX, but can be recognized by the absence of anal point and a long digitiform inferior volsella (Adam & Sæther 1999, Mendes & Andersen 2009). The males of *Nilothauma* differ from other Chironomini except some *Paratendipes* also by the combination of 13 flagellomeres in male, low to very low AR (less than 0.4, except in *N. longissimum* Mendes & Andersen, 2009), bare squama, high VR, front tibia with very long spur, each comb of mid tibia with one spur, hind tibia with 2 spurs; the pupae can be separated from all other Chironomini on the shape of the thoracic horn consisting of 4–8 slender branches, segment IV with 1 taeniate lateral seta, segments V–VIII with 4 taeniate lateral setae, and anal lobe with 1 long, taeniate dorsal seta; the larvae can be separated from all other Chironomini by the bean-shaped head in lateral view, antenna with 6 segments with basal segment shorter than flagellum, lauterborn organs absent, and pale mental and mandibular teeth (Mendes & Andersen 2009). The immatures of *Nilothauma* are found in the littoral and sublittoral sediment of standing and flowing waters (Pinder & Reiss 1983, 1986; Cranston *et al.* 1989).

Adam & Sæther (1999) revised the genus and recognized 25 species. Since then, Yan *et al.* (2005) recorded 4 species of *Nilothauma* from China; Mendes & Andersen (2009) described 13 additional species from Neotropical Region, and placed *Paranilothauma* Sopenis, 1987 and *Neelamia* Sopenis, 1987 as synonyms of *Nilothauma*. To date, the genus comprises 42 species worldwide: 6 in the Palaearctic Region, 4 in the Nearctic Region, 16 in the Neotropical Region, 5 in the Oriental Region, 11 in the Afrotropical Region, and 2 in the Australasian Region (Adam & Sæther 1999, Yan *et al.* 2005, Mendes & Andersen 2009).

In this contribution, a new species of *Nilothauma* in Oriental China is described, and a key to males of *Nilothauma* in the world is presented.

- Superior volsella bifid or trifid, microtrichiose areas at most of limited extent 37
- 37. Superior volsella bifid, both branches with at least one terminal seta; anterior tergite IX projection with 11–14 setae. Thailand *N. mergae* Adam & Sæther, 1999
- One lateral branch of superior volsella sharply pointed without an apical seta; anterior tergite IX projection with about 15 or about 33 setae 38
- 38. Anterior tergite IX projection with about 33 setae; superior volsella apically narrow and parallel-sided with 1–2 apical setae. Oriental China *N. acre* Adam & Sæther, 1999
- Anterior tergite IX projection with about 15 setae; superior volsella broadened apically with one long laterally directed seta and 8–10 short setae. Nearctic *N. bicorne* (Townes, 1945)
- 39. Anal point trifid; anterior tergite IX projection very long, tapering to parallel-sided apex, with setae only apically; posterior tergite IX projection distally very slender, with 5 apical setae. D. R. Congo, Ghana *N. burmeisteri* Adam & Sæther, 1999
- Anal point simple; anterior tergite IX projection wart-like, with setae not concentrated around apex; posterior tergite IX projection triangular or apically rounded 40
- 40. Posterior tergite IX projection apically rounded; superior volsella with four lobes. Oriental China *N. quatuorlobum* Yan, Tang & Wang, 2005
- Posterior tergite IX projection triangular; superior volsella without lobe 41
- 41. Anal point parallel-sided; anterior tergite IX projection with setae thickened at apices. Ghana *N. ankasense* Adam & Sæther, 1999
- Anal point spatulate; anterior tergite IX projection with setae not thickened at apices 42
- 42. Superior volsella tapering, widest near base. Europe *N. brayi* (Goetghebuer, 1921)
- Superior volsella narrowest at base, widest about 1/3 from apex. Australia *N. infissum* Adam & Sæther, 1999

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