

## **Article**



# Blood sucking midges of *Leptoconops* (*Holoconops* Kieffer) (Diptera: Ceratopogonidae) from India

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#### **Abstract**

Three new species, Leptoconops (Holoconops) brevistylus, L. (H.) fortipalpus and L. (H.) tenebrostigmatus of the subgenus Leptoconops (Holoconops Kieffer) are described from the Damodar valley of India. Previously, only two species, Leptoconops (Leptoconops) indicus (Kieffer) and L. (Styloconops) spinosiformis (Carter) were known from India.

**Key words:** Diptera, Ceratopogonidae, *Leptoconops*, new species, India

#### Introduction

The biting midges of the genus *Leptoconops* Skuse, often referred to as "black gnats", are fascinating and extremely annoying blood sucking pests in coastal and desert regions. Adult females are diurnal feeders and rest by burying themselves in sand (Borkent, 2001). The immature stages are sometimes prevalent in wet clays or soil in xeric areas or in sand and marine or freshwater beaches (Clastrier & Wirth, 1978).

Of the 7 subgenera within *Leptoconops*, *Brachyconops* Wirth & Atchley, *Holoconops* Kieffer, *Leptoconops* Skuse, *Megaconops* Wirth & Atchley, *Palaeoconops* Borkent, *Proleptoconops* Clastrier and *Styloconops* Kieffer (Borkent, 2009), the subgenus *Holoconops*, described originally by Kieffer (1918) based on *Leptoconops kerteszi* Kieffer from Egypt, was recorded in many places of the world. Of the 147 extant worldwide species of *Leptoconops* Skuse, only two species belonging to the subgenera, *Leptoconops* and *Styloconops* have been previously described from India. Although no species of the subgenus *Holoconops* had previously been recorded from India, 73 are known from elsewhere around the world (Borkent, 2009).

### Material and methods

This study is based on adult specimens caught with the light traps operated in various places along the Damodar valley of the states of Jharkhand and West Bengal of India. The insects were processed and mounted on microslides following the procedure of Das Gupta & Wirth (1968). Terms follow those used by Mazumdar et al. (2009). Measurements of the holotypes are reported in millimeter units (mm).

Types at present are retained with the collection of insects at the Entomology Laboratory, University of Burdwan (India) and will be deposited to National Zoological Collections (NZC), Calcutta and The Museum of Natural History (BMNH), London, in due course.