

A NEW SPECIES OF GENUS *CRYPTOCHIRONOMUS* KIEFFER
(CHIRONOMIDAE, DIPTERA) FROM INDIA

Genus *Cryptochironomus* was established by Kieffer (1918) on the basis of an European specimen, *Cryptochironomus chlorolobus* as its type-species. Edwards (1929) included it under the subgenus *Chironomus* Meigen. Goetghebuer (1936, '37) placed it as a separate subgenus which was subsequently supported and used by authors like Freeman (1957, 59 and '61) who also synonymised a number of genera with this *Cryptochironomus*. Recently, the generic status has been revived by Sublette and Sublette (1965, '73). The genus was previously known from India by one species, *Cryptochironomus polius* (Kieffer) only.

In describing this species the terminologies and usages have been followed after Frommer (1967) and Saether (1976).

Cryptochironomus fuscitarsus sp. nov.

(Figs. 1 A-C)

Male :

Head : Light brown in colour. Vertex with 9 setae (post ocular, 2, outer verticles 5, and inner verticles, 2), corona with 2 setae, Clypeus with 8-10 setae, clypeal ratio 0.81. Maxillary palp pale to brown, ratio of length of palpoles from I to V 10 : 10 : 19 : 26 : 35, L/W 3.8. Eyes bare, reniform and extended dorsally. Antenna brown, flagellomere XII long with apical seta, AR 1.15. CA 0.62, C. P. 1.

Thorax : Light brown. Pronotum without V shaped emargination, anteropronotals

5, acrostichals 12, dorsocentrals 16, humerals, 4 and prealars, 4, Scutellum with 10 setae, post-scutellum yellow and bare.

Wing : Hyaline, posterior veins inconspicuous. Brachiolum with 2 setae, R with 15, R₁, 8 and R₄₊₅ with 16-18 setae, R₂₊₃ mee's C very close to R₁, distance being 0.1 mm, r-m faint and proximal to f-cu ; An ends below f-cu. Squama with 6 setae. CR 1.03, VR 1.2. Haltere with yellow stem and knob.

Legs : Yellow in colour. Fore tibial scale with 2 long setae, mid and hind tibia with 2 spurs in each comb. Spurs of mid tibia equal and 0.24 mm long, ratio of length of spurs to the apical diameter of mid tibia 4 : 9 ; spurs of hind tibia unequal, 0.042 mm and 0.024 mm long, ratio of lengths of spurs to the apical diameter of hind tibiae 9 : 11 and 4 : 11. Fore tarsomeres grey, tarsomeres IV-V of mid and hind leg grey, tarsomere V flattened. LR 1.6 in fore leg, 0.5 in mid leg and 0.6 in hind leg. TR of hind leg 1.7.

Abdomen : Yellow in colour. Terga uniformly setaceous.

Hypopygium (Fig. 1 A) : Anal point 0.32 mm long, proximal part slightly swollen with subacute tip, base with 3-4 (4) setae on each side. Appendage 2 absent, appendage 1 slightly bent inward. Gonocoxite moderate and small, inner margin with fine setae gonocoxite with 8-9 (8) setae ; gonostylus long, proximal part little dilated, distal part narrowed, slightly bent inward with 4-5 (4) weak setae

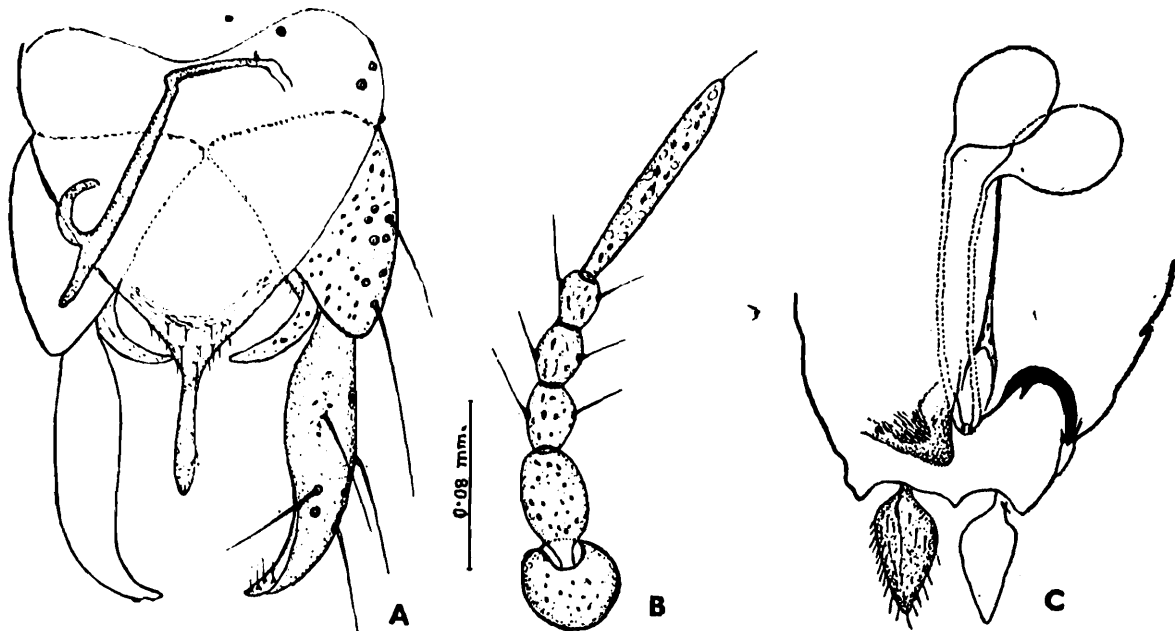


Fig. 1. (A—C) *Cryptochironomus fuscitarsus* sp. nov., A-♂, hypopygium, B-♀ antenna, and C-♀ genitalia.

at the inner apical margin. Laterosternite with 10 setae lateral sternapodeme 0.5 mm, transverse sternapodeme 0.02 mm HR 0.64, HV 0.51.

Female :

Similar to male with usual sex differences. Antenna (Fig. 1B) brown, flagellomeres drum-shaped, flagellomeres I to IV with 3 long setae, flagellomere V dark with a long apical seta and 7-8 sensilla ; ratio of length of flagellomeres from I—V 15 : 8 : 8 : 8 : 26, AR 0.67. Wing with 15-16 setae on R_1 , 6-7 on R_2 and 17 on R_{4+5} . Genitalia (Fig. 1C) : Notum 0.84 mm long. Tergum IX with 6-7 long setae in a row, tergum X with 4 long setae along its margin. Gonocoxite with 2 setae, cerci long, elongated, finely setaceous and a few long setae. Seminal capsule (Fig. 1C) unequal, oval, moderately sclerotized measuring 0.15 mm by 0.09 mm and 0.12 mm by 0.08 mm.

This species has been named *Cryptochironomus fuscitarsus* sp. nov. due to its dark

colour of the tarsomeres of legs. It seems close to other species of the genus especially *Cryptochironomus forcipatus* Freeman (1957, '61) from South Africa and Australia and *C. distractus* Johannsen from Java but can easily be identified from them by, i) colour of the specimens, ii) chaetotaxy of head, thorax and wing, iii) tarsomeres of all legs, iv) structure of anal point bare and curved appendage 1 and vi) shape of gonostylus with terminal apical setae.

Measurements :

Body length ♂, 2.96 (2.92-3.34, n=8) mm, ♀, 2.20 mm (n=4) ♂ Wing length 1.4 mm (n=6), breadth 0.05 mm (n=7), ♀, wing length ♀ 1.60 mm (n=4), breadth 0.70 mm (n=4). Dorsal extension of eye (♂, ♀) 0.6 mm.

Holotype : ♂, (Z. S. I. Reg. No. 6512/H6) West Bengal, Bolpur, 18. viii. 1977, Coll. D. Chatterjee.

Allotype : ♀, (Z. S. I. Reg. No. 6513/H 6) data same as holotype.

Paratypes : 10 ♂♂, (Z. S. I. Reg. No. 6514/H 6—6518/H 6) 7 ♀♀, 15-21, viii, 1977, rest data same as types. Rest paratypes in the collection of Zoology Dept., Burdwan University.

Additional specimens : 18 ♂♂, 11 ♀♀, in spirit, data same as types.

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*Zoological Survey of India,
Calcutta*

*Dept. of Zoology, University
of Burdwan, Burdwan*

D. K. GUHA
AND

P. K. CHAUDHURI

