

On the species of *Diamesa* Waltl from India (Diptera, Chironomidae)

by

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ABSTRACT. — A new species, *Diamesa bicornipes*, is described from India. Three species from India are reallocated in *Diamesa*: *D. bryophila*, *D. khoksarensis* and *D. rahlus*. By these actions *Diamesa* counts six species from India.

The genus *Diamesa* Waltl of the subfamily Diamesinae is reported to be represented in India by two species only (Pagast, 1947; Sublette & Sublette, 1973). Our studies on this and related genera reveal that four more species occur in India: one species new to science and three others located previously in other genera. This brings the number of species of *Diamesa* from India to six. The terminology used is after Saether (1969).

Diamesa bicornipes n. sp.
(figs. 1—3)

MALE: Length of wing 3.57 mm, breadth 1.2 mm.

Head: Dark brown in colour. Vertex with 5-6 setae on each side. Eyes spherical without any dorsal extension, pubescent. Maxillary palp brown to dark brown in colour, bases of palpomere white, palpomere III (fig. 2) with a deep preapical sensory pit, palpomere with long lateral setae, palpomere V having 3 apical setae; length ratio of palpoemes I-V 5:5:8:9:14. Antennal plumes long, flagellomere XIII long with bare and swollen apical part; length ratio of flagellomere I-XIII 18:5:7:8:9:10:12:12:13:13:16:14:160, AR 1.17. Pedicel ratio 1.09.

Thorax: Anteprenotum with 2 setae on each side. Acrostichals 2-3 near anteprenotum, dorsocentrals 7-8 in a row, prealars 3. Scutellum dark with 25-26 irregularly placed setae, postscutellum dark brown.

Wing (fig. 1): Light brown with anterior veins brown. Brachiolium with 2 setae and a few sensillae. C extended a little beyond R4+5, extension being 0.14 mm long; R2+3 meets C 0.24 mm away from R1; R4+5 ends distal to M3+4. R with 30, R1 with 20 and R4+5 with 5-6 small setae at its distal half; r-m long and little bent, m-cu faint and short; ratio of the distance between m-cu and r-m to the distance between f-cu and m-cu 1.67; Cu1 bent at the apex. Sensory organs 3-4 at the base of R2+3 and a few on R1 and R4+5. Squama completely fringed with setae. Haltere greyish brown with 3-4 setae in the knob and stem bearing 5 setae. CR 0.89, VR 0.90.

Legs: Brown in colour. Spur of fore tibia 0.08 mm long, ratio of length of spur to the apical diameter of fore tibia 1.43; spurs of mid tibia equal 0.06 mm long, ratio of length of spurs to the apical diameter of mid tibia 1.00; spurs of hind tibia unequal 0.09 mm and 0.06 mm long, ratio of length of spurs to the apical diameter of hind tibia 1.37 and 0.94. Hind tibial comb with 16-17 (17) setae. LR 0.80 in fore, 0.5 in mid and 0.75 in hind legs. Tarsomere IV bifid at the apex and shorter than tarsomere V. Claws of hind legs swollen at tip more or less like that of a tree frog bearing 1 long and 2 short basal setae.

Abdomen: Dark brown in colour. Tergum I bears large no. of setae concentrated at each side in several longitudinal rows. Hypopygium (fig. 3): Anal point long, tubular. Tergum IX with 7-8 setae on each side. Gonocoxite stout with a flap-like basal lobe extending to the middle of gonocoxite; gonostylus long, narrow at the base and with an apical tooth like structure (0.02 mm long) in addition to apical spine. HR 1.43.

Female: Unknown.

Holotype ♂ (Type no. 91, B.U. ENT), India, West Bengal, Darjeeling, 7.IV.1979, Coll. Miss S. Sarkar. **Paratypes** 4 ♂♂, same data as holotype

Remarks: The name of the species is derived from the bifid end of tarsomere IV of all legs. It

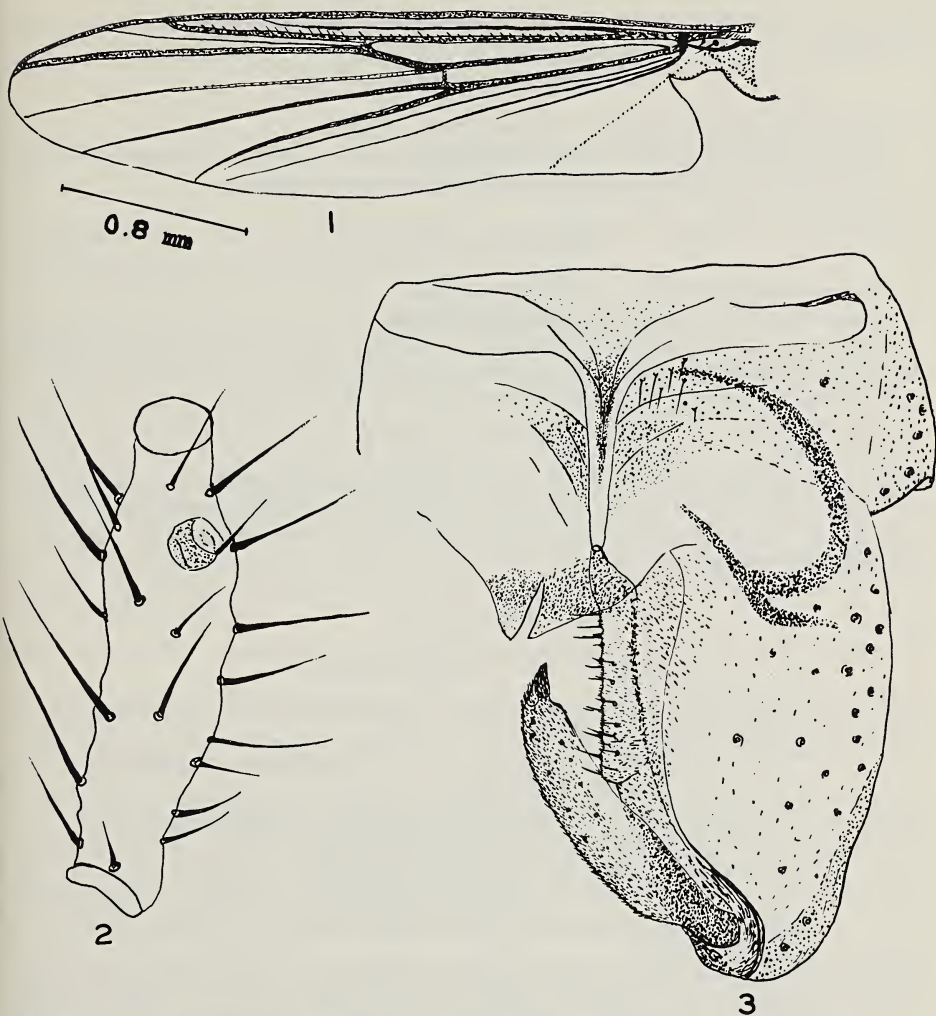


Fig. 1-3. *Diamesa bicornipes* n. sp. 1. wing; 2. palpomere III; 3. hypopygium.

seems close to *Diamesa barraudi* and *D. kasaulica* described by Pagast (1947) from India, *D. loffleri* Reiss (1968) from Nepal and *D. spinacies* Saether (1969) from North America in respect to the male hypopygium but the distinctiveness and differences in anal point, structure of tarsomere IV of all legs, claws of hind legs and the anal lobe of wing confirm identity of its separate status.

Diamesa bryophila (Singh) n.comb.

Trichocladius bryophila Sing, 1958. — Rahala (Punjab), India.

This species was erroneously placed in *Trichocladius* of subfamily Orthocladiinae. Sublette & Sublette (1973) rightly placed it in the Subfamily Diamesinae but its generic status remained doubtful due to inadequate descriptions and illustrations. After examining the type-specimen in the Zoological Survey of India, Calcutta, we propose the transfer to the genus *Diamesa* on the basis of the following characteristics: 1. Eyes densely pubescent, 2. antepnotum bare, 3. C little produced beyond R4 + 5, 4. m-cu little beyond f-cu, 5. r-m long and slightly bent, 6. tarsomere IV

bifid at tip more or less cordiform and 7. gonocoxite with a broad basal lobe and a simple gonostylus.

Diamesa khoksarensis (Kaul) n. comb.

Adiamesa khoksarensis Kaul, 1970. — Khoksar (Punjab), India.

The genus *Adiamesa* Kieffer, which was established solely on the basis of reduction of male antennal plumes, was placed in synonym with *Diamesa* by Edwards (1929).

Diamesa rahlus (Kaul) n. comb.

Prodiamesa rahlus Kaul, 1970. — Rahla (Punjab), India.

It appears from the description of the species (Kaul, 1970) that the characters of the genus *Prodiamesa* such as: presence of microtrichia on wing, m-cu before f-cu, tarsomere IV of all legs longer than tarsomere V and the double gonostylus are lacking here.

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APATURA IRIS (LINNAEUS) IN DE ACHTERHOEK (LEP., NYMPHALIDAE). In *Ent. Ber., Amst.* 40: 13 (1980) deelde ik mee, dat de heer D. Jansen op 17 juli 1978 in de omgeving van zijn woonplaats Eefde een Weerschijnvlinder in handen gekregen had. In de zomer van 1980 ontving ik een brief van hem, waarin hij meedeelde op precies dezelfde datum van dat jaar weer een *A. iris* gezien te hebben. Het was de eerste droge dag na een periode van regenachtig weer. En terwijl hij in zijn tuin bezig was dook uit de bomen een exemplaar dicht bij hem neer. Ook dit kon weer gefotografeerd worden.

Gelukkig komt deze fraaie vlinder dus nog steeds in het oosten van het land voor, zij het dan ook spaarzaam. — B. J. Lempke.