

THREE NEW SPECIES OF *CLEPHYDRONEURA* (DIPTERA : ASILIDAE)  
FROM SOUTH INDIA

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INTRODUCTION

In 1938 Oldroyd studied the genus *Clephroneura* Becker in detail and gave a key to the then known 17 species, of which 13 species were from India. From 1979 onwards Joseph and Parui added 21 species. The present paper describes 3 new species *Clephroneura dasi*, *C. ghoshi* and *C. karikalensis* from South India.

Genus : *Clephroneura* Becker

1925. *Clephroneura* Becker, *Ent. Mitt.* 14 : 68.

1. *Clephroneura dasi* n. sp.

A slender brown and pale-yellow species with infuscated wing and yellow leg. Male : length 20 mm, wing 14 mm.

*Male* : Head broader than thorax, black with white tomentum ; mystax white ; fronto-orbital bristles white ; ocellarium with black bristles ; postcranium pale pilose ; postocciput with white and black bristles ; postgena pale pilose. Antenna with the scape and pedicel pale yellow, first flagellomere pale yellow at base, rest black, scape twice the length of pedicel, style longer than first flagellomere. Palpus and proboscis shining black with pale yellow pile.

*Thorax* : Black, greyish-white tomentose ; pronotum greyish-white tomentose with pale pile ; scutum with mediolongitudinal dark brown stripe and three lateral spots ; humerus with pale pile ; chaetotaxy : notopleurals 2, supra-alars 2, post-alars 2 ; anepisternum with a few posterior pale pile ; katepisternum and meron with sparse pale yellow pile. Scutellum black, greyish-yellow pollinose, posterior margin yellow, disc with sparse black bristles, border with a pair of black bristles.

*Leg* : Yellow ; fore coxa yellow, mid and hind coxae black, all with yellow pile ; hind femur with a black patch dorsally at apex ; fore femur with long yellow pile ventrally,

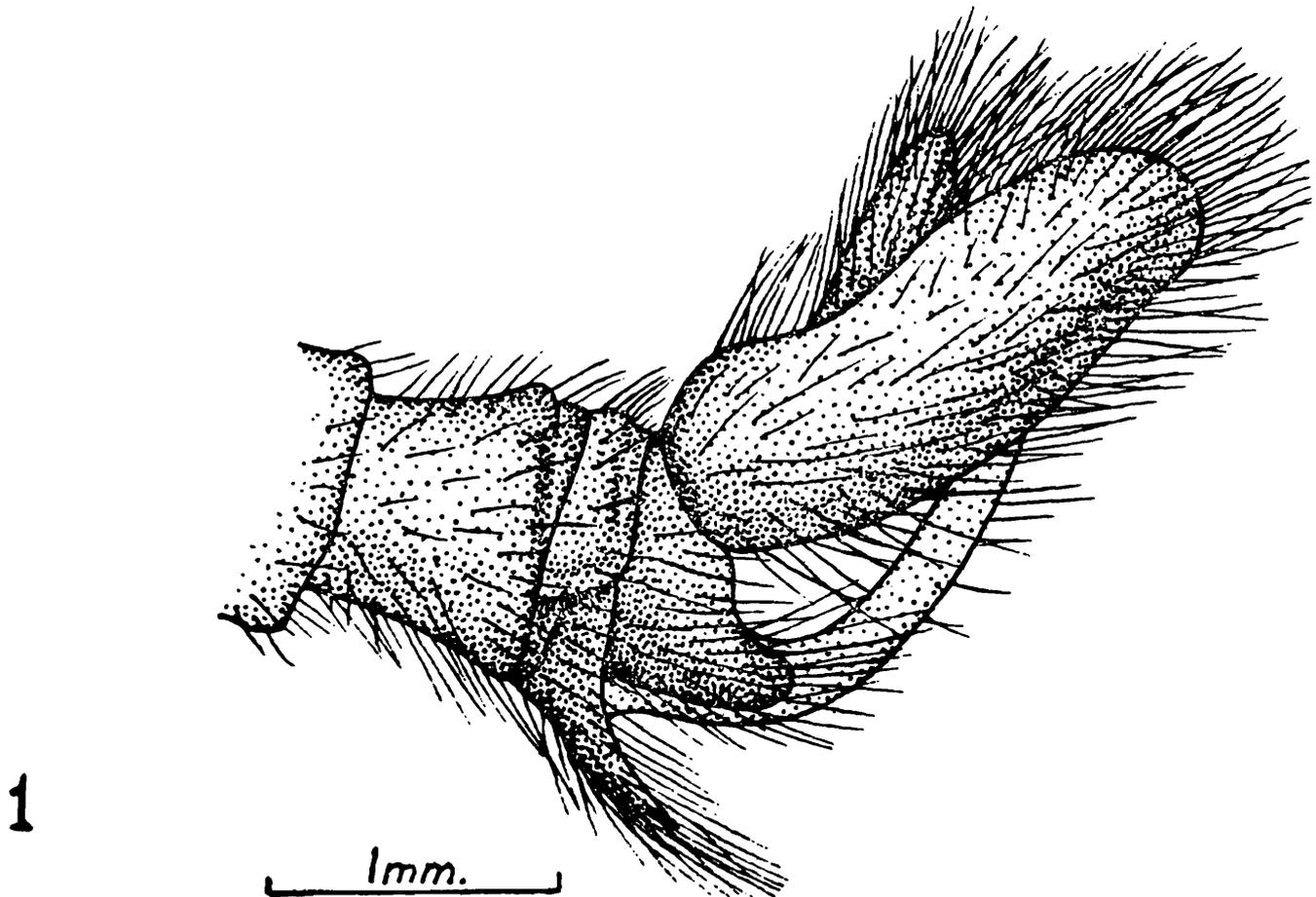


Fig. 1 : *Clephydroneura dasi* n. sp., lateral view of male genitalia.

mid femur with an anteroventral row of bristles and hind femur with an anterodorsal and an anteroventral rows of black bristles ; mid tibia with a row of ventral bristles ; hind tibia with two rows of black bristles on apical half.

*Wing* : Infuscated at apex which extends up to fifth posterior cell.

*Abdomen* : Black, hind border of each tergum yellowish-brown, each tergum with a row of bristly pile above posterior border ; sternum black with pale yellow pile. Male genitalia (Fig. 1) black with black and pale yellow pile.

*Holotype* ♂, Tamil Nadu : Kodaikanal : Pulney hills, 1675 m., v. 1953, coll. P. S. Nathan. Holotype in Smithsonian Institution.

*Remarks* : The species resembles to *Clephidroneura martini* Joseph and Parui (1979) but differs in the presence of black bristles on the disc of scutellum and in the details of male genitalia. It is named after our colleague, Dr. B. C. Das, who collected many interesting robber flies,

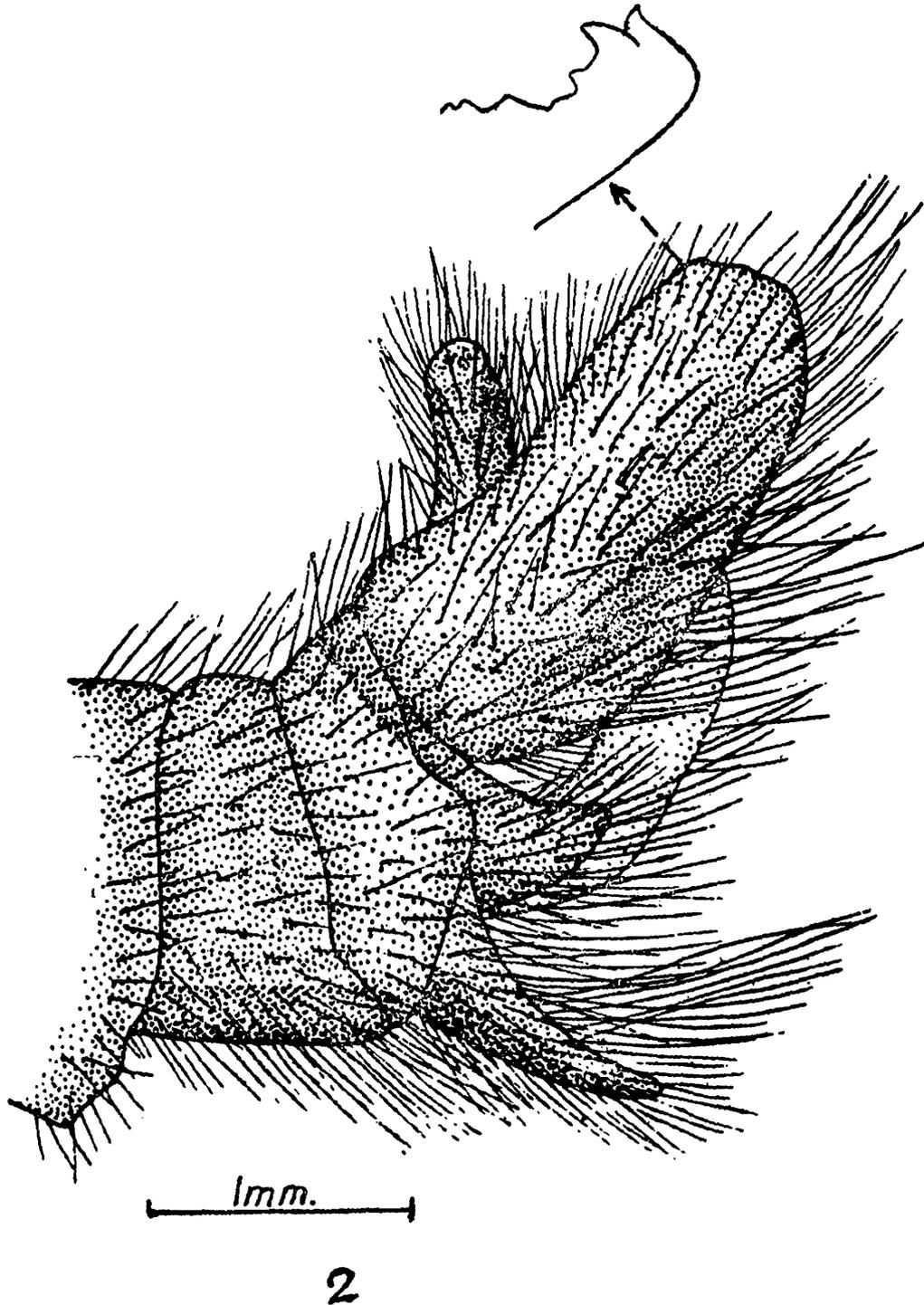


Fig. 2 : *Clephidroneura ghosi* n. sp., lateral view of male genitalia.

## 2. *Clephroneura ghoshi* n. sp.

A slender black species with white and black mystax, yellow and black legs and infuscated wings. Male : length 16-18 mm ; wing 10-11 mm.

*Males* : *Head* broader than thorax with greyish-yellow tomentum ; mystax white with a few black bristles above ; frons and ocellarium with black bristles ; post cranium pale pilose ; post occiput with black bristles ; postgena pale yellow pilose. Antenna black, pedicel and first flagellomere dark brown but in some specimens brown, the latter equal to the combined length of scape and pedicel. Palpus and proboscis black with pale yellow pile.

*Thorax* : Black with greyish-white pollen ; pronotum with lateral pale yellow pile ; scutum with the mediolongitudinal stripe and two lateral dark brown spots ; chaetotaxy : notopleurals 3, supra-alars 4, post-alars 2, dorsocentrals a series ; katepisternum, anepisternum and meron with sparse pale yellow pile. Scutellum with sparse pale yellow pile on disc and a pair of black bristles on border. Haltere yellowish-brown, knob darker.

*Leg* : Yellow and black ; femur yellow with black stripe anteriorly and dorsally ; fore femur devoid of bristles, ventrally with long, pale yellow pile, a few of them black, mid femur with a row of anteroventral black bristles, ventral pile few ; hind femur similar to middle pair ; tibiae all yellow, with scattered black bristles.

*Wing* : Infuscated at apex and the infuscation extends up to fifth posterior cell.

*Abdomen* : Black with posterior border of each tergum pale yellow, all terga laterally with long, pale yellow pile and bristles ; sterna with pale yellow pile. Male genitalia (Fig. 2) shining black except yellowish gonostylus, pile pale yellow and black, eighth sternum produced with pale yellow bristles on border.

*Holotype* : ♂, India : Tamilnadu : Nilgiri Hills : Naduvatum, 1835 m., v. 1958. Coll. P. S. Nathan. Paratype 2♂, details as in holotype ; 1♂, Naduvatum 1835 m., 5.v.1950, Coll. P. S. Nathan ; 1♂, Naduvatum, 1835m., 3.v. 1957, Coll. P. S. Nathan. (S. W. Bromley Coll). Holotype and two paratypes in Smithsonian Institution, rest in Z.S.I. collection.

*Remarks* : The species is closely similar to *Clephroneura semirufa* Oldroyd (1983) but differs from the latter by the white and black mystax ; uniformly yellow tibia and details of male genitalia. The species is named in honour of Dr. A. K. Ghosh, Director, Zoological Survey of India.

3. *Clephroneura karikalensis* n.sp.

A black and yellowish-brown species with yellow legs, anteriorly dilated and apically infuscated wings. Male : length 20 mm, wing 14 mm.

*Male* : *Head* as broad as thorax, white tomentose ; mystax white ; fronto-orbital bristles white ; ocellarium with pale yellow and black pile ; post cranium pale yellow pilose ; post occiput with black and pale yellow bristles ; postgena pale yellow pilose.

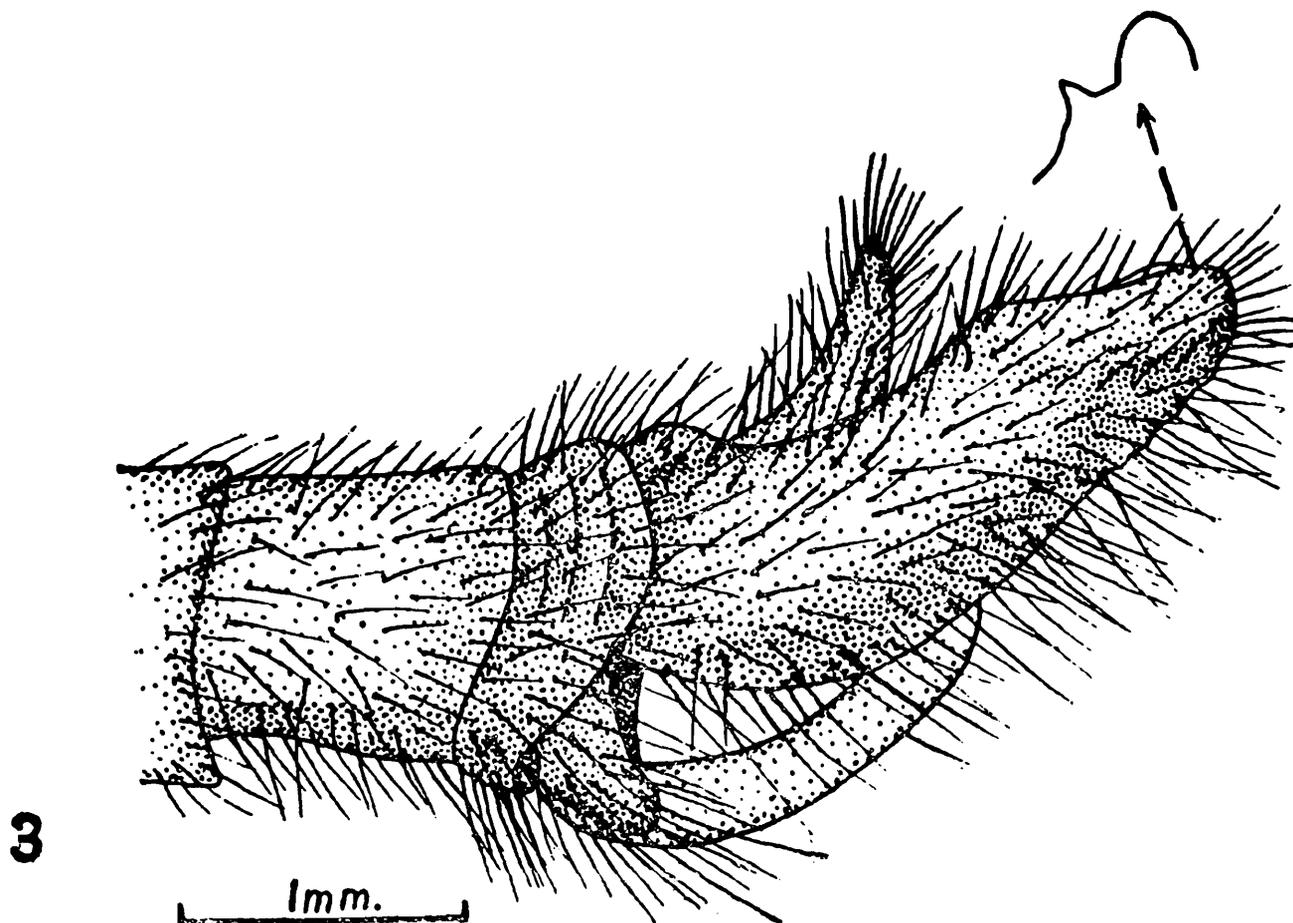


Fig. 3 : *Clephroneura karikalensis* n. sp., lateral view of male genitalia.

Antenna yellow with dark arista, scape two and a half times the length of pedicel, first flagellomere twice the length of pedicel. Palpus and proboscis black with pale yellow pile.

*Thorax* : Black, greyish-white tomentose ; pronotum laterally with pale yellow pile ; scutum with dark brown mediolongitudinal stripe and three lateral spots, humeri pale yellow pilose ; chaetotaxy : notopleurals 2, supra-alars 2, post-alars 2, anepisternum

and katepisternum bare, meron with sparse pale yellow pile. Scutellum short with black bristles on disc and border with three black bristles. Haltere yellowish-brown.

*Leg*: Yellow; coxa and trochanter black except yellowish fore pair; femur yellow but mid and hind femora with a subapical black infuscation, fore femur bare of bristles, ventrally with long, yellow bristly pile; mid and hind femora with an anteroventral row of bristles, the latter with also an anterior row of bristles; tibiae yellow; tarsus darker.

*Wing*: Anteriorly dilated, apical infuscation not so distinct.

*Abdomen*: Black dorsally and brownish-yellow laterally; terga with pale yellow pile dorsally, lateral ones longer, posterolaterally with 3-4 long, pale yellow bristles; sterna with pale yellow pile. Male genitalia (Fig. 3) black with pale yellow and black pile; eighth sternum produced and with a fringe of bristly pile on border.

*Holotype*: ♂, Tamil Nadu : Karikal : Bagaram Kurum, 10. x .1949, coll. P. S. Nathan (S. W. Bromley coll. 1955). Holotype in Smithsonian Institution.

*Remarks*: As regards male genitalia the species is closely similar to *Clephyroneura mudigorensis* Joseph and Parui (1984) but differs from the latter in the structural details, in the wholly white mystax and in the leg colouration. It is also similar to *C. apicalls* Oldroyd (1938) but differs in the details of male genitalia.

#### ACKNOWLEDGEMENTS

We are grateful to Dr. A. K. Ghosh, Director, Zoological Survey of India, Calcutta, for facilities and encouragement.

It is with great pleasure we express our gratitude to Dr. Gary F. Hevel of Smithsonian Institution for loaning the material.

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