A NEW GENUS AND A NEW SPECIES OF THE FAMILY HEMEROBIIDAE (NEUROPTERA) FROM INDIA

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INTRODUCTION

The material has been received for identification from Post Graduate Centre, Tripura, India. On careful examination of the material the author has come across some unique morphological features including genitalia. Therefore the erection of a new genus viz., Neomicromus along with a new species viz., Neomicromus agarwalai is felt necessary. The description of the new taxa along with suitable illustrations is dealt with in this paper.

Neomicromus, gen. nov.

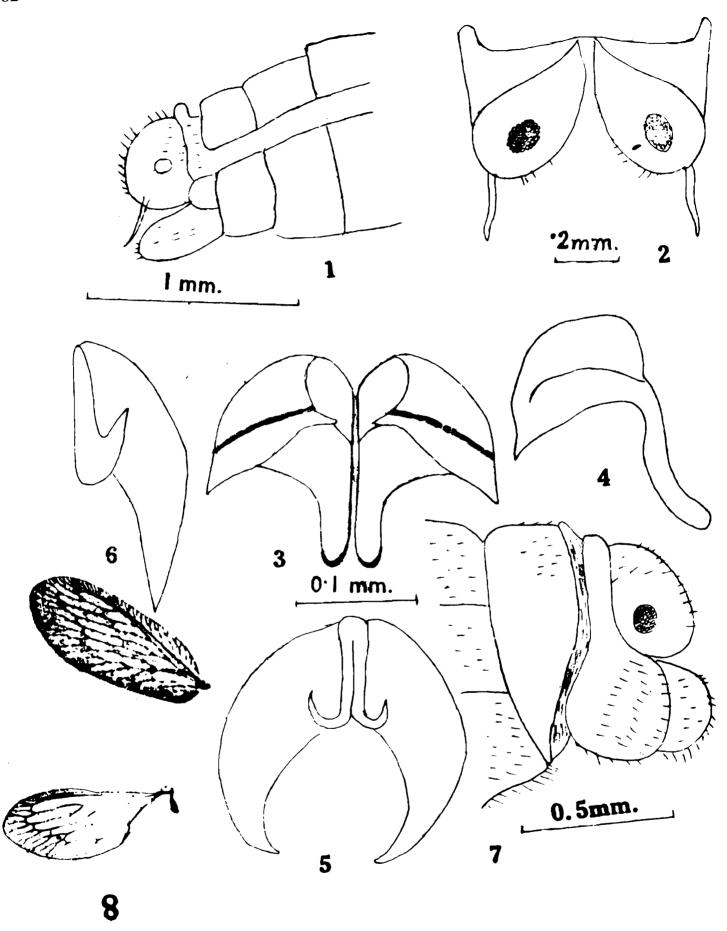
Forewing: With elliptical apex; humeral vein unforked and not recurrent; Rs with 4 - branches; M 3 + 4 and Cu not coalescent; outer and inner gradate series of crossveins not regularly arranged. Hindwing: Rs with 3 - branches; M 3+4 and Cu though close but separated. Male genitalia: ectoproct with short and spiny catoprocessus; parameres proximally separated but distally united and with a pair of large processes; gonarcus arch-shaped, without arcessus but with a process at middle which bends on either side to form a hook. Female genitalia: tergite 9 greatly expanded below the ectoproct.

Type species: Neomicromus agarwalai, sp. nov.

Remarks: The new genus comes close to the genus *Micromus* Rambur by the narrow costal area particularly at base, unforked humeral vein, number of branches of Rs and presence of catoprocessus in male ectoproct but differs from it by M 3+4 and Cu in both wings non-coalescent and also by the structure of male genitalia.

Neomicromus agarwalai, sp. nov.

Palpi, frons, antenna and vertex: brown. Pronotum: broader than long and with dark shadings towards the margins. Meso and metanotum: dark brown. Forewing (Fig. 8): narrow with elliptical apex; pterostigma inconspicuous; membrane tawny; costals partially yellow or brown; longitudinal veins pale yellow interrupted with brown streaks; crossveins brown; distinct brownish spot present between M & Cu, over apical portion of Cu₂, and 1A & 2A, and also on a single apical gradate in inner row; all the gradates in outer row clouded with brown; Rs with 4 branches. Hindwing (Fig. 8): shape same as forewing; membrane hyaline; longitudinal veins pale at base but brown apicad; Rs with 3 branches; crossveins of inner gradates pale; outer gradates brown; M 3



Figs. 1-8. Neomicromus agarwalai, sp. nov., 1. tip of abdomen in male, lateral 2. tip of abdomen showing catoprocessus 3. parameres, dorsal 4. paramere, lateral 5. gonarcus, dorsal 6. gonarcus, lateral 7. tip of abdomen in female, lateral 8. fore and hind wings.

+ 4 & Cu not coalescent. Abdomen: yellowish brown; male genitalia: ectoproct (Fig. 1) rather short, narrow and with curved hindmargin; catoprocessus (Fig. 2) short, acute and spine-like, almost straight; sternite with rounded hindmargin; parameters (Figs. 3 & 4) large with a pair of large processes at apex, proximally separate but distally united; gonarcus (Figs. 5 & 6) arch-shaped with a process at middle which is bent on either side at apex to form a hook; female genitalia (Fig. 7): tergite 9 greatly expanded backwards below the ectoproct; gonapophysis lateralis prominent.

Measurements: ♂, ♀: Length of forewing, 7 mm, hindwing, 5 mm.

Material examined: (Holotype σ , Z.S.I. Reg. no. 1169/H₁₂ & Allotype, Z.S.I. Reg. no. 1170/H₁₂: India, Tripura, Agartala, date - nil, coll. B. K. Agarwala.

Remarks: The species closely resembles Micromus timidus Hagen but differs from it by the number of branches of Rs and spotting over cubital and anal veins of forewing, M 3 + 4 & Cu not coalescent in hindwing and also by the structure of genitalia.

SUMMARY

A new genus along with a new species of the family *Hemerobiidae* is described from India.

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