

Rec. zool. Surv. India : 108(Part-1) : 91-95, 2008

A NEW SPECIES OF *ANCYLOTROPUS* CAMERON (HYMENOPTERA : EUCHARITIDAE) FROM INDIA

P. GIRISH KUMAR AND T. C. NARENDRAN*

Zoological Survey of India, M-Block, New Alipore, Kolkata-700 053

E-mail: k_p_girish@yahoo.co.in

INTRODUCTION

The genus *Ancyлотropus* was erected by Cameron (1909) based on the type species *Ancyлотropus cariniscutis* Cameron. This genus was treated briefly by Narendran & Sheela (1995) and Boucek (1988). Based on their phylogenetic position, members of the genus *Ancyлотropus* Cameron are probably parasites of Ponerinae in the tribe Ectatommini (Heraty, 2002). They are distributed in Palaeotropical region through the Malagasy subregion to western Malaysia. Five species are known from all over the world of which 3 species were reported from Oriental region including 1 species from Indian subcontinent. These 5 species are *A. cariniscutis* Cameron from Oriental region, *A. ivondroi* (Risbec) from Malagasy region, *A. manipurensis* (Clausen) from Oriental region (Indian subcontinent), *A. montanus* (Girault) from Oriental region and *A. seyrigi* (Risbec) from Malagasy region (Heraty, 2002, Girish Kumar, 2004 and Noyes, 2004). In this paper one new species is described from Muthanga reserve forests in the Kerala part of Western Ghats. Heraty (2002) placed the undescribed species in the couplet No. 2 of his key to species of *Ancyлотropus* Cameron of the world. All the type specimens are deposited in the 'National Zoological Collections' of the Zoological Survey of India, Kolkata (NZSI).

The following abbreviations are used in the text :

F1-F9–Funicular segments 1 to 9; Gt1–Gastral tergum 1; MV–Marginal vein; NZSI–'National Zoological Collections' Zoological Survey of India, Kolkata; OOL–Ocellocular line; PMV–Postmarginal vein; POL–Postocellar line; SMV–Submarginal vein; SSS–Scutoscutellar sulcus; STV–Stigmal vein.

**Systematic Entomology Laboratory, Department of Zoology, University of Calicut, Kerala-673 635*
E-mail : drtcnarendran@yahoo.com

1. *Ancylotropus keralensis* Girish Kumar and Narendran sp. nov.

(Figs. 1-4)

Holotype : Female : Length 3.83 mm. Head, mesosoma and petiole black with metallic green refrigence; antenna pale yellowish brown but for yellow scape and pedicel; mandible pale brownish yellow with tip of teeth brown; eyes blackish brown; anterior ocellus reflecting brown, posterior ocelli reflecting brown; legs pale brownish yellow except coxae brownish black; claws brown; wings hyaline without any infumation around stigma, veins brown; gaster blackish brown.

Head : Transverse subtriangular (Fig. 2), 1.27x as broad as high excluding mandibles; in dorsal view 5.50x as broad as its median length including median ocellus (Fig. 3); OOL as long as POL; vertex smooth with few striations; frons with few strong transverse striations; gena and sides of lower frons with minute scattered pits; labrum 8 digitate; clypeal and supraclypeal area smooth; tentorial pit deep; vertex and frons with sparse hairs; eyes bare, separated by 1.64x their height. Antenna (Fig. 1) 12 segmented; scape cylindrical, not reaching front ocellus; relative proportions of length and width of antennal segments : scape : 3.1; pedicel : 1.1; F1 : 2.4; F2 : 4.1; F3 : 3.7; F4 : 4.1; F5 : 3.3; F6 : 5.1; F7 : 4.6; F8 : 3.4; F9 : 3.12; clava : 3.

Mesosoma : Mesoscutum and scutellum including posteriorly projecting horn with close rugoso-alveolate sculpture and moderately pubescent, interstices carinate; SSS transversely carinate; scutellum with a single horn directed straight posteriorly, almost rounded at apex (Fig. 3); callus and propodeal disc with felt like pilosity; mesepimeron with sparse pilosity; median length from SSS to apical tip of scutellar horn in dorsal view 1.31x basal width (excluding axillae) of scutellum; scutellar horn almost at the same plane of scutellum and not tilted upwards; propodeum (Fig. 4) rugulose; mesopleuron almost fully sculptured except at the anterodorsal angle; coxae sparsely pubescent; femora moderately pubescent; pubescence on tibiae and tarsi denser than those on femora. Fore wing (Fig. 1) 2.75x as long as broad, 1.76x length of mesosoma (including length of scutellar horn); fore wing densely pubescent except basal cell sparsely pubescent; SMV 1.47xMV; MV 1.58x PMV; PMV 3.42x STV; hamuli 3 in number.

Metasoma (Fig. 1) : Petiole shorter (0.72x) than hind femur, 0.61x length of gaster, with longitudinal striations; Gt₁ triquetrous, smooth and shiny.

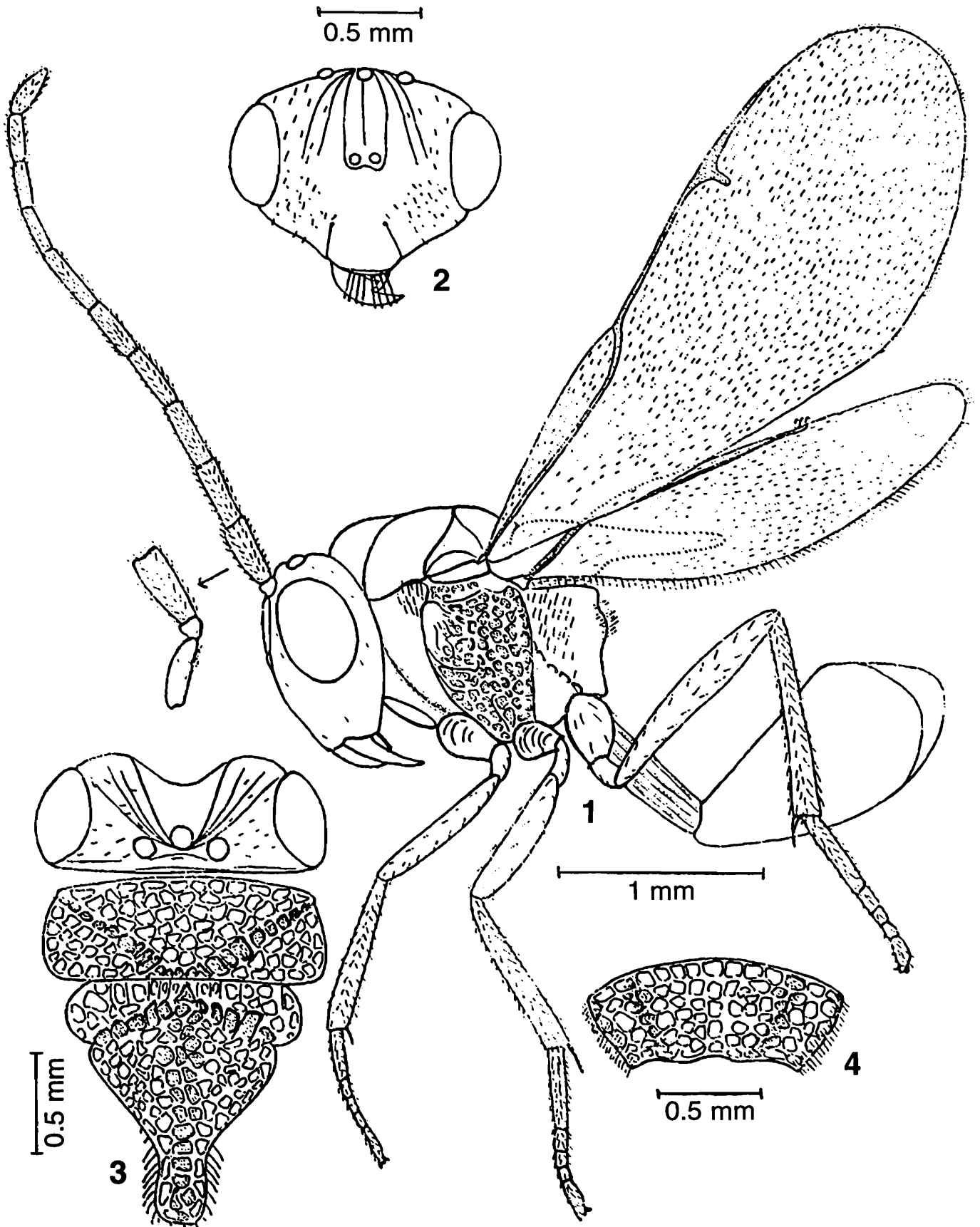
Male : Unknown.

Host : Unknown.

Biology : Unknown.

Variation : Scutellar process almost rounded to slightly incised; hamuli 3-5 in number; eyes blackish brown to pale brown and ocelli reflecting yellow to brown.

Distribution : India (Kerala).



Figs.1-4. : *Ancylotropus keralensis* Girish Kumar and Narendran sp. nov. Female. 1. Body profile; 2. Head front view; 3. Head and mesosoma dorsal view; 4. Propodeum.

Etymology : The species is named after the state from where the type specimens are collected.

Material examined : *Holotype* : Female, INDIA : Kerala; Wayanad Dt.; Muthanga reserve forest (11°44' N 76°29' E); Narendran T.C and Party, 7.v.2000, 9991/H3 (NZSI). *Paratypes* : 1 Female, same data of holotype, 9992/H3 (NZSI). 1 Female, same data of holotype except collection date, 6.v.2000, 9993/H3 (NZSI).

Discussion : This new species resembles to *A. manipurensis* (Clausen) in having : (1) Antenna 12 segmented; (2) Scape not reaching median ocellus; (3) Mesosoma with shallow, close, rugoso-alveolate sculpture on mesoscutum and scutellum and sparsely pubescent; (4) Gastral petiole distinctly shorter than hind femur. However this new species differs from *A. manipurensis* in having : (1) Gt_1 triquetrous (In *A. manipurensis* Gt_1 bivalved); (2) Scutellum with posterior horn almost rounded or atleast slightly incised (In *A. manipurensis* scutellum with posterior horn deeply incised at apex); (3) Scutellar horn almost at the same plane of scutellum and not tilted upwards (In *A. manipurensis* scutellar horn tilted upwards about 30° on horizontal axis of scutellum); (4) Frons with a few strong transverse striations (In *A. manipurensis* frons smooth with weak longitudinal striations on upper part joining vertex); (5) Fore wing hyaline without any infuscation around STV (In *A. manipurensis* fore wing with an infuscation around STV); (6) Head 1.27x as broad as high (excluding mandibles) (In *A. manipurensis* head 1.43x as broad as high (excluding mandibles)); (7) Eyes separated by 1.64x their height (In *A. manipurensis* eyes separated by 2.50x their height).

SUMMARY

A new species of *Ancylotropus* Cameron viz., *Ancylotropus keralensis* Girish Kumar and Narendran sp. nov. is described from India and their affinities are discussed.

ACKNOWLEDGEMENTS

We are grateful to the authorities of University of Calicut for providing facilities. The first author is also grateful to the Director, Zoological Survey of India, Kolkata for providing facilities and encouragement.

REFERENCES

- Boucek, Z. 1988. Australasian Chalcidoidea (Hymenoptera). A Biosystematic Revision of Genera of Fourteen Families with a Reclassification of species. Wallingford : C.A.B. International, 832 pages.
- Cameron, P. 1909. On two new genera and seven species from Borneo. *Entomologist* **42** : 229-234.

- Girish Kumar, P. 2004. A review of Family Eucharitidae (Hymenoptera : Chalcidoidea) of Indian subcontinent. *In Perspectives on Biosystematics and Biodiversity*. Prof. T.C. Narendran Commemoration Volume. Edited by Rajmohana K. *et al.* 627-646.
- Heraty, J.M. 2002. A revision of the genera of Eucharitidae (Hymenoptera : Chalcidoidea) of the world. *Mem. Amer. Ent. Insti.* Vol. **68** : 1-367.
- Narendran, T. C. and Sheela, S. 1995. A systematic study of the Oriental genus *Ancylotropus* Cameron (Hymenoptera : Eucharitidae). *Uttar Pradesh J. Zool.* **15** : 43-47.
- Noyes, J.S. 2004. Universal Chalcidoidea Data Base. The Natural History Museum London. Website : <http://www.nhm.ac.uk/entomology>. Chalcidoidea.