

A NEW SPECIES AND A KEY TO SPECIES OF *ANTEROMORPHA* DODD (HYMENOPTERA : SCELIONIDAE) OF INDIA

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ABSTRACT

Anteromorpha malabarica Narendran sp. nov. comes near *A. deccanensis* Sharma in general appearance but differs from it in having lateral ocelli contiguous with eye border and T1 with hump or module in middle base. A key to species of *Anteromorpha* is provided.

Key words: Scelionidae, *Anteromorpha*, New species, Key.

INTRODUCTION

The genus *Anteromorpha* was erected by Dodd (1913) with the type species *Anteromorpha australica* Dodd. Since then Nixon (1933) erected the genus *Govinda* which was synonymized with *Anteromorpha* by Kozlov (1971). Priesner (1951) erected the genus *Aegyptoscelio* which was synonymized with *Govinda* Nixon by Sundholm (1970). Risbec (1956) erected the genus *Afroscelio* which was synonymized with *Aegyptoscelio* Priesner by Masner (1958). Johnson (1992) listed various synonyms of *Anteromorpha* Dodd. There are 18 species of *Anteromorpha* in the world and among these 3 are known from India (Mani & Sharma 1982) and from Oriental region (Johnson 1992). In this paper a new species from Kerala is described. A key to Indian species is also provided. This paper is in continuation of our earlier studies on scelionidae (Narendran & Ramesh Babu 1996; Rajmohana & Narendran 1997, Narendran 1998; Narendran & Ramesh Babu 1997 ;1999).

Abbreviations used: OOL=Ocellocular distance; POL = Post Ocellar Distance; F=Funicular Segment; T=tergite; SMV=Submarginal vein; MV=Marginal vein;

PMV=Post-marginal vein; STV=Stigmal vein; DZCU=Department of zoology, University of Calicut.

MATERIALS AND METHODS

The specimens were collected using specially made sweeping net and studied in the laboratory using M3Z wild stereozoom microscope (Switzerland) and Leitz-Wetzlar (German made) microscopes. The drawings were made using the drawing tube of M3Z wild stereozoom. The specimens were card-mounted and held on pins No.3 (Size 38 mm x 0.53) made by Newey Goodman Ltd. England.

RESULTS AND DISCUSSION

Anteromorpha malabarica Narendran sp. nov. (Figs.1-3)

Holotype Female: Length 1.85 mm. Head black; mesosoma notum, scutellum blackish brown, rest of mesosoma and gaster liver brown; scape legs excepting coxae yellowish brown; pedicel, mandibles and coxae brown; rest of antenna brownish black; mandibular teeth reddish brown; eye pale blackish yellow; ocelli pale reflecting yellow; wings hyaline with fine dense, yellowish brown pubescence; body clothed with sparse, fine, moderately long silvery white hairs.

Head: With vertex and frons reticulate and granulate, densely pubescent; occiput striate reticulate; frons in front of front ocellus granulate; scrobal area smooth in middle; lower frons longitudinally striate; frons, vertex, gena and eyes fully pubescent; antennal sockets close to clypeal border; clypeus short; mandibles long and bidentate with few long hairs; lateral ocelli distinctly separated from eye border; relative measurement of OOL=2;POL=13;occiput strongly margined posteriorly; gena carinate posteriorly; malar groove distinct and carinate; gena with radiating striations originating from base of mandibular area towards cheek; head width in front view subequal to its length; eye length to head length 85:10.5; head width in dorsal view as wide as mesosoma; median length; width 28:38 head viewed laterally length to height 10:14. Antenna 12 segmented; relative length of antenna to body=85:158. Relative measurements of length:width of antennal segments: Scape =25:6.5, pedicel =9.4; F1=7.5:4.3, F1=7.5:4.3, F2=5.3:4; F3=4:4; F4=4:3, F5=4:6,F6=5:7, F7=5.2:7.5, F8=5:9; F9=5:8; F10=6:6.

Mesosoma: Mesonotum with shallow close setigerous punctate; interstices not smooth, narrow, granulate; notauli absent; scutellum semicircular, unarmed

and punctate as on mesonotum; metanotum produced medially into a subtriangular plate with subhexagonal reticulations; mesonotum to scutellum 29:10, mesonotum and scutellum densely pilose; propodeum with two submedian and sublateral foveae, laterally striate-reticulate. Propleura rugose and granulate; prepectus distinct, transversely striated; mesopleura reticulately punctate on anterodorsal side; mesopleural depression deep, smooth and shiny with a row of close rectangular punctate near posterior border, two or three irregular transverse striations below tegulae; metapleura reticulate on anterior half and basally, posteriorly smooth and shiny in middle; mesosoma length to width in dorsal view 49:34; in lateral view length:height 13:18. Wings hyaline with minute dense pubescence, marginal fringe present; forewing length to width 94:28. Relative length of forewing veins. SMV = 49; PMV=10; STV = 8; relative length of forewing to hindwing 94:89; hind femur 0.9 hind tibia; hind metatarsus 0.8 x following tarsal segments combined.

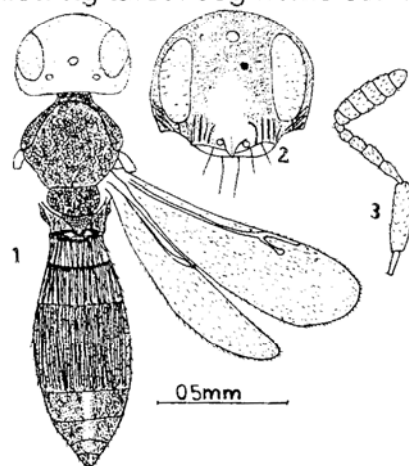


Fig.1-3 *Anteromorpha malabarica* Narendran sp. nov. Female 1. Part of body in dorsal view; 2. Head in front view; 3. Antenna

Gaster: Length of gaster to rest of body 80:77; length of gaster 2.5 x its width. Tergites as in Fig.1; T1 and T2 distinctly carinated longitudinally and with deep pits in between carinae basally; T3 longest, distinctly striolate; T4, T5, T6 and T7 smooth medially, matty laterally.

Male: Unknown

Host: Unknown

Holotype: Female, India, Kerala, Calicut University Campus, T.C. Narendran & Party 12.viii-1988 (DZCU). **Paratypes:** 2 Females of same data of holotype.

Key to species of *Anteromorpha* of Indian subcontinent

1. Metanotum produced medially into a transverse lamella; hind ocelli contiguous with eyes; PMV and STV equal; eye pubescent*glabra* Sharma.
= Metanotum produced medially into subtriangular plate; other characters may or may not be in the same combination2
2. Mandibles tridentate; T3 irregularly striolate*tuberculata* Sharma.
= Mandibles bidentate; T3 different from above alternate3
3. Lateral ocelli distinctly separated from eye border. T1 without hump (Fig.1) *malabarica* Narendran sp. nov.
= Lateral ocelli contiguous with eye border; T1 with hump or nodule in middle base*deccanensis* Sharma

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