

## A NEW GENUS OF PTEROMALIDAE (HYMENOPTERA: CHALCIDOIDEA) FROM COORG, KARNATAKA<sup>1</sup>

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(With seven text-figures)

A new Pteromalid genus, namely *Neoepistenia* gen. nov. and a new species *N. coorgensis* sp. nov. of the subfamily Cleonyminae from Coorg (Karnataka) are described. The distinguishing features of the genus from related genera are commented on.

### INTRODUCTION

In our studies on Indian Pteromalidae (Sureshan and Narendran 1990, in press; Narendran 1992, Narendran *et al.* 1992a, b) we came across an interesting Pteromalid wasp belonging to the subfamily Cleonyminae. This was collected from the wet evergreen forests of Nemanakolli (South Coorg). Our studies reveal that the specimen belongs to a genus which is new to science. It neither fits into any of the published genera of Pteromalidae nor to any of the keys published by Peck *et al.* (1964), Graham (1969), Farooqi and Subba Rao (1985), Dzhanokmen (1987), Boucek (1988) and Boucek and Rasplus (1991). Hence the genus and species are described hereunder.

### *Neoepistenia* gen. nov.

Type species: *Neoepistenia coorgensis* sp. nov.

Body moderately large and stout (Fig. 1). Head (Figs. 1, 3, & 4) uniformly and moderately raised reticulate with silvery white pubescence; occiput immargined; temples moderately converging; malar grooves distinct; anterior margin of clypeus straight; scrobe deep with carinate outer margin and inter-antennal ridge. Antennae (Fig. 2) inserted slightly above lower

margin of eyes; toruli wide apart; antennal formula 11083.

Thorax reticulate punctate with moderately dense pubescence. Pronotum (Fig. 3) large with a median keel. Mesoscutum with notauli complete. Propodeum (Fig. 6) medially raised with a short median carina anteriorly cleft to embrace a sub-triangular cup (which is subdivided). Prepectus and metanotum reticulate punctate. Forewing (Fig. 5) with mv slightly longer than pmv; stv 0.3x pmv. Hind tibia with two unequal spurs, with an outer row of scattered spines in addition to thick hairs.

Gaster (Figs. 1 & 7) elongate, acuminate, length 4.1x width in dorsal view, reticulate punctate on sides of T2-T5, anterior part of T3 dorsally and T4 and T5 completely; ovipositor sheaths and ovipositor strongly protruded out.

**Remarks:** *Neoepistenia* has a longer pronotum, propodeum with a short median carina anteriorly cleft to embrace a sub-triangular cup (which is subdivided), dorsally flattened gaster and hence resembles *Parepistenia* Dodd and also in general structure of the body. *Parepistenia* however differs from it in having triangular spines on the dorsal edge of fore tibia, gaster with lateral keels dorsally, epipygium short and ovipositor not produced.

*Neoepistenia* also resembles *Reikisura* Boucek in general appearance, structure of antenna, etc. but differs in the absence of occipital carina, scrobe not reaching ocellus, in having longer pronotum and propodeum and in

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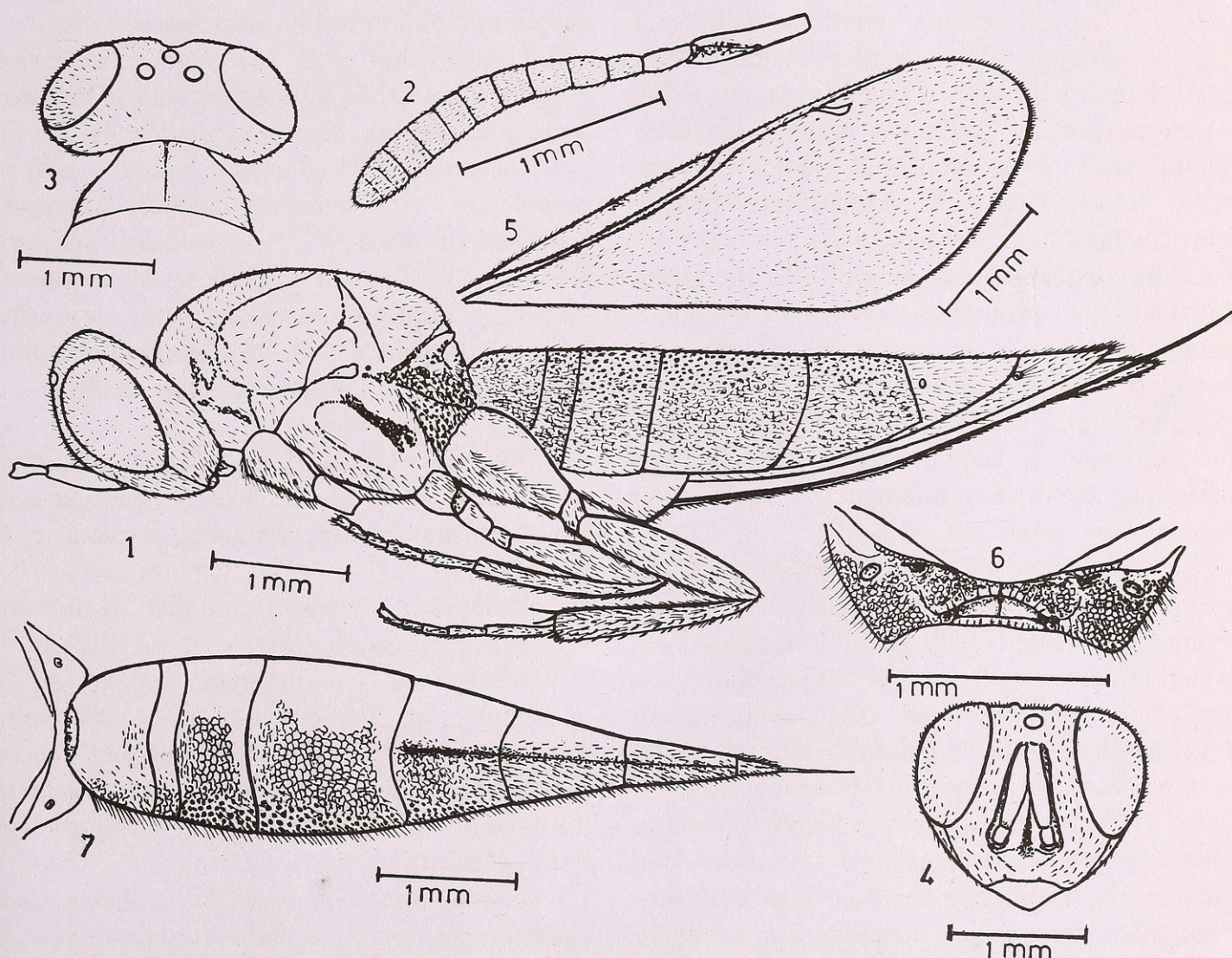
the shape of gaster. In *Reikisura* occipital carina is conspicuous on sides, scrobe reaching ocellus, pronotum and propodeum very short and gaster highly conical at the tip.

Another genus to which *Neoepistenia* shows resemblance is *Thaumasura* Westwood in the shape of pronotum with a median keel and larger size of the body. *Thaumasura* however

***Neoepistenia coorgensis* sp. nov.**

(Figs. 1-7)

FEMALE: Length 7.6 mm. Black with golden yellow reflection on mesoscutum and scutellum dorsally, metallic blue to violaceous reflections on propodeum and T1 and T4 of gaster dorsally; eyes dirty brown. Antennae black with slight



Figs. 1-7. *Neoepistenia coorgensis* sp. nov. : Female

1. Body in profile; 2. Antenna; 3. Head and pronotum in dorsal view; 4. Head in front view; 5. Forewing;

6. Propodeum; 7. Gaster in dorsal view.

differs from it in having double infumation on the wings, longer eyes, swollen cheeks and gaster with an extended epipygium.

metallic blue tinge on scape. Coxae concolorous with thorax; all femora dark brown; tibiae brown except base and tips testaceous; tarsi yellow with



tips brown. Tegulae brown; wings hyaline; veins brown.

Head (Figs. 1, 3, 4) uniformly and moderately raised reticulate, reticulation engraved on vertex and occiput, with uniform silvery white pubescence. In dorsal view head width  $2\times$  length and in front view width  $1.2\times$  height; temples moderately converging, length  $0.25\times$  that of eye; POL  $1.6\times$  OOL; ocelli large; occipital carina absent; anterior margin of clypeus straight; malar grooves distinct; malar space length  $0.4\times$  that of eye; eye length  $1.45\times$  width in profile. Antennae (Fig. 2) inserted slightly above lower margin of eyes; toruli wide apart; scrobe deep with carinate outer margin and distinct interantennal ridge; scape not reaching median ocellus, length  $0.6\times$  that of the eye and  $2.6\times$  pedicel; pedicel plus flagellum length equal to head width; F1-F4 equal in length; F5 and F6 slightly shorter than F4 and equal in length; F7 and F8 slightly shorter than F6 and equal in length; club as long as two preceding segments combined; pubescence on antenna very small and dense.

Thorax (Figs. 1 & 3) reticulate punctate with moderately dense pubescence. Pronotum width  $2.5\times$  length with distinct median keel which is becoming faint at posterior end; collar not demarcated anteriorly. Mesoscutum width  $1.4\times$  length; notauli complete. Scutellum width almost equal to length. Propodeum (Fig. 6) width  $2.3\times$  of its maximum length, medially raised with a sharp transverse ridge, the area behind it lies in a vertical plane forming a sub-triangular cup which is subdivided medially, shiny anteriorly and with vertical rugae posteriorly; median carina short; plicae indicated only anteriorly; callus with dense pubescence; spiracles large and oval, area behind it raised reticulate. Mesepimeron reticulate punctate with a triangular shiny area beneath tegulae. Metanotum reticulate punctate. Forewing (Fig. 5)

length  $2.8\times$  width, with brown pubescence; costal cell hairy only on upper half; basal cell hairy, distinct speculum absent; marginal fringe small. Relative lengths of smv, mv, pmv and stv as 26.5, 12, 10.5, and 3.5. Fore and hind coxae reticulate laterally; mid coxae shagreened; hind coxa length  $1.7\times$  width; hind femur length  $0.9\times$  that of hind tibia; hind tibia with two strong, unequal spurs, with an outer row of scattered spines in addition to the thick hairs.

Gaster (Figs. 1 & 7) elongate, acuminate, length  $4.1\times$  width in dorsal view and  $1.7\times$  that of head plus thorax combined; sides of T2-T5, anterior part of T3 dorsally and T4 and T5 completely reticulate punctate; engraved reticulate on sides of T1; pubescence dense on sides of T1-T5 and complete on remaining tergites; ovipositor sheaths and ovipositor strongly protruded out; hypopygium reaching beyond T3 up to one fourth length of T4.

MALE: Unknown.

**Biology:** Collected from wet evergreen forest over a dry wood heavily infested with wood boring beetles, probably a parasite of beetles.

**Holotype:** FEMALE: India: Karnataka: Nemanakolly (South Coorg), 7. iii. 1994, coll. P.M. Sureshan. The holotype is kept in the collections of Zoological Survey of India, Western Ghat Field Research Station, Calicut, but eventually will be deposited in the National Zoological collections of Zoological Survey of India, Calcutta.

**Etymology:** *Neoepistenia*, name from *Parepistenia*, owing to the close resemblance of this genus to *Parepistenia* Dodd. The species is named after the district of Karnataka state where it was collected.

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## REFERENCES

- BOUCEK, Z. (1988): Australasian Chalcidoidea (Hymenoptera). C.A.B. International, U.K. 1-832.
- BOUCEK, Z. & J.Y. RASPLUS (1991): Illustrated key to West-Palearctic genera of Pteromalidae (Hymenoptera: Chalcidoidea). INRA Editions, France. 1-144.
- FAROOQI, S.I. & B.R. SUBBA RAO (1985): Family Pteromalidae. pp. 279-306 *In*: Subba Rao & Hayat (Eds.) The Chalcidoidea (Insecta: Hymenoptera) of India and the adjacent countries. Part I. Review of families and keys to families and genera. *Oriental Ins.* 19: 161-310 & 15 pp.
- GRAHAM, M.W. R. DE V. (1969): The Pteromalidae of North Western Europe (Hymenoptera: Chalcidoidea). *Bull. Br. Mus. nat. Hist. Ent. Suppl.* 16: 1-908.
- DZHANOKMEN, K.A. (1987): Family Pteromalidae pp. 88-411. *In*: Medvedev (Ed.) Keys to the Insects of the European part of the USSR. Vol. III, Hymenoptera, part II. 1-1341.
- NARENDHAN, T.C. (1992): A new species of *Riekisura* Boucek (Hymenoptera: Pteromalidae) from India. *J. Adv. Zool.* 13(1 & 2): 57-58.
- NARENDHAN, T.C., K. ANIL, & K. CHANDRASEKHARAN (1992a): A new species and a new record of the remarkable genus *Delislea* Girault (Hymenoptera: Pteromalidae) from the Oriental Region. *J. Bombay nat. Hist. Soc.* 89(2): 231-233.
- NARENDHAN, T.C., K. ANIL, & K. SUREKHA (1992b): On some important and beneficial chalcids (Hymenoptera: Chalcidoidea) associated with sericulture industry in India. *Bioved* 3(1): 1-6.
- PECK, O., Z. BOUCEK & G. HOFFER (1964): Keys to the Chalcidoidea of Czechoslovakia (Insecta: Hymenoptera). *Mem. ent. Soc. Can.* 34: 1-120.
- SURESHAN, P.M. & T.C. NARENDHAN (1990): Taxonomic studies on *Eurydinotomorpha* and *Netomocera* (Hymenoptera: Chalcidoidea: Pteromalidae). *Oriental Ins.* 24: 219-227.
- SURESHAN, P.M. & T.C. NARENDHAN (in press): A new species of a little known genus of Pteromalidae (Hymenoptera: Chalcidoidea) from India. *Rec. Zool. Surv. India*.

A NEW GENUS OF TINGINAE (HETEROPTERA) FROM SOUTHERN INDIA<sup>1</sup>

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(With a text-figure)

*Longiscutella* has been introduced as a new genus of the subfamily Tinginae. The monotypic species *Longiscutella menoni* resembles *Lasiacantha* Stål in its pronotal hood and paranotal expansion but differs from it by its much elongated proscutellum that reaches the posterior end of discoidal area and by the total absence of ciliation.

**Longiscutella** gen. nov.

In general appearance and development of pronotal hood and paranotal expansion this new

genus resembles *Lasiacantha* Stål. But the extraordinary development of the areolated proscutellum, almost reaching the posterior end of the discoidal area of the hemelytra and the total absence of ciliation make it easy to recognise it from the latter. In all other recorded species of Tingidae, the proscutellum does not exceed the middle of the discoidal area.

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