

## ON A COLLECTION OF PARASITIC HYMENOPTERA FROM THE GOVERNMENT MUSEUM, MADRAS.

By M. S. MANI, *Assistant, Zoological Survey of India, Indian Museum, Calcutta.*

Dr. F. H. Gravely, Superintendent, Government Museum, Madras, recently sent me for identification a small collection of Parasitic Hymenoptera. The material comprises one new Proctoprypid and three new species of Chalcids. The species *Euchalcis myrmeleonae* and *Neochalcis myrmeleonae*, which are stated to have been bred from the cocoons of ant-lions, are of particular interest as the first records from India of any Hymenopterous parasites of Myrmeleonids.

My sincere thanks are due to Dr. Gravely for giving me an opportunity of studying this interesting collection. My thanks are also due to Dr. Bains Prashad, Director, and Dr. H. A. Hafiz, Officer in charge of the Entomological Section, Zoological Survey of India, Indian Museum, Calcutta, for giving me facilities for work.

### Superfamily PROCTOTRYPOIDEA.

#### **Hoploteleia gravelyi**, sp. nov.

This species differs from all the others of the genus *Hoploteleia* Kieff. in that the lateral ocelli are situated close to the eye border, in the sculpture of abdomen and also in the unarmed metanotum. This last character shows affinity to the genus *Triteleia* Kieff.<sup>1</sup> but the short abdomen and the very distinctly edged sternal impression behind the lateral ocelli place the species in *Hoploteleia*.

*Female*.—Length about 3.5-3.75 mm. Body black, densely clothed with whitish setæ. Head subquadrate, one and a half times as broad as long; ocelli arranged in the form of a triangle, front ocellus just above the deep antennal fovea, the lateral ocelli nearly touching the eye border. There is a deep, distinctly ridged impression behind the lateral ocelli, and a straight carina connecting the lower borders of the eyes with the base of the antennal fovea. Sculpture of head consisting of umbilicate punctation; antennal fovea transversely striate; pubescence dense, white and long. Eyes bare. Antennae about half the length of body; segments 12; scape yellow, about two thirds the length of flagellum, slender basally; pedicel and the first segment of funicle nearly equal; funicle yellowish brown, segments gradually growing shorter and stouter; club dark reddish brown, segments 6. Mesonotum umbilicately punctate, but less closely so than the head; the space between the punctae finely reticulate; in addition to the median and the parapsidal furrows there are also two other furrows at the lateral margin connected anteriorly by a transverse furrow with the parapsidal furrows.

---

<sup>1</sup> Kieffer, *Berlin. Ent. Zeit.*, L, p. 264, (1906); also see Kieffer, *Das Tierreich*, Lief. XLVIII, p. 364, (1926).

Scutellum coarsely and densely punctate. Femoral impression of mesopleura finely transversely striate. Mesepisternum closely umbilicately punctate. Metanotum distinctly unarmed. Propodeum unarmed. Legs, except the coxæ, yellowish brown. Abdomen oval, less than half the length of the rest of body; first apparent tergite with a close, longitudinally corrugated sculpture, second apparent tergite corrugated antero-medially and coarsely streaked behind; sculpture of the rest of the dorsal surface of abdomen fine punctation; third apparent tergite longest; terminal segment with a denser pubescence than the rest of abdomen.

*Male*.—Resembles the female, but differs in the following respects: Length 3.5 mm. Legs yellowish. Head more round than in female. Antennæ yellowish brown, about half the length of body; scape about one third the length of flagellum; pedicel much shorter than the first segment of funicle; the first two funicular segments long, equal; rest shorter than these two but equal to each other; terminal segment somewhat longer. Transverse striations of the femoral impression of mesopleura rather faint.

*Type Series*.—One female and male in spirit. No. 932/H3. In the collection of the Zoological Survey of India, Indian Museum, Calcutta.

“Bred from egg-cases of a long-horned grass-hopper, Madras. F. H. Gravely, viii-1925.”

#### Superfamily CHALCIDOIDEA.

#### *Euchalcis myrmeleonae*, sp. nov.

This species differs from the only other Indian species *E. trichiocephalus* Cam.<sup>1</sup> mainly in the sculpture of mesonotum and propodeum.

*Male*.—Length 4 mm. Body black. Head closely umbilicately punctate; antennal fovea faintly developed only near the insertion of the antennæ, transversely striate; dense, silvery white pubescence on cheeks as in *E. trichiocephalus*; the pubescence on occiput not so dense; lateral ocelli separated from the eye border by a distance less than their diameters; eyes large, bordered black, projecting behind occiput. Antennæ reddish brown; scape dark reddish; pedicel somewhat shorter than the first segment of funicle; ring joint broader than long, its breadth equal to that of pedicel; first segment of funicle longest; second and third segments equal, each about three fourths the length of first; fourth to sixth equal, each somewhat shorter than third; seventh somewhat shorter than sixth; club longest of all antennal segments, conically pointed apically, solid; there are two dark transverse lines at about one third and two thirds from the base but there are no sutures.

Pronotum closely, deeply, coarsely and umbilicately punctate; punctations on mesonotum and scutellum neither so close nor so deep; femoral impression of mesopleura transversely corrugated, corrugations not very deep. Propodeum with two median longitudinal carinæ at a distance from each other anteriorly but broadly connected posteriorly; there is also a lateral carina diverging from the posterior end of the

<sup>1</sup> Cameron, *Journ. Bombay Nat. Hist. Soc.*, XVII, p. 579, (1907),

median carina and connected with it in the middle by a transverse carina; there are other carinae interconnecting these in addition to a spiny one outside the lateral carina. All legs reddish, hind coxæ polished above, minutely punctured below, very dark reddish; hind femur bright red, with one large sharp basal tooth and an apical lobular process in addition to being finely and pectinately denticulate; hind tibiae rather darker; hind metatarsus slightly longer than the second tarsal segment. Tegulae bright red. Abdomen oval, black; first apparent tergite covering nearly half the dorsal area, glossy; second apparent tergite closely punctate and pubescent; rest of the tergites of the abdomen glossy in anterior half, punctate and pubescent in posterior half.

*Type*.—One male in spirit; one antenna mounted in canada balsam. No. 933/H3. In the collection of the Zoological Survey, Indian Museum, Calcutta.

Bred from the cocoon of an ant-lion, 26-ix-1921. Coll. H. C., Madras.

### ***Neochalcis myrmeleoneae*, sp. nov.**

This species differs from the Indian species *N. forticaudis* Cam.<sup>1</sup> mainly in the sculpture of head and abdomen and the relative proportions of the antennal segments. The propodeum is also differently sculptured.

*Female*.—Length 1.5-2.0 mm. Body very dark reddish brown. Head about as broad as thorax, with a leathery sculpture, finely pubescent. Lateral ocelli separated from the eye border by a distance slightly greater than their diameters. Antennae yellowish brown; scape a little more than half the length of funicle; pedicel slightly longer than the first two segments of funicle; other funicular segments gradually become broader and shorter; club as long as pedicel, basal segment longer, middle segment broader than long, apical segment conical. Pro- and mesonotums coarsely umbilicately punctate, punctae not very close. Scutellum subreticulately sculptured, the reticulations rather close. Legs reddish brown. Abdomen reddish, shorter than the rest of body; second tergite occupies nearly half the dorsal surface; minutely sculptured.

*Type series*.—Three females in spirit; one partly dissected; one antenna mounted in canada balsam. No. 934/H3. In the collection of the Zoological Survey, Indian Museum, Calcutta.

Bred from the cocoon of an ant-lion. July, 1920. Coll. H. C., Madras.

### ***Stomatoceroïdes indicus*, sp. nov.**

The genus *Stomatoceroïdes* was erected by Girault<sup>2</sup> for forms closely related to *Stomatoceras* Kirb. but having a ring joint in the antenna. About ten species, all from the Australian region, have so far been described and the present species is the first record of the genus from India. The Indian species differs from all the other species in having hyaline

<sup>1</sup> Cameron, *Journ., Bombay Nats. Hist. Soc.*, XVII, p. 96, (1906).

<sup>2</sup>Girault, *Mem. Queensland Mus.*, IV, p. 341, (1915).

wings, elongated abdomen, relatively shorter first segment of funicle of antenna, much longer club and in the relatively shorter post marginal vein.

*Female*.—Length about 4.75 mm. Body black. Head black, slightly broader than thorax; sides of the facial impression ridged; antennal fovea transversely striate; rest of face irregularly punctate; cheek densely setose; occiput and back of head closely umbilicately punctate; front ocellus within the facial impression; lateral ones separated from the eye border by a distance equal to their diameters; there is a deep impression between the lateral ocellus and the eye. Antennae reddish brown, short; scape about as long as the pedicel, ring joint and first three segments of the funicle combined, stout, crooked and broadened apically; pedicel short; ring joint very much broader than long; first three segments of the funicle equal; fourth segment slightly shorter than third; fifth nearly equal to fourth; sixth and seventh each about three fourths the length of fourth; club solid, conical, slightly more than twice the length of first segment of funicle. Thorax black, closely umbilicately punctate. Scutellum with a carinate margin; apical spinous process broad, blunt and widely separated, sculpture as on the rest of thorax. Propodeum with a rugose sculpture, deepest in the middle; there is a spinous carina on each side. Legs dark reddish brown. Hind femur somewhat lighter, finely ciliated and denticulate underneath from about the basal one fourth onwards. Wings hyaline, post marginal vein equal to or very slightly longer than the marginal vein. Abdomen conical, nearly equal to the rest of body in length, reddish; second tergite occupies nearly half the dorsal area of abdomen, sparsely punctate; other tergites closely punctate and pubescent; style-like posterior prolongation about half the length of the rest of the abdomen.

*Type*.—One female in spirit; one antenna mounted in canada balsam. No. 935/H3. In the collection of the Zoological Survey, Indian Museum, Calcutta.

Coll. Johnson, Waltair, Aug. 1920.