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A NEW ANT-MIMICKING MIRID BUG (HEMIPTERA-HETEROPTERA) FROM VICTORIA.

By Gordon F. Gross, Curator of Insects, South Australian Museum.

Ant mimicry is not uncommon amongst Heteroptera and occurs in several distinct families, but especially in Lygaeidae, Pyrrhocoridae and Miridae. Amongst the Miridae the bulk of the ant mimics and near ant mimics belong to the tribe Pilophorini in the subfamily Orthohylinae as now characterized by Carvalho (1952–1955).

From the Pacific area we have four genera and five species of the tribe. These are Leucophoroptera Poppius, 1921 (2 species), Kirkaldiella Poppius, 1921 and Myrmecoridea Poppius, 1921 from Australia, and Anthropophagiotes Kirkaldy, 1908 from Fiji. The only one of these which has any really close resemblance to an ant is Myrmecoridea gracillima Poppius.

Amongst a small consignment of Heteroptera sent recently to the author for identification were two specimens of a new genus and species of Mirid which is a very convincing ant mimic. The species belongs to the Orthotylinae as there are arolia present, free, and arising from between the claws; these are strongly convergent towards their apices. There is no pronotal collar. The ant like habitus places the species in the Pilophorini.

MYRMECOROIDES gen. nov.

Strongly myrmecomorphic genus. Eyes medium sized, not projecting. Posterior portion of head including eyes subglobular, but postclypeus (vertex), anteclypeus (frons) and labrum formed into a prominent high semicircular keel which runs longitudinally along the mid-line of the head from the level of the hind margins of the eyes above to the insertion of the rostrum anteriorly. Clypeal keel and labial keel separate structures but contiguous along an obliquely downward directed line. Antennae long and slender, first segment surpassing apex of head, second segment longest, third shorter than second but longer than first and fourth, fourth a little longer than first. Rostrum robust, reaching to about mid coxae.

Thorax small and elongate. Pronotum without a collar and divided by a strong transverse constriction behind the middle into two lobes; the anterior lobe subglobular, posterior more annuliform, inclined towards constriction and vaguely flattened above. Scutellum short, rather tumid, triangular. Hemelytra very reduced, scale or flap like, about same length as pronotum, not clearly differentiated into corium, clavus, cuneus, and membrane. Wings absent. Propleurae and pronotum one integral structure, the pronotum flowing into the propleurae smoothly in an even curve. Mesopleurae large and prominent in front of middle coxae, hind margin directed obliquely forwards and upwards. Metapleurae short, obvious only in front of hind coxae and bearing a prominent scent canal on either side which runs up to end beneath a tumid prominence.

All coxae large and longish. All legs slender and long, hind tibiae conspicuously longer than either fore or middle tibiae. Tarsi with two claws from between whose bases arise a pair of well developed arolia which are strongly convergent at their apices.

Abdomen with first two visible segments (actually II. and III.) strongly narrowed to give a petiole like appearance, then the three succeeding segments (IV., V. and VI.) become successively larger and are followed by the three apical visible segments (VII., VIII. and IX.) which gradually diminish to give a gaster like appearance. Abdomen somewhat laterally compressed so that it is higher than wide; no lateral margin; the dorsal and ventral segments running into one another, forming a depressed area in the region of the junction which may collapse inwards so as to lower the abdomen.

Genotype MYRMECOROIDES CARINATUS n. sp. MYRMECOROIDES CARINATUS n. sp.

§ Black, eyes grey. Tips of hemelytra, a median band and second
antennal segment, the upper margins of true abdominal pleurites IV.-VIII., the
small anal segment and the hind margin of the true ventral segment III. luteous.
First antennal segment, all rostrum except tip, fore femora and tibiae, the bases
and apices of the mid and hind tibiae, and the ovipositor when extended brown.
All tarsi, mid femora and head more a piceous black than true black.

General appearance: Almost glabrous with some very fine sparse short white hairs, a little thicker on the edge of the keel on the head and along the tips of the hemelytra. Beneath with some hoary patches.

Length: $5 \cdot 3 - 5 \cdot 5$ mms.

Locality: Holotype female, Donnybrook, Victoria, November 22, 1959, coll. J. Ozols, and two paratype females, same locality and collector, November 29, 1959; type and one paratype in the collection of the National Museum, Victoria; the other paratype, No. 120112 in the South Australian Museum, Adelaide.

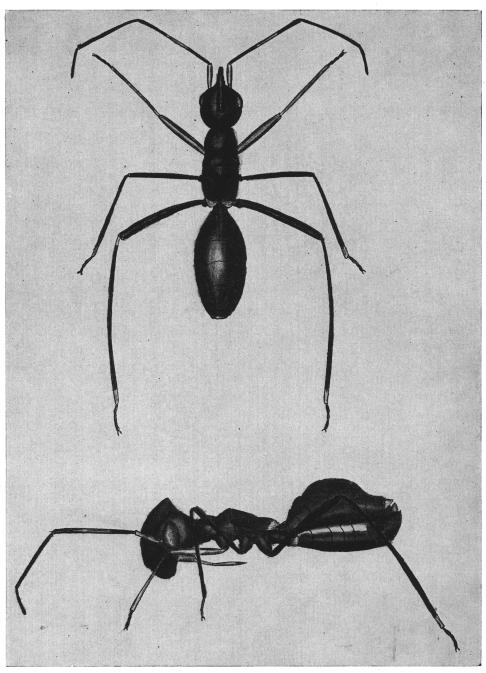
A satisfactory classification of the genera within the Pilophorini sets a difficult task. In mimicking, the unwholesome insect represented is usually but a single species amongst a family group. Because of this mimicking species, though they may be closely related, must, and do, assume the likeness of quite widely separated and unlike "models". This great diversity of form and structure poses a difficult problem when their exact relationship to one another must be assessed.

Myrmecoroides can be distinguished from the other three Australian genera of Pilophorini by this key (modified from Carvalho).

- 2. Second antennal segment as thick as third, or fourth; females usually brachypterous or with modified hemielytra (short membrane) ... 3 Second antennal segment thicker than third and fourth; females usually macropterous . Leucophoroptera Poppius.
- 3. Head with a very prominent keel above and in front . *Myrmecoroides* gen. n. Head without such a keel *Myrmecoridea* Poppius.

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Myrmecoroides carinatus new genus and species.

Top, view from above. Below, view from left hand side.