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ANT LARVAE OF THE SUBFAMILY PONERINAE: THIRD SUPPLEMENT (HYMENOPTERA: FORMICIDAE)

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ABSTRACT—The authors' second supplement on the ant larvae of the subfamily Ponerinae was published in 1971. The present supplement contains descriptions of 6 additional species in the genera Amblyopone, Bothroponera, Leptogenys, Mesoponera and Neoponera.

Subsequent to the publication of our second supplement on ponerine larvae (1971) we have received from other myrmecologists so much additional material that it is now necessary to publish a third supplement.

SUBFAMILY PONERINAE

Corrections for our second supplement (1971): Page 1215, Appendix B, Group Ia: add *Bothroponera* Group II, *Euponera*, *Hypoponera*. Group Ic: change *Bothroponera* II to *Bothroponera* III. Page 1216 Key, rubric J₅: change cryptoponiform to odontoponeriform, K₂: change II to III.

W. M. Wheeler 1910:264. Ponerinae "carry their larvae and pupae under their bodies."

Genus Amblyopone Erichson

Amblyopone pluto Gotwald and Lévieux. Gotwald and Lévieux (1972:393-394) describe in great detail feeding of larvae.

Genus Neoponera Emery

Neoponera crenata (Roger). Length (through spiracles) about 6.9 mm. Very similar to N. moesta (1971:1205) except in the following details. Ten tubercles on AV, 8 on AIX and 4 on AX. Integument with minute spinules in short transverse rows on venter and on dorsum of posterior somites. Body hairs shorter (0.013–0.05 mm long). Posterior surface of labrum densely spinulose, spinules long and slender, and in long subtransverse parallel rows, rows so close together that spinules overlap on medial half, lateral spinules larger and in short rows or isolated. Mandibles with apical tooth more rounded; basal portion with minute spinules in scattered short subtransverse rows on anterior, medial and posterior surfaces. Entire maxillary surface spinulose, spinules isolated and in shorter rows basally; longer, finer and in short rows apically. Hypopharynx with spinules in moderately long arcuate rows, which form a reticulate pattern. (Material studied: 4 larvae from Brazil, courtesy of Dr. W. L. Brown.)

Genus Bothroponera Mayr

Bothroponera silverstrii (Santschi). IMMATURE: Length (through spiracles) about 5 mm. Similar to B. sjostedti (1971:392) except in the following details.

Tubercles tall (about 0.125 mm), slender spires with numerous minute denticles in spiral rows and with 2 or 3 hairs about 0.037 mm long near base. Tubercles 106, distributed thus: T1 10, TII-AX 8 each. Body hairs about 4 times as numerous as tubercles and about 0.1 mm long. Cranium subhexagonal, slightly broader than long. Antennae large, each on a slight elevation. Head hairs longer (about 0.1 mm long). Labrum with a slight swelling projecting anteriorly from ventral surface of each lobe; posterior surface with minute spinules in short arcuate rows on each lateral sixth. Labium densely spinulose, spinules long and in transverse subparallel rows, rows so close together that spinules overlap. (Material studied: 3 larvae from Nigeria, courtesy of Dr. W. L. Brown.)

Genus Mesoponera Emery

Revision: Our generic characterization (1971:1205) should be replaced by the following: Body beset with numerous (84–186) tubercles, which are spirelike or subconical; integument of tubercles with minute spinules in short transverse rows. Body and head hairs usually few and minute.

Mesoponera pergandei (Forel) (fig. 2). Length (through spiracles) about 6.2 mm. Very similar to M. constricta (1952:624) except in the following details. Two more tubercles on AX; the typical tubercle is about 0.125 mm tall, with basal half cylindrical and the apical half conical and with 3 or 4 hairs about 0.15 mm long mounted on its sides. Entire integument spinulose, spinules minute and in arcuate rows, rows subtransverse ventrally, elsewhere forming a reticulate pattern. Body hairs longer (0.025–0.1 mm long). Head capsule with lateral bulges at level of antennae more pronounced. Head hairs longer (0.048–0.09 mm long). Mandibles less distinctly divided into basal and apical portions. Maxillae less densely spinulose. Labium sparsely spinulose; spinules minute and in short transverse rows. Hypopharynx densely spinulose, spinules long and in long subtransverse parallel rows, which are so close together that spinules overlap. (Material studied: one larva from Venezuela, courtesy of Dr. W. L. Brown.)

Mesoponera n. sp. (fig. 1). Length (through spiracles) about 7 mm. Pachycondyliform (i.e., shaped somewhat like a crookneck squash; neck long and slender; head large; abdomen subovoidal, but with ventral profile nearly straight); anus ventral with 2 small lips. Tubercles 134; distributed thus—TI-TIII 10 each; AI, AII and AVI-AVIII 12 each; AIX 10 and AX 4; AIII-AV 10 tubercles each and a dorsal pair of large discoidal elevations, each of which might be compared to a pulley with one of its sides fused to body wall and with 3 or 4 hairs about 0.036 mm long near its base. A typical tubercle is conical, about 0.2 mm tall, with numerous minute spinules in short encircling rows and with 3 or 4 simple hairs about 0.2 mm long mounted near its base. Spiracles on minute papillae. Integument densely spinulose, spinules large and in arcuate rows which frequently form a reticulate pattern. Body hairs about 0.13 mm long, simple, slightly curved, very few. Cranium transversely subelliptical. Each antenna a low convexity bearing a paraboloid with 3 sensillae on its apex. Head hairs 0.06-0.12 mm long, few, simple, slightly curved. Labrum large, deeply bilobed, lateral margins sinuate; anterior surface of each lobe with a ventral boss bearing about 10 sensilla on and near its ventral border; posterior surface densely spinulose, medial spinules long and in numerous long subtransverse parallel rows, rows so close together that spinules overlap; rows short and arcuate ventrolaterally; pos-

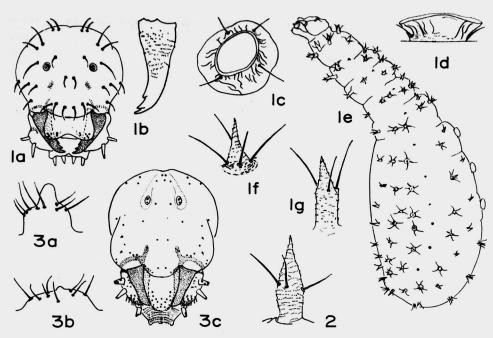


Fig. 1, Mesoponera n. sp. a, head in anterior view, $\times 39$. b, left mandible in anterior view, $\times 81$. c, a dorsal discoidal elevation in ventral view, $\times 133$. d, a dorsal discoidal elevation in side view, $\times 133$. e, larva in side view, $\times 12$. f and g, two tubercles, $\times 167$. Fig. 2, Mesoponera pergandei: tubercle, $\times 85$. Fig. 3, Leptogenys (Lobopelta) fallax fortior. a and b, two tubercles, $\times 68$. c, head in anterior view, $\times 68$.

terior surface with about 10 sensilla on each lobe. Mandibles ectatommiform (i.e., heavily sclerotized; narrowly subtriangular in anterior view; apical tooth curved medially, 2 small subapical teeth); anterior and medial surfaces of basal half of mandible with minute denticles, isolated or in short rows. Maxillae with apex conoidal and densely spinulose, spinules longer and in short rows apically, shorter basally and isolated laterally; each palp a cylinder with 4 apical sensilla (1 encapsulated and 1 with a peg); galea tall and digitiform, with 2 apical sensilla. Labium with anterior surface densely spinulose, spinules in numerous short rows medially, becoming longer and isolated ventrally and laterally; with a basal densely spinulose transverse welt; each palp a cylinder with 4 apical sensilla (1 encapsulated and 1 with a short peg); opening of sericteries wide and salient, with 3 projections. Hypopharynx densely spinulose, spinules so long and rows so close together that spinules overlap. (Material studied: 10 larvae from "4.5 km E. Rio Aguaclara, Valle, Colombia, 19 June 1971, (on old road) wet canyon. #2. Nest A," courtesy of Dr. W. L. Brown.)

Genus Hypoponera Santschi

Le Masne 1953:26. Workers feed on the liquid excreted from the anus of the larvae.

Genus Leptogenys Roger

Revision: In our generic characterization (1952:639) the second sentence should read: Tubercles numerous (100–134); mammiform; encircled by a subapical ring of 4–10 relatively long hairs.

Leptogenys (Lobopelta) fallax fortior Forel (fig. 3). Length (through spiracles) about 4.7 mm. Similar to L. sp. (1952:640) except as follows. Tubercles fewer (106), bearing a distinct nipple and with more numerous hairs (6–10), which are about twice as long (0.36 mm). Entire integument with minute spinules in short to long rows, which are transversely subparallel except concentric around bases of tubercles. Body hairs moderately long (0.006–0.106 mm). Cranium feebly cordate; integument with about 40 sensilla. Posterior surface of labrum spinulose, spinules minute to long and isolated or in short rows. Maxillary spinules sparse, long and slender. Labial spinules numerous, fine and so long that rows overlap. Hypopharynx spinulose, spinules minute and in numerous short arcuate rows. (Material studied: 1 larva from Queensland, courtesy of Rev. B. B. Lowery.)

Genus Odontomachus Latreille

W. M. Wheeler (1928) discussed mermithergates in O. haematoda Linnaeus and O. chelifer Latreille and inferred that the nematode larva (Mermis) had been parasitic in the ant larva.

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