

THE LARVA OF PARAMYRMICA (HYMENOPTERA: FORMICIDAE)

GEORGE C. WHEELER AND JEANETTE WHEELER
Department of Biology
University of North Dakota, Grand Forks

In 1957 Dr. A. C. Cole described a new genus, *Paramyrmica*, which was associated with *Myrmica striolagaster* Cole. He has very kindly sent the larvae to us for description. We find them to be closely related to *Myrmica* (Wheeler and Wheeler, 1952, p. 112) as evidenced by the shape of body, head and mouth parts and by the head hairs. They are, however, generically distinct from *Myrmica* as evidenced by the lack of anchor-tipped hairs and by the similarity of head hairs to body hairs. Formal descriptions follow.

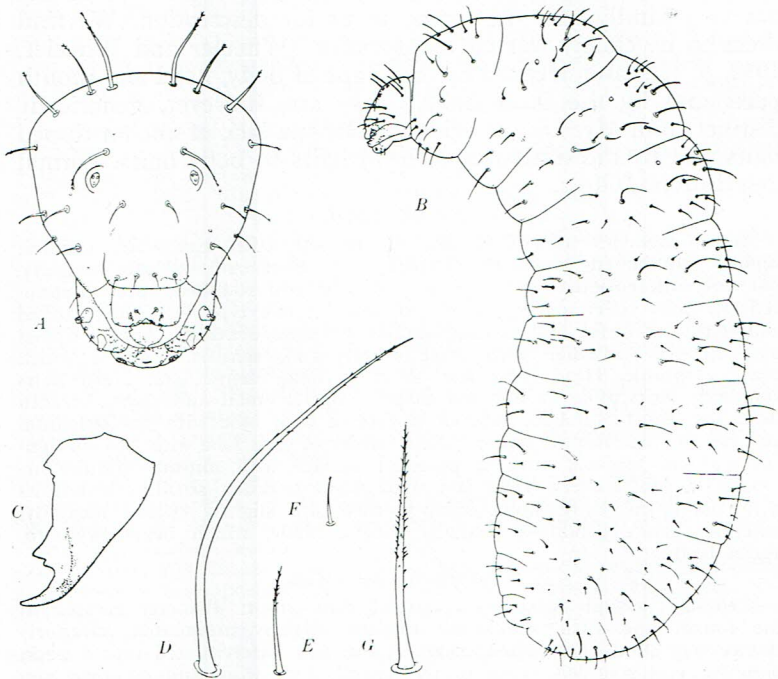
Genus PARAMYRMICA Cole

Stout; diameter greatest at the fourth and fifth abdominal somites; slightly attenuated anteriorly; thorax very stout and arched ventrally, but not differentiated into a neck; posterior end rounded; anus postero-ventral. Body hairs sparse; minute to long; of one type — slightly curved and with the distal half bearing numerous short denticles. Anchor-tipped hairs absent. Antennae with three (rarely two) sensilla, each of which bears a spinule. Head hairs few, short to long, denticulate. Head hairs and body hairs alike in size and shape. Labrum small and short, breadth twice the length; bilobed; anterior surface of each lobe with one sensillum and two or three minute hairs; ventral border of each lobe with two contiguous and two isolated sensilla; posterior surface with minute spinules arranged in subtransverse rows and with about a dozen sensilla. Mandibles with the apical third stout, sharp-pointed and slightly curved medially; anterior surface produced medially into a blade, which bears two sub-apical teeth.

Paramyrmica colax Cole

Length (through spiracles) about 5.5 mm. Stout; diameter greatest at the fourth and fifth abdominal somites; slightly attenuated anteriorly thorax very stout and arched ventrally, but not differentiated into a neck; posterior end rounded. Anus posteroventral. Leg, wing and gonopod vestiges present. About thirteen differentiated somites. Integument spinulose, the spinules minute and in short to long subtransverse rows. Body hairs sparse, somewhat sparser on the ventral surface, minute to long (0.002-0.19 mm), slightly curved, the distal half bearing numerous short denticles. Cranium slightly broader than long, broadest at the dorsal corners; occipital outline broadly rounded. Antennae with three (rarely two) sensilla, each of which bears a spinule. Head hairs few, short to long (0.04-0.13 mm), longest near the occipital border, with the distal third bearing denticles. Labrum small and short, breadth twice the length; bilobed; anterior surface of each lobe with one sensillum and two or three minute hairs; ventral border of each lobe with two contiguous and two isolated sensilla; posterior surface spinulose, the spinules (longer dorsally) arranged in numerous subtransverse rows; posterior surface with six sensilla near the center of each lobe. Mandibles rather small and heavily sclerotized; distal third forming a stout sharp-pointed apical

tooth which is curved medially; anterior surface produced medially into a blade which bears two subapical teeth. Maxillae with the apex paraboloidal and sparsely spinulose, the spinules minute and in short rows; palp a skewed peg with two apical, two or three subapical and one lateral sensilla; galea a frustum with two apical sensilla. Labium with the anterior surface spinulose, the spinules minute and in short arcuate rows; palp a low rounded elevation with five sensilla; an isolated sensillum between each palp and the opening of the sericteries; the latter a short transverse slit. Hypopharynx with a few short subtransverse rows of minute spinules. (Material studied: eleven larvae from the type colony collected by A. C. Cole in Limpia Canyon, Davis Mountains, Jeff Davis County, Texas.)



Text figure 1. — A, head in anterior view, X 82; B, larva in side view, X 22; C, left mandible in anterior view, X 222; D-G, four body hairs, X 222.

LITERATURE CITED

- Cole, A. C. 1957. *Paramyrmica*, a new North American genus of ants allied to *Myrmica* Latreille. (Hymenoptera: Formicidae). *Jour. Tenn. Acad. Sci.* 32: 37-42, 1 fig.
- Wheeler, G. C., and J. Wheeler. 1952. The ant larvae of the myrmicine tribe Myrmicini. *Psyche* 56: 105-125, 1 text fig.