

California, G. C. and J. Wheeler #27.)

G. C. and J. Wheeler 1970: 145, 148—"Larvae often creamy white with a dirty gray meconium showing through from interior; becoming yellowish, especially at anterior end; semipupae and pupae usually yellow; but brood of same size may be white, yellow, or orange."

*Manica hunteri* (Wheeler)

Length (through spiracles) about 6.2 mm. Similar to *Manica mutica* (1960a: 5) except as follows. Body more slender. Integument of venter of thorax with minute spinules in short rows. Body hairs of only one type: 0.15-0.32 mm, simple, the longest with slender flexuous tip. Head more evenly rounded. Head hairs 0.072-0.11 mm long, simple. Labrum deeply bilobed; anterior surface of each lobe with four short hairs; ventral border of each lobe with four sensilla; posterior surface of each lobe with four isolated and two clusters of two or three sensilla. Each mandible with blade extending down onto apical tooth.

IMMATURE LARVA: Length (through spiracles) about 4.1 mm. Similar to mature larva except in the following details. Body shape similar to submature larva of *M. mutica*. Body hairs 0.075-0.32 mm and a few on the lateral surfaces of AI-VIII 0.026-0.234 mm, with curled flexuous tip. Mandibles with the apical tooth more curved medially; all teeth sharper. Maxillary palp with eight or nine sensilla each, each galea shorter and stouter. Labial palp represented by a cluster of seven sensilla.

VERY YOUNG LARVA: Length (through spiracles) about 1.8 mm. Similar to mature larva except as follows. Entire integument spinulose, the spinules minute and isolated. Body hairs sparse and simple, 0.009-0.054 mm long. Head hairs about half as numerous and about 0.027 mm long. Each antenna a raised knob bearing three sensilla. Labrum bilobed. Mandibles with the teeth very sharp. Maxillary palp represented by a cluster of seven sensilla; galea represented by two contiguous sensilla. Each labial palp represented by a cluster of seven sensilla.

Material studied: numerous larvae from Montana (#109), Washington (#23, 24) and Wyoming (#184), G. C. and J. Wheeler.

G. C. and J. Wheeler 1970: 153—"The large larvae of *hunteri* are active, flexible and extensible. When the honey-sugar-yolk food was placed near larvae, they fed upon it. Larvae were observed feeding on a dead fly: the mouth parts, which were half-buried in fly tissues, made pumping movements; the mandibles did not move from side to side; when a worker picked up and moved the fly, three larvae remained attached."

*Manica mutica* (Emery)

YOUNG LARVA: Length (through spiracles) about 4.7 mm. Similar to the mature larva (1960a: 5) except in the following details. Integument of ventral surface of thorax and dorsal surface of posterior somites with minute spinules in short arcuate rows. Body hairs sparse and long. Of two types: (1) 0.11-0.36 mm long; (2) 0.09-0.14 mm long. Head hairs of two types: (1) 0.059-0.12 mm long, stout, with minute denticles; (2) 0.09-0.13 mm long, simple, with slender tip. Labrum deeply bilobed; ventral border of each lobe with about 12 sensilla, but without spinules. Each maxillary palp with nine sensilla. (Material studied: numerous larvae from Wyoming, G. C. and J. Wheeler #183.)