

The Ant Larvae of the Subfamily Dolichoderinae: Supplement¹

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ABSTRACT

An earlier study on the larvae of the Dolichoderinae was published by the authors in 1951. The present supplement contains descriptions of 9 additional species in the genera *Dolichoderus*, *Forelius* and *Iridomyrmex*. *Forelius* is new to the authors' collection and is characterized here for the first time. Necessary revisions are made in the 1951 descriptions and additional references to the literature are cited. The body profiles of dolichoderine

larvae are classified into 3 generalized types; there is only 1 generalized type of mandible shape. The tubercles of 6 genera (*Dorymyrmex*, *Iridomyrmex*, *Bothriomyrmex*, *Engramma*, *Tapinoma*, and *Technomyrmex*) are described and contrasted with the tubercles of ponerine larvae, from which they differ markedly in number, position and shape.

Subsequent to the publication of our article "The Ant Larvae of the Subfamily Dolichoderinae" (1951) we have received from other myrmecologists so much additional material that it seems desirable to publish a supplement.

In this article we describe the larvae of 1 genus and 9 species which we have acquired since 1951. Including these, we have studied a total of 45 species in 14 genera of this subfamily.

REFERENCES TO THE SUBFAMILY²

Adlerz (1886) characterized the larvae as fat and capable of little movement (p. 275). After examining the larvae of *Tapinoma* he concluded—erroneously—that most of the hairs had been broken off and that further investigation would probably show that the dolichoderine larvae had double-hooked hairs (as in *Myrmica*) (p. 51).

Bernard (1951):—"Larves à tête petite, omnivores ou spécialisées; microcephales, en boudin, poils rares" (p. 1041). "Leurs larves sont beaucoup moins mobiles et segmentées que celles des [Formicinae] . . . Les larves sont nues ou avec poils rares, à segmentation indistincte, à pièces buccales atrophiées ou nulles" (p. 1071).

Stärcke (1933):—"Larvae helpless. Strongly hypognathous. Few or no hairs; *Dolichoderus* has none; *Tapinoma* has hairs on the last segment; in *Iridomyrmex* they are generally distributed. Internal anatomy was also discussed.

Tribe DOLICODERINI Emery

Genus *Dolichoderus* Lund

The very young larva (Wheeler and Wheeler 1951, pl. 30, Fig. 10) is similar to the mature larva except in the following details: Body ovoidal, with the head nearly the diameter of the prothorax and on the anterior end. Anus subterminal. Segmentation distinct. Body and head hairs reduced or lacking. Spinules on the integument isolated.

Dolichoderus (Acanthoclinaea) doriae Emery (Fig. 3).—The immature larva (length through spiracles about 2.8 mm, straight length about 2.3 mm) is similar to *D. taschenbergi*, except in the following details: Body hairs moderately numerous, rather evenly distributed, longest ventrally. Integument with short rows of minute spinules. Cranium suboctagonal in anterior view; broader than long. Head hairs numerous, longer (0.03–0.65 mm long). Labrum breadth 4 times the length; with a few short rows of minute spinules on the anterior surface. Mandibles with the basal half as broad as long. Maxillae with the apex adnate, the integument with short arcuate rows of minute spinules; palp represented by a cluster of 4 slightly elevated sensilla (3 with a spinule each). Labium with a few short rows of minute spinules; palp represented by 4 elevated sensilla (3 with a spinule each); an isolated sensillum between each palp and the opening of the sericteries.

The very young larva (straight length about 0.9 mm) is very similar to the immature larva.

Material Studied.—Numerous larvae from New South Wales, courtesy of the Reverend B. B. Lowery. This species is known also as *A. clarki* Wheeler.

Parasite.—In the sample of about 500 larvae, 47 contain 1 or 2 dipterous larvae, which are similar to those found in *Technomyrmex albipes*. See Fig. 11, 12.

Dolichoderus (Hypoclinaea) mariae Forel.—Length through spiracles about 2.9 mm, straight length about 2.5 mm. Similar to *D. taschenbergi*, except in the following details: Body hairs longer (0.018–0.036 mm long). Head hairs moderately numerous and longer (0.018–0.036 mm long). Antennae with 3 (rarely 4) minute sensilla, 2 (rarely 3) with a minute spinule each. Mandibles with the basal half about as wide as long and with a few minute spinules. Maxillae adnate, the integument with a few minute spinules; palp represented by 2 contiguous sensilla (1 encapsulated and 1 with a spinule); galea represented by 2 slightly raised sensilla each bearing a spinule. Labial palp represented by 2 contiguous sensilla; an isolated sensillum between each palp and the opening of the sericteries.

The sexual semipupa (length through spiracles about 4.7 mm, straight length about 3.6 mm) is simi-

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² The genus *Aneuretus*, established by Emery in 1892, has long been recognized as annectant between Dolichoderinae and the less specialized subfamilies. Clark (1951) removed the tribe Aneuretini from the Dolichoderinae and raised it to subfamilial rank as the Aneuretinae. Wilson et al. (1956) concurred, using larval characters (among others) to justify the separation (p. 87–89, 91, 93, 98; Fig. 3 on p. 86).