

Cerapachyine larvae most nearly resemble the larvae of the Dorylinae. Both types have an elongate subcylindrical body with the head at the anterior end; rather feebly sclerotized mandibles, which are typically elongate and slender and have the medial border denticulate in part; inconspicuous maxillary palps; and the trophorhinium wanting or poorly developed. They differ in that doryline larvae are a little stouter and more nearly straight, have more hairs on the head and have smaller mouth parts.

Cerapachyine larvae also show a marked resemblance in body shape to the larvae of the ponerine genus *Myrmecia*. The larvae of this genus have the posterior half of the body noticeably stouter than in the Cerapachyinae, but there is a gradual attenuation from behind forward; hence there is no sharply defined "neck" which is characteristic of the higher Ponerinae. Wheeler considered the adults of *Myrmecia* to be eminently primitive and generalized and the larvae the most primitive of existing Formicidae.

It seems therefore that the following hypothesis might be justified. The larva of *Myrmecia* represents an ancestral formicid type. From this type, by differentiation into a large "body" and a slender curved "neck", the higher Ponerinae evolved. But before this differentiation occurred, a side branch was formed, the larvae of which became more attenuated posteriorly. This line led to the Cerapachyinae. A secondary offshoot from it gave rise (through straightening of the larval body) to the Dorylinae.

This study, then, supports Wheeler's conclusion (see above) that the Cerapachyinae are intermediate between the Ponerinae and the Dorylinae and also tends to confirm his diagram (1920, p. 52) of the phylogenetic relationships of the subfamilies of Formicidae.

#### A BIBLIOGRAPHY OF THE LARVAE OF THE CERAPACHYINAE

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