

ENTOMOLOGY.—*The ant larvae of the myrmicine tribes Cataulacini and Cephalotini.* GEORGE C. WHEELER and JEANETTE WHEELER, University of North Dakota. (Communicated by C. F. W. Muesebeck.)

The tribe Cataulacini consists of a single genus (*Cataulacus*), which comprises about 45 species and occurs in the Ethiopian, Malagasy, Indomalayan, and Papuan Regions, with the greatest number of species in the Ethiopian. "All the species of this genus are tree-ants, usually forming medium-sized nests in hollow twigs and stems, or more rarely under the bark. They are timid and slow-moving insects, often feigning death or dropping rapidly to the ground when disturbed." (Arnold *vide* Wheeler, 1922, p. 198.)

The Neotropical tribe Cephalotini comprises about 90 species in four genera: *Procryptocerus*, *Zacryptocerus*, *Cephalotes*, and *Paracryptocerus*. The last-named is the largest with 60 species, three of which range into the southern Nearctic in Arizona, Texas, and Florida.

The ants of these two tribes are particularly interesting because of convergence. Although they inhabit different hemispheres, they occupy similar niches, i.e., they are ecological equivalents. Both are arboreal and live in cavities in plants. "Similarity in habits has gradually resulted in a remarkable resemblance in the shape of the head and the flattened body, . . . though they are not closely related to each other" (Wheeler, 1922, p. 496).

The larvae are likewise convergent in body shape and in pilosity. The body is elongate, straight (or nearly so), and subcylindrical or subellipsoidal; hairs are mostly minute or short. Both of these characters are possibly adaptations to life in plant cavities, particularly tubular cavities of small bore. A

long larva parked parallel and close to the wall would be less of a traffic hazard than a shorter larva parked crosswise or obliquely. These same characters are to be found also in the larvae of other ants which inhabit plant cavities, notably *Azteca*, *Camponotus*, *Crematogaster*, *Leptothorax*, and the Pseudomyrmecinae. *Camponotus* larvae have a neck, but it is short, stout, and strongly curled ventrally so that the cylindricality of the profile as a whole is scarcely affected. *Leptothorax* is somewhat stouter than the others; perhaps it is only in the early stages of adaptation.

The only noteworthy larval difference between these two tribes is to be found in the dorsal uncinata hairs: those of the Cataulacini have a single stout hook at the tip; in the Cephalotini they are anchor-tipped, i.e., with two stout hooks.

One-hooked dorsal hairs occur in *Azteca* and the Pseudomyrmecinae as well as in the Cataulacini. Anchor-tipped dorsal hairs occur in *Crematogaster* and *Leptothorax* as well as in the Cephalotini, but they are also to be found in many myrmicine genera which do not inhabit plant cavities.

Tribe CATAULACINI Emery

Elongate and subellipsoidal; nearly straight; prothorax forming a very short stout neck, which is inclined ventrally to about 45°. Spiracles minute, decreasing slightly in diameter toward the posterior end. Body hairs mostly very short; single-hooked (i.e., not anchor-tipped) hairs on the dorsum. Head moderately large; clypeus bulging. Antennae minute. Head hairs minute to very short. Anterior surface of labrum with