

other species of *Trachymyrmex*, not in populous files like the species of *Atta sens. stricto*, *Acromyrmex* and *Møllerius*, and bring in caterpillar excrement and bits of green and withered vegetable débris with which to replenish the substratum of their gardens. Microscopic examination of these shows that they have essentially the same minute structure as those cultivated by other species of *Atta*. The brown, triturated substratum is enveloped and shot through with a delicate, ramifying mycelium on which numerous glistening white clusters of food-bodies are formed as pyriform swellings at the ends of the hyphæ. In my former paper I employed the name "bromatia" for the clusters ("Kohlrabihäufchen" of Moeller) and that of "gongylidia" for the hyphal swellings ("Kohlrabiköpfchen" of Moeller), but Neger¹ has recently suggested that the term "ambrosia" be given to the hyphal modifications produced and eaten by all fungus-growing insects, *i. e.*, by the ants and termites as well as by the Ipid (Scolytid) beetles for which the term "ambrosia" was originally suggested by Schmidberger as long ago as 1836. I am quite willing to accept this term and to abandon my own nomenclature.

The only insects that could be suspected of myrmecophily in connection with *T. arizonensis* were a number of small, yellow, wingless, cockroaches which I found in the superficial galleries of a nest in Hunter Canyon. These cockroaches, however, were not species of the genus *Attaphila*, which Berg and I have taken from the nests of the large species of *Atta*, but were probably merely the young of some much less remarkable cockroach and were behaving as scavengers. The same species was also found in the upper galleries of several other ants in the same locality, especially in nests of *Odontomachus clarus*.

2. *Atta (Trachymyrmex) desertorum* sp. nov. (Fig. 2).

Worker. Length 2.5-3.5 mm.

Head, without the mandibles, as broad as long, slightly narrower in front than behind, with feebly convex lateral and straight or nearly straight posterior border and angularly rounded posterior corners. Eyes hemispherical, in front of the middle of the head. Mandibles with two larger apical and several minute basal teeth. Clypeus flattened, with its anterior border sinuately reflected. Frontal area triangular, rather distinct. Frontal carinæ with angular external borders and flattened but not concave surfaces; continued back as a pair of diverging ridges to the pos-

¹ Ambrosiapilze. Ber. Deutsch. Bot. Gesell. 1908, Bd. XXVI, Heft 10, pp. 735-754, 1 pl.