

distribute some product from the mandibular glands, is probably not homologous with the basal pit. It is oriented differently, and at least one species of "*Bothroponera*" has both the pit and the groove.

In the former *Trachymesopus*, species without the truly spine-like mid-tibial setae (except for 2-3 of these setae at the tibial apex) are divided into three groups: the *stigma* and *darwinii* groups, which have no basal mandibular pit and no anal lobe on the hind wing of the sexes, and the *sharpi* group, which has the pit, and the lobe in the male only, so far as known. The *sharpi* group is close to *Brachyponera*, with which it shares the pit and the lobe, but further information may dictate a separate genus for each of these groups.

In what remains of *Trachymesopus*, the *stigma* group (e. g., *stigma*, *cautus*, *pachynodus*, *rufonigrus*) has palpal segmentation 3, 3, while *darwinii* has 4, 3. Thus, it may be seen that *Trachymesopus* is a heterogeneous grouping even after the removal of the *Cryptopone* species; its reclassification will have to await the study of more of the larvae and adult winged forms.

Among the most promising of characters to be used in ponerine systematics are those of the larvae. The Wheelers (1952) have laid the groundwork for a comparative study of the larvae of the genera of Ponerini, but for the great majority of species of the tribe, the larvae have never been studied. The larvae of Ponerini are usually covered with peculiar medullate projections, called by the Wheelers "tubercles." In consonance with the morphological terminology applied to other holometabolous larvae, particularly Lepidoptera, I propose that these projections be called by the more specifically descriptive term *chalaza* (sing.), *chalazae* (pl.). The chalazae of Ponerini are matched by apparently homologous structures in tribes Thaumatomyrmecini and Odontomachini, which are close to Ponerini on the basis of adult characters as well. Some of the smaller ponerine genera bear special paired mushroom-shaped chalazae on one or more abdominal tergites; these have long been known to function as "hangers" by which the larvae are stuck to the ceiling and walls of the nest by a glutinous substance covering the head of the chalaza. The number and placement of these fungiform chalazae is important in generic taxonomy, but they must be used with care owing to the fact that they may change in number and form, or be lost altogether, as the instars metamorphose one into another.