

sexual forms. The labral hemocoel of soldiers and workers consists of 2 arms, 1 in each lobe, which were not united medially in those examined. In queens and males, the hemocoel either occupies the entire labrum or it occupies it with the exception of a median strip which separates the hemocoel into 2 parts. The labrum is usually heavily sclerotized. This is particularly true for *Nomamyrmex* (fig. 283), in which the labrum is thick and bears a heavy ridge near and parallel to the distal margin. Generally the labra of males are more abundantly setose than others, and this is particularly true for *E. burchelli* (fig. 206). In *N. gibbatus* a median point projects out over the median cleft.

Mandible. The variation in shape of the mandible is great, not only between species, but between castes of a single species as well. The mandibles of *E. mexicanum* castes (figs. 227, 231, 235) are generally typical of the intraspecific variation that can occur. With the exception of *E. rapax*, which does not have a distinct soldier caste, the mandibles of *Eciton* soldiers are cylindrical and hooklike. These mandibles are sharply pointed apically and are usually without subapical teeth or irregularities, although *E. lucanoides* does possess a subapical tooth medially along the mandible's length (fig. 222). In the workers of *E. mexicanum*, the mandible is triangulate with an apical tooth and several subapical denticles or irregularities. In the queen the mandible is linear and slightly curved distally and is pointed apically but without subapical teeth. The mandibles of males of *Eciton* are usually similar to that of *E. burchelli* (fig. 205), but in other ecitonine genera, they are usually proportionately broader and more falcate [e.g. *Neivamyrmex swainsoni* (fig. 278)]. There is much less difference between the mandibles of workers and soldiers of *Labidus* than occurs in *Eciton*. The mandibles of ecitonine workers are triangulate but with varying dentition and some variation in the appearance of the basal and masticatory margins. The mandibles of the *Neivamyrmex* species examined can be categorized into three groups: one in which the basal margin curves smoothly into the masticatory margin; another in which the basal margin is abruptly shouldered, forming a subquadrate bulge along the internal margin; and another in which the mandible is truncated apically and the basal margin is long and convex. To the first type belong *N. gibbatus*, *humilis*, *laevigatus*, *legionis*, *nigrescens* (fig. 266), *pilosus*, and *sumachrasti*; to the second *N. agilis*, *carolinensis*, *opacithorax*, and *wheeleri*; and to the third *N. postcarinatus*. Mandibular setal patterns and abundance vary widely among ecitonines. While the mandalus appears to be present in all the mandibles examined, the trulleum is often absent or modified in the mandibles of soldiers, queens, and males.

Maxilla. The maxillary palpus is 2-segmented in all species and castes examined. The stipites of soldiers and workers are relatively uniform in shape and construction throughout the Ecitonini. The stipes of the soldier