

species and with *Bradoponera*. In some *Discothyrea* species, in particular, the petiole is transverse in dorsal view and only slightly constricted behind, at its articulation with the following (postpetio- lar) abdominal segment. These attributes are doubtless adaptations to life in confined moist and irregular spaces in soil or rotting wood, where effective use of the antennae and sting would otherwise be compromised. The clypeal shelf probably functions with the mandibles to aid transport of arthropod eggs, upon which several species of both genera (including the remarkable secondarily epigaecic Mauritian *Proceratium avium* Brown) are known to feed (Brown 1958b, 1974). Females generally resemble workers, though the eyes are usually less reduced, and the mesosoma non-ankylosed, at least in those species with winged gynes.

The structural features of *Aulacopone* are, of course, known only for the female; those of the worker must be surmised. *A. relict*a nonetheless shows clear cryptobiotic tendencies. The female is of small to medium size for an ectatommine*, with fine sculpture comparable to that of various *Proceratium* and *Discothyrea* species, and relatively pale yellowish brown colour. The pilosity is dense, though short and not unlike that of some *Discothyrea* species, and the eyes are smaller than would be expected in an epigaecic ectatommine. The really distinctive features of the genus have to do with its cephalic structure (Figs. 1, 2), in which the fronto-clypeal part of the head is extended forwards to form a strong triangular process, partly covering the closed mandibles. The antennal fossae are carried forwards on this process almost to the level of the mandibular bases. The resulting structure is, however, very different from that of any *Proceratium* or *Discothyrea* species, for here the lobes of the frontal carinae are not elevated; they are instead extended laterally and posteriorly to form, on each side, the upper enclosure of a strong, deep scrobe, in which the folded antenna can be stowed. Such strong antennal scrobes are unusual in ectatommine ants, though those of *Heteroponera relict*a and of some *Discothyrea* species (discussed above) are almost as well developed. Each frontal carina is narrowed immediately above the appropriate antennal socket. This might facilitate anterior extension

*The measurements (mm) of the Mt Gugljaband specimen are: aggregate total length 4.25; maximum head length 1.08; head width across eyes 1.02; chord length of scape 0.59; maximum diameter of eye 0.24; Weber's length of mesosoma 1.36; scutum width 0.82; petiole width 0.52; petiole height 0.58; width of postpetiole (abd. II) 0.96.