

others, such as *emarginatus*, that exceed the size of the smallest *Odontomachus* (e. g., *minutus*, small *monticola*, *brunneus*, *spissus*, *simillimus*). Certain *Anochetus* (e. g., *faurei*, *rothschildi*, *gladiator*) also enter the *Odontomachus* size range at the small end. In size, *Champsomyrmex coquereli* is in the range of *Odontomachus*.

2) Shape of petiolar node. Although *Odontomachus* species do always have more or less faithful versions of the pointed-conic or uniaxile node, in some species (e. g., *spissus*, *biolleyi*) the point is low and blunt. The *Anochetus* species, on the other hand, show very wide variation in nodal shape. In the Indomalayan *princeps* group, species approaching the lower size limits of *Odontomachus* have subconical (*princeps*, *risii*, *rugosus*) or even spiniform (*gladiator*) nodal apices. These nodal forms grade into bluntly rounded ones (*levaillanti*, *orientalis*, etc.), and then an anteroposterior flattening of the nodal summit yields species such as *emarginatus*, *mayri*, *punctaticeps* and many others, with chisel-like, emarginate or bidentate apices.

3) Antennal fossae. One of the best arguments against this as a valid generic character is the existence of the Malagasy species *Champsomyrmex coquereli*, which is *Odontomachus* in size and nodal form, but lacks well-developed, confluent fossae. Emery «neutralized» this embarrassing species by assigning it to a monotypic genus. As if this arrangement were not artificial enough, an even more damaging fact can now be entered into the argument. *O. hastatus*, the well-known neotropical species, has large workers which, despite their somewhat *Stenomyrmex*-like habitus, can be classified on all three of the foregoing criteria as bona fide *Odontomachus*. But in the smaller workers of this species, the antennal fossae are absent or ill-defined, and at least are nonconfluent. Thus, in the formal key character, large workers of *hastatus* would run to *Odontomachus*, and small ones to *Anochetus*. The fossae are not really confluent in most *O. panamensis*; in *O. spissus*, they are rudimentary and scarcely form confluent sulci at the midline of the head.

The antennal fossa thus appears to be size-correlated (allometric) through a morphocline of species, but the correlation with size is incomplete and unevenly expressed along this morphocline. In the smaller *Anochetus* species, the approximate position of the missing fossa is often indicated by the posterior edge of a fan of radiating striae on the vertex.

Another character of possible significance is the presence or absence in the male of a downcurved spine on the apex of the pygidium. Some *Anochetus* lack the spine, some *Odontomachus* have it, but for the majority of species, the male remains unknown. In *A. isolatus*, the downcurved spine is well developed; in *A. filicornis* it is present and acute, but short; in *A. madaraszi* it is represented merely by a pointed fold at the pygidial posterior midline.

The evidence we have from the larvae (G. C. and J. Wheeler, e. g., 1971:1212-1214) also offers little encouragement for splitting *Odontomachus* and *Anochetus* on traditional lines.

Now we come to the new diagnostic character. I was led to discover (or rediscover?) this after rereading the remarks of Mayr (1862:708 ff.), in which he briefly mentioned as a character diagnostic of worker-queen *Odontomachus* the «tiefe