



Figure 2. Proposed phylogeny of the genus *Acanthomyrmex*, given a hypothetical myrmecine outgroup. Four additional, equally parsimonious trees differ only in the position of the species *dusun* and *careoscrobis*, as discussed in the text. All character state changes for initially polarized characters are mapped, but for simplicity only those unpolarized characters which show no homeoplasy within the *Acanthomyrmex* tree are shown. Numbers refer to characters as described in Table 1. Derived states are indicated in parentheses for multistate characters. Tree length: 78 steps.

more evenly rounded margin characteristic of majors in *notabilis* group species. The placement of the species in which the major caste has not yet been described (particularly *careoscrobis* and *concavus*) should be considered tentative.

Two trees are most parsimonious when *Pheidole tethepa* is used as the outgroup. The first is identical to the tree shown in Figure 2, except it is rooted just below *ferox* and *laevis*, such that the *ferox-laevis* clade is the sister to all other *Acanthomyrmex*. Thus now the *luciolsae* species group is paraphyletic, with *A. dusun* representing the sister species to the *notabilis* group. The other tree is similar, but the

species *crassispina* is displaced so as to represent the sister group of all other *Acanthomyrmex*. In addition the *ferox-laevis* and *basispinosus-luciolsae* clades now form a monophyletic group. Given that *Acanthomyrmex* is related to *Pheidole*, both of these phylogenies would appear to be reasonable, since the emarginate head characteristic of *Pheidole* major workers is treated as the ancestral condition for *Acanthomyrmex*.

TERMINOLOGY AND CHARACTER STATES

All available *Acanthomyrmex* material was examined in detail for differences in