



Figure 5. Consensus tree of 3 most parsimonious cladograms from recoded matrix with *Cerapachys* and *Myrmecia* included. *Myrmecia* is used as outgroup.

Discussion

Lattke's (1994) study was concerned with the ponerine tribe Ectatommini. His sample of Ponerinae genera outside Ectatommini is sufficient to challenge the monophyly of the tribe (sensu Brown 1958) and to argue for the recognition of Emery's Paraponerini. Nevertheless, Lattke's

choice of outgroup is unsatisfactory. He based his outgroup selection on a previous analysis by Baroni Urbani et al. (1992), but this analysis is problematic because it contains faults that are the result of a long turbulent history of the taxonomy of the poneroid complex as a whole.

When *Myrmecia* is chosen as outgroup (argu-

Table 1. Final recoded and expanded matrix. Missing values are denoted by '?'. Polymorphies are denoted by '*'. Inapplicable characters are denoted by '-'. All characters are treated as nonadditive.

| | 10 | 20 | 30 | 40 | |
|----------------------|------------|------------|------------|------------|---|
| <i>Myrmecia</i> | 0000000000 | 0000001000 | 0000000000 | 0001010001 | 0 |
| <i>Cerapachys</i> | 0210110200 | 1101002011 | 1000121101 | 1100111111 | 0 |
| <i>Paraponera</i> | 0110000200 | 0000111010 | 1110040011 | 0000010001 | 1 |
| <i>Proceratium</i> | 0210110210 | 11*1111010 | 1100121101 | 0000010111 | 0 |
| <i>Discothyrea</i> | 2200210210 | 2101111011 | 1100121101 | 0000010111 | 0 |
| <i>Rhytidoponera</i> | 0321111100 | 1110111010 | 11*1131101 | 0000010111 | 0 |
| <i>Ectatomma</i> | 0421101100 | 1110111010 | 1110130101 | 0000010111 | 0 |
| <i>Gnamptogenys</i> | 14211*1211 | 1110111010 | 110?131101 | 0000010111 | 0 |
| <i>Heteroponera</i> | 121120*111 | 1111001100 | 1100111001 | 0000010111 | 0 |
| <i>Acanthoponera</i> | 1001200110 | 1111001100 | 1100111001 | 0000010111 | 0 |
| <i>Pachycondyla</i> | 2200100100 | 0001001000 | 11*0010001 | 0000010111 | 0 |
| <i>Amblyopone</i> | 2110100100 | 00*1001*10 | 1100021011 | 0000000100 | 1 |
| <i>Typhlomyrmex</i> | 1521100001 | 0011001010 | 1100121001 | 0010010111 | 0 |
| <i>Platythyrea</i> | 2000000211 | 0000011001 | 11*0120001 | 0000000111 | 1 |
| <i>Centromyrmex</i> | 2210100101 | 0011001000 | 1100020001 | 0010010111 | 0 |
| <i>Harpegnathos</i> | 2200000000 | 0001?11000 | 1110000001 | 0001010111 | 0 |
| <i>Apomyrma</i> | 0??010???? | ???1?010?0 | 100024?001 | 11100-0??? | ? |
| <i>Nothomyrmecia</i> | 0??000???? | ???0?020?0 | 000120?000 | 10000-0000 | 0 |
| <i>Cheliomyrmex</i> | 0??011???? | ???1?020?1 | 100004?001 | 1100101001 | 0 |