



Figure 7. Cladogram from Figure 6 with the tribal grouping and numbers of currently recognized genera and species.

ably a better choice), it is clear that Lattke's preferred result is completely reversed (Fig. 3), and that his first outgroup, *Cerapachys*, is nested well inside Ponerinae (Fig. 4). Some of Lattke's characters are also problematic in the way there were coded (e. g., his character 15 with present, variable or absent). But even when the matrix is recoded the result is no different (Fig. 5). In conclusion, Lattke's results, even though they provide evidence for the reconsideration of Ectatommini, are insufficient to reclassify the group. Lattke's decision to reestablish the Ectatommini as was considered before Brown's revision of the tribe is cladistically inconsistent.

Nevertheless, Lattke's data are important because they shed some light regarding the status of Ponerinae as a natural group. When the sample outside Ponerinae is increased the paraphyly of Ponerinae is more evident (Fig. 7): the added *Nothomyrmecia* (Nothomyrmeciinae) appears outside the poneroid group (a reasonable result), and *Cerapachys* (Cerapachyinae), *Cheliomyrmex* (Ectoninae) and *Apomyrma* (Apomyrminae) group together and are nested inside Ponerinae.

Bolton (1990b) suggested the tergo-sternal fusion of abdominal segment four as a putative synapomorphy for Ponerinae. Nevertheless, when this

character is tested for its congruence with other characters it appears to be symplesiomorphous among the genera possessing it. The tergo-sternal fusion appears at the base of the poneroid group (Char. 22, Fig. 6) but it is reversed to an unfused state in the branch leading to *Apomyrma* + *Cerapachys* + *Cheliomyrmex*. This result contrasts with the intuitive view that fusion of sclerites is irreversible in evolution (Ward, 1994). Although this character loses force as a hypothesis of synapomorphy for Ponerinae, it is an additional putative synapomorphy for Bolton's poneroid group.

Figure 7 shows the final cladogram with a resumé of the tribal and family taxonomy of the groups included in this reanalysis and the number of genera and species in each tribe (Bolton 1995). The sample of characters and taxa used in this study resulted in a cladogram that does not support the tribal classification of Ponerinae as currently recognized. It can be seen that the results of this analysis are highly preliminary and that a more comprehensive taxon sampling will be necessary in order to shed some light on the poneroid group taxonomy. For example, Ponerini (Fig. 7) is only represented by 3 of the 22 genera currently recognized. Additionally, more characters of different sources are needed, as for example, characters