

simplification of thoracic structure (micronoty) so universal in the workers, is evidently a phylogenetic process, which was completed in most ant-genera before the Lower Oligocene. *Aptery* is, of course, to be carefully distinguished from *deålacion*, the dropping of the wings by the female ant immediately after fecundation. Deålacion is really a form of mutilation (autotomy) which has been practiced by female ants for millions of years without necessarily entailing any modification or diminution in the development of wing structures. Compared with this case of the non-inheritance of mutilations, the cases usually cited in the

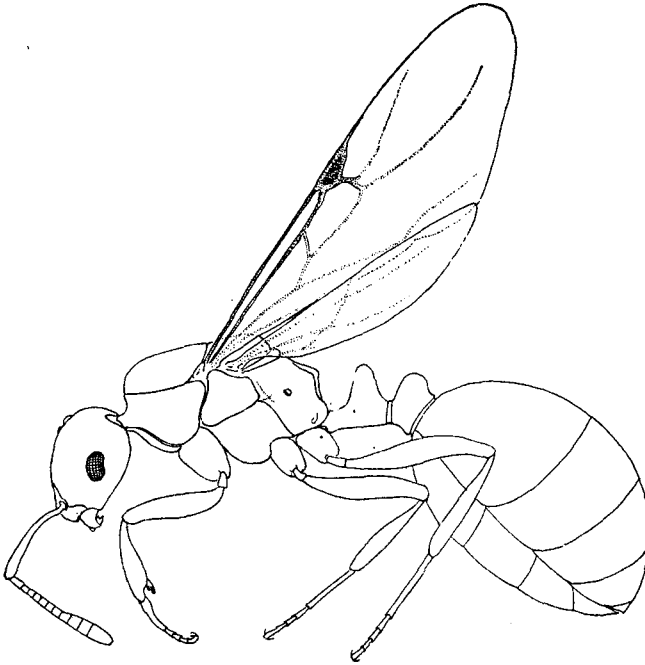


FIG. 1

Winged, macronotal female of *Monomorium rothsteini* Forel var. *humilius* Forel, lateral view.

text-books, such as circumcision and the docking of tails in mice, are insignificant, because they refer to such limited series of generations.

There are a few genera of ants, especially in the subfamily Myrmicinae, in which it is possible to trace all the transitions in thoracic structure from that of the female to that of the worker, except that, in all cases hitherto recorded, the wings show no transitions, but are perfectly developed in the typical female and entirely lacking in all the other forms of the series. Good examples are certain species of *Myrmecina* (*M. graminicola*) and *Leptothorax* (*L. emersoni*), but of all the genera