



Fig. 1. Gross morphology of *Pogonomyrmex comanche* worker.

have been considered important specific characters, and these spaces are usually described as "smooth" or "punctate." During this study many specimens were identified according to this system using a dissecting microscope, but data obtained from electron micrographs proved this terminology to be inappropriate in every case encountered. For example, the interrugal spaces of *P. montanus* appear strongly punctate under the light microscope which suggests that the surface is covered with punctures or pits. Electron microscopy (450 \times) revealed tiny rugules that are interconnected in a manner that is best described as "areolate" (Harris 1979). Accordingly, this term is used in place of "punctate" in the following discussions.

Subgenus *Pogonomyrmex*

A. The *badius* complex.—This complex is composed of only one species, *P. badius*. It is the only polymorphic species in North America, the only species to occur east of the Mississippi River, and it is largely allopatric with other congeners over its entire range. The workers are divided into minor, medium, and major size classes, whereas all other species (except for *Pogonomyrmex coarctatus* Mayr of South America) maintain only one worker size class. The large head of the major appears partially bilobed (Fig. 2), and there are no spines on the epinotum (Fig. 3). The scutellum is developed; in all other North American species this