

Figs. 56–59. Morphology of *Pogonomyrmex*, scale line for Figs. 57 and 58 = 0.1 mm, all others = 1.0 mm. 56–58, *P. huachucanus*: 56, Thorax, lateral view. 57, Epinotal spines. 58, Pedicel, lateral view. 59, *P. occidentalis* (gynandromorph): Head, frontal view.

mophore, one of the characters chosen by Wheeler (1902) to justify the creation of the subgenus. The coarse rugosity and heavy interrugal reticulation shared by all members of the group is also apparent. The compound eyes of these species are placed below the center of the head (Fig. 51). The prominent clypeal angles are diagnostic for *P. imberbiculus* (Fig. 51). Extensive reticulation and coarse rugosity cover the thorax (Fig. 52). A relatively massive postpetiole is present (Fig. 53), and numerous barbed hairs arise from the epinotal spines (Fig. 54).

One of the most problematic species in the genus is *P. huachucanus*. It is often described as intermediate between *Pogonomyrmex* sens. str. and the other two North American *Ephebomyrmex* species. The most obvious such character is the relative size of the ants. *Pogonomyrmex imberbiculus* is the smallest North American species in the

genus, whereas *P. huachucanus* is larger, but smaller than almost all members of the nominate subgenus. Rugosity and compound eye placement of *P. huachucanus* appear "intermediate" (Fig. 55). The thorax is not as heavily sculptured (Fig. 56), and the epinotal spines are more slender than those of *P. imberbiculus* (Fig. 57). The less abundant hairs found on these spines are relatively simple, but the postpetiole is proportionately large, as is that of *P. imberbiculus* (Fig. 58).

Sufficient differences between species of *Pogonomyrmex* and *Ephebomyrmex* exist to recognize two genera, as currently done by several other authors. These differences will be further documented in a forthcoming paper on the chromosomes of these species. Some question on the placement of "E." *huachucanus* still remains. The present study and the unpublished data on chromosomes