

fashion, for there was no noticeable difference between their behavior and that of the Tucson colony. This colony was housed in a plastic petri dish 90 mm. in diameter. A short polyethylene tube connected this petri dish to a second one which served as a feeding chamber. This arrangement permitted a close watch on the development of the brood. The other two colonies were kept in sealed aquaria which contained oak block observation nests. This provided the ants with passages similar to those which they normally use and at the same time gave them the opportunity to forage outside the nest.

Most of the habits of *rohweri* are like those of *texanus* but there are some significant differences in the behavior of the two species. At maturity the *rohweri* colony is notably smaller than that of *texanus*. There are seldom more than seventy-five workers present and in most of the colonies that we have seen the total has been less than fifty individuals. This is undoubtedly due to the fact that *rohweri* is seldom, if ever, pleometrotic. Each of the nine colonies of *rohweri* which we have examined had a single queen. The nests of *rohweri* are established in abandoned burrows of wood-boring beetles (often those of small buprestids) which are cleared of the detritus left in them by the beetle larvae. While most of the branches selected by *rohweri* consist of hard, sound wood it will nest in rotten branches as well. A limb housing one of the Santa Catalina colonies was so badly decayed that the ants were extracted by crumbling the wood between the fingers. As shown elsewhere (4) *texanus* ordinarily rejects nest sites in rotten wood. The burrows chosen by *rohweri* are of a size that permits the major to occlude the terminal opening. This occlusion is like that of *texanus*; the opening is blocked by the head and pronotum of the major, who crouches to admit the minor. An interesting variation of this response was observed in the junior author's colony. This colony originally occupied burrows in a large, dead palo verde branch. Just inside the entrance of one of these burrows was a circular flange of detritus. The circular opening in this flange was slightly more than 2 mm. in diameter. This opening was occluded by the cephalic disc of the major, who stood in the passage behind the flange. The workers of *rohweri* pack themselves tightly into the outer portion of the nest passage, as do those of *texanus*, but show one response under these conditions that *texanus* does not display. The minor worker of *rohweri* can reverse its position in the passage by a twisting somersault. This begins with a lowering of the head, whose forward edge is thrust under the anterior coxae. Thereafter the body is swung forward and downward and during this arc it is twisted sidewise. The end result is that when the