

the bark of the tree. In captivity, foragers often followed trunk routes at least 3–5 cm long before departing from them to forage singly.

Foraging minor workers fed at crushed fruit flies, fragments of freshly killed cockroaches, honey water baits, and Bhatkar diet (Bhatkar and Whitcomb, 1970). The ants avoided wounded fruit flies, and did not recruit minor and major workers to wounded prey as has been observed for *Erebomyrma nevermanni* (Wilson, 1986).

Soon after most large baits were presented, ants began arriving at the bait using a well-defined route, suggesting an odor trail had been laid down. However, recruitment behavior was difficult to document because of the tiny size of the ants and their weak response to food, even following periods of food deprivation.

Typically food was torn into small pieces and carried into the nest by solitary individuals. Whole dead fruit flies near the nest entrances were sometimes dragged into the nest by groups of 2–5 workers. However, this group transport behavior was poorly coordinated, as workers often pulled in conflicting directions.

*Repletes:* The *O. overbecki* majors were mildly replete (“semi-replete”), with their gasters never expanding to a size much greater than that of their heads. Moreover, the majors were no more replete than replete minor workers (judging by the volume of the gaster relative to that of the trunk).

*Emigrations:* Two shifts in nest location were documented in the laboratory. These followed periods of mild stress in which a 60 watt bulb was positioned 25 cm above the glass-covered nest chamber, while an unoccupied shaded chamber was provided 4–5 cm away. Within ten minutes the ants became more active, with darkly pigmented minors and a few majors leaving the nest chambers to explore the nest environs. Gradually more and more workers moved back and forth between the nest chambers and the shaded chamber, until it was clear that a set route had been established. Traffic along the emigration route was relatively steady throughout the period of brood transfer, with the number of ants passing an arbitrary point on the route exceeding 20 per minute.

The first immature was carried out of the nest 50 minutes into the second emigration; the sequence of brood transfer is documented in Figure 2. There was no group transport of immatures and no adult