

Fig. 8. Aggressive posture of a major worker of O. longinoda

laying odor trails rose sharply over a period of about half an hour, then declined toward zero during the next 1–2 h. The number of workers present in the arena rose to a higher peak somewhat later and thereafter declined at a much slower rate. The response was typical of recruited ants generally, and did not appear to differ from that of *Oecophylla* workers recruited to new food discoveries. A typical case history is provided in Figure 9.

Essentially the same response was obtained when new space could be defined in one or the other several different ways: (1) a simple extension of surface added onto the existing arena and in the same direction from the nest tree as the arena; (2) new surface adjacent to the nest tree but projected outward in a new direction; and (3) new surface added vertically within a previously occupied space, such as a glass platform elevated on glass bottles within the boundaries of the colony's arena.

b) Bridge Building. When an object such as a new arena or potted tree was placed close to the Oecophylla nest tree but not close enough for individual workers to step over to it, a remarkable sequence of behaviors ensued. Workers first crowded together on the end of the leaf or twig closest to the new object. They were apparently attracted visually to this position; when the object was moved part way around the nest tree workers abandoned the old site and moved separately to whatever new position was closest to the object. No trail laying occurred during the movements. Upon arriving at the closest site the