

Fig. 16. A worker of the African tree ant *Polyrhachis militaris* has been spreadeagled and immobilized by *Oecophylla* workers in the laboratory foraging arena. The capture of this large ant requires the initial cooperation of at least three *Oecophylla* workers, and the effort is abetted by both long-range and short-range recruitment of defending nestmates to the vicinity

encountered by a jerking trail layer began laying odor trails of their own, and they also exhibited the jerking motor display when they encountered still other workers, even though they had not yet experienced the enemy stimulus themselves. This is a rare example of chain communication in a social insect.

f) Entrapping the Enemy. In most cases observed, long-range recruitment caused a slow and modest buildup of Oecophylla workers in the arena where the intruders had been contacted. Simultaneously, the workers were deployed increasingly into small groups by short-range recruitment. The result was a higher rate of capture and immobilization of the enemy. Pogonomyrmex workers could seldom be held down by less than two Oecophylla working together, while three or four Oecophylla were required to immobilize the still larger Polyrhachis. In the initial stages of the invasion (when 5–10 of the alien ants were introduced), the density of the Oecophylla was sufficiently low and their deployment so close to random that each intruder seldom encountered more than a single Oecophylla at a time, and it therefore usually escaped with ease. As the Oecophylla increased in numbers and formed more clumps, the intruders were seized by groups of workers at higher frequencies. Eventually all were halted, spreadeagled by packs of the Oecophylla, and killed (Fig. 16). The corpses were then carried to the nest tree by groups of Oecophylla and eaten.