

RESOURCE FIDELITY IN ARGENTINE ANT WORKERS

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Since its introduction to California in 1905, the Argentine ant, *Linepithema humile* (Mayr), has readily exploited new environments. Argentine ants have been particularly destructive to agriculture because of their mutualistic relationship with homopteran insects, such as aphids, mealybugs, and scales. In exchange for honeydew, the ants provide the homopterans with shelter, and most importantly, defense against natural enemies. To determine if the ants are returning to the same food resource, they were allowed to forage on a calcuflor-dyed sucrose solution at one site in a citrus tree. The dye was replaced with 25% sucrose solution and ants were collected at this site and two other sites on the tree. Approximately 25-40% of foraging ants returned to a given resource. Greater than 95% of the ants at the other two sites had not previously visited the calcuflor-dyed sucrose solution, suggesting resource fidelity. Consequently, it may be important to have multiple bait stations because foraging ants develop an allegiance to resource sites.