

FIGURE 1. Approximate distribution (stippled area) of Wasmannia auropunctata on Santa Cruz Island in 1976.

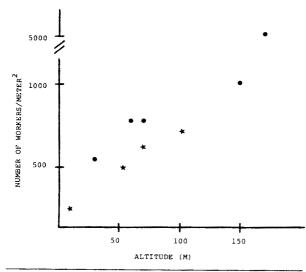


FIGURE 2. Relation between density of Wasmannia auropunctata workers and altitude on the south slope of Santa Cruz Island. Circles represent hot-season data, stars come from cool-season censuses.

nia, which uses honeydew, is unicolonial, and produces numerous small workers. In this case the principal displaced species (*Pogonomyrmex californicus* Buckley) was larger, had more specific food require-

ments, and formed smaller colonies than *I. humilis*. Erickson observed a steady displacement of *P. californicus* over a six-year period.

In Bermuda, *Pheidole megacephala* F. largely replaced the native ant fauna (Haskins and Haskins 1965). In the 1950's *Iridomyrmex humilis* appeared in Bermuda and began replacing *P. megacephala*, rapidly at first but later at markedly lower rate (Crowell 1968). In this case both species were unicolonial with small workers.

Hölldobler and Wilson (1977) suggest that tramp species like W. auropunctata, P. megacephala, and I. humilis, because they are unicolonial and support dense populations, must be generalists in food and nest-site requirements, a situation that was true for Wasmannia on Santa Cruz. Relative to most other species, Wasmannia tolerated a wide variety of environments. It foraged 24 hours a day, and so had a broader spectrum of foods available to it than species like Camponotus macilentus that were either diurnal or crepuscular/nocturnal. Wasmannia consumed a wide variety of foods, but because diet information for the other species is lacking it is not known whether Wasmannia's diet is in fact broader than that of the other ants.