# SEASONAL ABUNDANCE OF INSECT PESTS OF FIGS (*FICUS CARICA*) IN CALIFORNIA

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Producers and handlers of dried figs in Central California face unique insect pest management challenges. The dried fig industry is heavily dependent on fumigation and other postharvest treatments, in part because they have no economical and effective pre-harvest treatments for their insect pests.

The primary insect pests affecting California figs are the navel orangeworm and a complex of nitidulid beetles including the dried fruit beetle and several closely related species. Past studies of insect pest management in figs have focused on the nitidulids, which are present but not an economic problem in other horticultural crops in Central California. Currently some fig producers perceive the navel orangeworm to be a greater problem than the nitidulids. Many studies have examined the navel orangeworm as a pest of tree nuts in California, but there are few data in the scientific literature concerning the prevalence or biology of the navel orangeworm in figs.

Compared to other dried fruit and tree nut crops, fig production is more varied and complex. Figs on a given tree ripen and mature at various times over a period of weeks and therefore have a longer period of susceptibility to infestation by insect pests. There are four types of figs used for dried fig production in California: Calimyrna, Adriatics, Kadotas, and Missions. One of these types, the Calimyrna, requires pollination by the wasp *Blastophaga* to produce mature fruit and the other three can produce mature fruit without pollination. Calimyrna figs are important commercially, but have larger ostia and are more susceptible to insect and disease problems.

In this study we sampled, on a weekly basis, figs from Calimyrna and Adriatic orchards to examine the relative prevalence of the navel orangeworm and nitidulids, and to determine their spatial and temporal distribution. We also examined the relative effectiveness of synthetic aggregation pheromone mixtures and bait for attracting nitidulid species.