

Chemical Control/New Products

Fruit Flies–From Lab to Field

S. K. Zolbrod, R. A Van Steenwyk, E. M. Davis and R. M. Nomoto  
Dept. of E.S.P.M., University of California, Berkeley, CA

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*Abstract:* Laboratory trials were conducted on olive fruit fly (OLFF) and walnut husk fly (WHF). In both species, Malathion and GF-120 had very good efficacy. A GF-120 longevity trial with WHF was conducted and mortality decreased rapidly. A WHF density experiment with GF-120 was conducted and there was a decrease in mortality with increasing density. From these laboratory results, field studies were conducted in olive and walnut orchards. Two rates of Danitol were tested with Success and GF-120 in olives. Danitol caused immediate OLFF mortality at 0 DAT and closely resembled laboratory data. However, Success and GF-120 were not as effective. Field trials for WHF were conducted in four walnut growing regions in northern California. High, medium and low population management strategies were investigated. All conventional and reduced risk insecticides provided significantly lower WHF infestation than the untreated control. Under moderate to high populations, organophosphate insecticides were found to be more cost effective than the reduced risk insecticides. However, under low population pressure the application of GF-120 was comparable to OP pesticides.