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Chemical Control/New Products

Control of walnut huskfly with a spinosad plus bait (GF-120)

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*Abstract:* A trial was conducted in the San Joaquin valley, CA, to evaluate the efficacy of spinosad plus fruit fly bait (GF-120) for control of walnut huskfly (WHF) in walnuts. The trial was conducted in two orchards. GF-120 applications were initiated on July 10 in orchard No. 1 and July 17 in orchard No. 2, using a modified weed sprayer mounted on an ATV. Applications were terminated on September 19 at the beginning of husk-split in both orchards. GF-120 was diluted 1:4. In orchard No. 1, applications of GF-120 at 20 and 40 oz/ac applied weekly and 40 oz/ac applied every other week resulted in a significant reduction in fruit infestation compared to the blank bait or grower standard, but there was no significant difference among the GF-120 treatments. Despite the large reduction in fruit infestation, there was not a corresponding reduction in adult fly captures. In orchard No. 2, GF-120 10 oz/ac applied weekly and blank bait at 10 oz/ac applied every other week resulted in a significant increase in fruit infestation compared to the grower standard while GF-120 at 20 oz/ac applied weekly or every other week was not significantly different than the grower standard. It appears that 10 oz/ac was not sufficient to suppress this moderate population. GF-120 provided effective control of WHF. The amount of GF-120 per acre and/or the number of applications needed to suppress a population are dependent on the WHF density. GF-120 is slow-acting and has limited field longevity in the San Joaquin valley.