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(D1)

ORANGE: *Citrus Citrus sinensis* (L. Osbeck.) 'Valencia'

TIMING OF TEMIK AND MOVENTO APPLICATIONS FOR CONTROL OF ASIAN CITRUS PSYLLID (ACP) *DIAPHORINA CITRI*, 2010

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Asian citrus psyllid (ACP): *Diaphorina citri* Kuwayama

Aldicarb (Temik) is a systemic insecticide applied to the soil in winter or spring for control of ACP and spirotetramat (Movento) is a systemic insecticide applied as a foliar spray for the same purpose. The effectiveness of different timing scenarios of these two insecticides was compared with a grower standard dormant season (winter) application and an untreated control. Three 40-acre blocks of mature orange trees were selected in Glades County. Each block was divided into six sections and randomly assigned one of six treatments for this trial in an RCB design. The grower standard was zeta-cypermethrin (Mustang) was applied at 4.3 oz/ac on 15 Feb in 5 gpa with a Prop-Tec sprayer. Four additional treatments consisted of Temik at 33 lb/ac applied 15 eb followed or not by Movento at 10 oz/ac applied 15 Mar Temik applied on 15 Apr after a Mar application of Movento, or Movento applied alone in Mar. Movento was applied with 125 gpa water using a Durand Wayland Inc. (LaGrange, GA) AF500 CPS air blaster sprayer with 16 Albuz ATR 80 nozzles at 2 mph and 90 psi. Temik was applied by a commercial applicator into small furrows 4 inches deep on both sides of the tree 3 ft from the trunk and then covered. Temik was released and made available for take by the trees with irrigation and rain. Three locations per plot were selected for the sampling of 10 trees two taps per tree. Tap samples were conducted every other week to determine populations of ACP and beneficial arthropods consisting of spiders, Coccinellidae, and Chrysopidae. Tap samples were conducted using a clear acrylic clip board with a white paper back ground and a half inch two ft long PVC pipe. The clip board was placed four inches below an outer canopy branch selected from 4-6 ft from the ground with ½ to1 inch thickness in diameter. The branch was then tapped vigorously three times with enough force to dislodge arthropods from the branch which then fell onto the clip board and were counted. When present, new flush was inspected for presence or absence of ACP adults, eggs or nymphs but no treatment effect was observed. Data were analyzed with ANOVA and means separated using LSD ($P < 0.05$).

All treatments provided good ACP control through May. All treatments that included Movento held through 13 Jul. No ACP was found on trees receiving Temik in April for the last four sample dates or two months. There was no significant treatment effect observed on beneficial populations.

Table 1

	Adult ACP/tap			ACP x Days[1]
	3-Mar [1]	18-May [1]	13 July [1]	
Control	0.167A	0.333A	0.250A	2.192A
Mustang	0.033BC	0.067B	0.111AB	0.361B
Temik/Movento	0.000C	0.000B	0.017B	0.042B
Temik	0.061BC	0.006B	0.061AB	0.114B
Movento	0.100AB	0.056B	0.022B	0.381B
Movento/Temik	0.039BC	0.011B	0.000B	0.058B

[1] Cumulative average population of adult Asian citrus psyllids per tap sample pooled across sample dates.
Means followed by the same letter in the same column are not significantly different ($p < 0.05$, LSD).

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