

**EVALUATION OF INSECTICIDES FOR THE CONTROL OF WORM PESTS IN FRESH  
MARKET TOMATOES IN CENTRAL CALIFORNIA-2005**

Calvin Benny Fouché and Debra Boelk  
University of California Cooperative Extension  
420 South Wilson Way, Stockton, California 95205-6243

This trial was established at the Two Bees Research Farm in Escalon, California in order to evaluate the effect of products on worm pests in fresh market tomatoes. The tomato variety was Dominator, spaced 18 inches between plants centered on 60-inch wide beds 30 feet long. The plot was drip irrigated on flat beds with four replications. The tomato plants were not trained on stakes and required periodic trimming to facilitate effective pesticide application.

All foliar treatments were applied with a CO<sub>2</sub> powered backpack sprayer. In the first application all materials were applied with an 8002 center nozzle and TXVS-4 lateral, drop-down nozzles on a 30 inch wide boom. The boom was expanded to 50 inches in subsequent applications so that the nozzles were at an optimum distance from the plants as the plants grew larger. All subsequent applications were made with an 8002 VS center nozzle and 8025 VS nozzles on the drop-down sides. Operating pressure was 30 PSI @ 58 gal/A.

Materials were applied on 19 Aug, 02 Sept, and 16 Sept. Evaluations were made by selecting five plants in each plot and shaking fruit onto a white tarp. Fruit was inspected and counted both for worm damage and worms present. The white tarp was inspected for any worms that might have fallen off during the shaking process.

**Results**

High levels of control were seen in most of the chemicals, with Novaluron @ 12.0 oz showing the least worm damage, but not statistically different from many others. Those with lesser degrees of control were V10170, Novaluron @ 9.0 oz, Danitol, Success and BAS 320. All materials and rates provided control superior to the untreated control which sustained 16% damage. It is difficult to determine why the amount of damage in the untreated control was only half that seen last year. Pounds of fruit (data not shown) were comparable to last year's harvest.

## Control of Worm Damage in Tomatoes – 2005 Date of Harvest 09/30/05

Tomato Worm Trial 2005 Escalon California Evaluation 30 September

Products	Formulation	Prod/Acre	Percent Worm Damage
1. E2Y45	18.5% SC	3.3 fl oz	2.0a
2. E2Y45	18.5% SC	6.6 fl oz	2.3a
3. Tesoro (S-1812)	4 EC	6.4 fl oz	1.7a
4. V10170	50 WDG	1.4 wt oz	5.1b
5. Novaluron	.83 EC	9.0 fl oz	2.4ab
6. Novaluron	.83 EC	12.0 fl oz	0.2a
7. Danitol	2.4 EC	10.6 fl oz	2.4ab
8. Proclaim	5 SG	2.7 wt oz	2.2a
9. Proclaim	5 SG	3.0 wt oz	1.6a
10. Proclaim	5 SG	3.2 wt oz	1.3a
11. Success	2 SC	6.0 fl oz	3.1ab
12. Avaunt	30 WG	3.5 wt oz	2.0a
13. Intrepid	2 F	8 fl oz	2.3a
14. BAS 320	240 SC	16 fl oz	3.6ab
15. Entrust	80 %	2.5 wt oz	1.6a
16. Untreated Control			16.0c

Means in a column followed by the same letter are not significantly different at the 5% Level. DMR