

## I. Chemical Control/New Products

### a: Chemical Control

#### 1. peach twig borer (*Anarsia lineatella*), peach & apricot

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### Apricots

The test on apricots was conducted in a 12-year-old commercial 2.9 acre orchard of Perfection apricots near Donald, WA. Applications were done 1 June. Spray applications were done with a Rears (Eugene, OR) Pak-Blast air-blast sprayer using 100 gallons of water per acre. The south part of the orchard (1.9 acres) was used for a pheromone mating disruption test with CheckMate PTB. Mating disruption dispensers were hung according to the label at 6 to 8 feet off the ground to small limbs on the south side of the trees on 17 May. A mating disruption dispenser was hung on each of the 330 trees in this plot. Evaluations of treatment effects on peach twig borer were done 27 June by examining 400 apricots randomly selected from the center 4 trees of each plot and the number of peach twig borer larvae recorded. For the mating disruption plot 400 apricots from the west side and 400 from the east side were randomly selected.

### Results on Apricots

There were no significant differences in the number of peach twig borers in the plots treated with **Imidan, Sevin XLR Plus, Sevin Gel or Checkmate PTB** on 27 June as compared to the untreated check (Table 1).

There were significantly fewer peach twig borers in the plots treated with **Guthion, Legion, Penncap MS, or TD 2351** on 27 June as compared to the untreated check (Table 1).

### Conclusion:

Guthion, gave fair control of peach twig borer. Imidan gave poor control of peach twig borer. Legion gave fair control of peach twig borer. Penncap MS gave good control of peach twig borer. Sevin XLR Plus (at this low rate) gave poor control of peach twig borer. Sevin gel (at this low rate) gave poor control of peach twig borer. TD 2351-01 gave good control of peach twig borer. TD 2351-02 gave good control of peach twig borer. TD 2351-03 gave good control of peach twig borer. CheckMate PTB mating disruption gave poor control of peach twig borer.

### Peaches

The test on peaches was conducted in a 2-year-old commercial 4 acre orchard of "Whiteflesh" peaches near Pasco, WA. Applications were done 7 June. Spray applications were done with a Rears (Eugene, OR) Pak-Blast air-blast sprayer using 50 gallons of water per acre. The east part of the orchard (2.06 acres) was used for a pheromone mating disruption test with CheckMate PTB. Mating disruption dispensers were hung according to the label at 3 to 4 feet off the ground to small limbs on the south side of the trees on 16 May. A mating disruption dispenser was hung on every other tree

(416 dispenser covering 832 trees). Evaluations for the effects of the treatments on peach twig borer were done 29 June by closely examining 63 trees in each of the plots and recording the number of peach twig borer larvae found on the trees.

**Results on Peaches**

There were no significant differences in the number of peach twig borer in the **Garlic Barrier, Spinosad or CheckMate PTB** plots on 27 June as compared to the untreated check (Table 1).

There were significantly fewer peach twig borer in **Guthion, Imidan Malathion/methoxychlor, Penncap MS, Phaser , Thiodan and V-71639** plots on 29 June as compared to the untreated check (Table 1).

**Conclusion:**

Garlic Barrier gave poor control of peach twig borer. Guthion gave good control of peach twig borer. Imidan gave good control of peach twig borer. Malathion/methoxychlor gave good control of peach twig borer. Penncap MS gave good control of peach twig borer. Phaser gave good control of peach twig borer. Spinosad gave fair control of peach twig borer. Thiodan gave good control of peach twig borer. V-71639 gave good control of peach twig borer. CheckMate PTB gave poor control of peach twig borer.

Table 2. The percent control of peach twig borer from one test on apricots and one on peaches. Donald and Pasco, WA 1995.

<u>Treatment</u>	<u>Rate/acre</u>	<u>% Control on Apricots</u>	<u>%Control on Peaches</u>
Garlic Barrier	8%	ND	13%
Guthion 50WP	2 lb	48%	93%
Imidan 50WP	6 lb	30%	100%
Legion 8EC	1 pt	39%	ND
Malathion/ methoxychlor	3 qt	ND	87%
Penncap MS 2FM	1 gal	74%	100%
Phaser 50WP	2 lb	ND	80%
Sevin XLR Plus	2 pt	0	ND
Sevin gel	2 pt	0	ND
Spinosad 1.6%WP	3 lb	ND	53%
TD 2351-01 4FM	2 qt	57%	ND
TD 2351-02 4FM	2 qt	52%	ND
TD 2351-03 4FM	2 qt	69%	ND
Thiodan 3EC	5.3 pt	ND	93%
V-71639 0.84EC	1 pt	ND	100%
CheckMate PTB		22%	0

ND = no data