

# **EVALUATION OF INSECTICIDES FOR THRIPS CONTROL ON SEEDLING ONIONS, 1995**

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## **Abstract**

Five insecticides, imidacloprid (Admire, Bayer), chlorpyrifos (Lorsban, DowElanco), lambda-cyhalothrin (Warrior, ZENECA), bifenthrin (Capture, FMC), and carbofuran (Furadan, FMC) were evaluated for control of onion thrips on seedling onions grown for seed in a commercial field near Madras, Oregon. Materials were applied September 17, 1995, with thrips counts taken prior to application and 1, 6, and 10 days following application. Furadan provided the greatest control, with Admire producing significantly less control, but greater than no treatment. The effectiveness of Lorsban, Capture, and Warrior ranged between the Furadan and Admire.

## **Introduction**

Seed onions are an integral part of the vegetable seed industry in central Oregon, with nearly 400 acres grown annually for a gross income of \$1.5 million. Onion thrips are a major insect pest on seed onions grown in the area, with evaluation of insecticides for efficacy against onion thrips an important priority to the industry.

## **Methods and Materials**

The new insecticide, Admire, was compared to Lorsban, Warrior, Capture, Furadan, and untreated plots in a commercial seed onion field near Madras, Oregon. Pre-counts were made on September 14, 1995 by determining the number of thrips present on 15 randomly selected plants from the two center rows of each 10 ft x 20 ft plot. Insecticides were applied with the surfactant Silgard at the rate of 2 pt/100 gal water on September 17, 1995, using a CO<sub>2</sub> pressurized, hand-held, boom sprayer at 40 psi and 20 gal/a of water. Plots were replicated three times in a randomized complete block design. Thrips counts were made 1, 6 and 10 days following application on September 18, 23, and 27.

## **Results and Discussion**

There were no significant differences between the pre-counts of thrips prior to treatment (Table 1). Furadan appeared to take longer than the other materials to reach a maximum kill, but provided the greatest control of the insecticides evaluated. Admire provided significantly less control than Furadan, but significantly greater control than no treatment. Lorsban, Warrior, and Capture were not significantly different from each other, or with either Furadan or Admire on day 10. Additional evaluation is needed to determine if these initial results are representative of the performance of these materials.

Table 1. Results of insecticide trial applied September 17, 1995 to control tints on seedling onions near Madras, Oregon.

Treatment	Product/acre	Average number of thrips/plant			
		Pre-treatment	Day 1	Day 6	Day 10
Furadan 4 F	3 pt	5.3	1.7 b <sup>1</sup>	0.5 d	0.4 c
Lorsban 4E	4 pt	4.2	1.4 b	2.1 cd	3.6 bc
Capture 2EC	6.4 fl oz	5.8	2.4 b	2.5 bcd	2.7 bc
Warrior 1 EC	3.2 fl oz	6.6	2.7 b	4.2 bc	3.8 be
Admire 2F	16 fl oz	4.3	3.7 b	5.4 b	5.7 b
Untreated		4.2	6.9 a	10 a	9.8 a

Mean separation with the T-method at P 0.05