

## Section 2 Foliage and Seed Feeding and Mining Insects

### LEAFMINER CONTROL IN DRY BULB ONIONS

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Five insecticides were foliar applied to Bennie Red dry bulb onions and evaluated against an untreated Check for effectiveness in controlling Pea leaf miner (Liriomyza huidobrensis). Treatments were applied with a CO<sub>2</sub> charged backpack sprayer with a single nozzle boom and a D-2 cone nozzle at 35 PSI in 60 GPA water. Ortho X-77 was used at .25% V/V ratio. Plot size was 15' X 8.6' = 129 sq. ft. per replicate with four replicates per treatment in RCBD experiment. Treatments were applied on June 8, June 15, June 29, July 13, and July 27, 1987. Treatments were evaluated for Leafminers on July 6, July 20, and August 3, 1987, examining 10 lower leaves per replicate.

The high organic Lake Labish onion growing area is considered a heavily infested region for Leaf miners. Yellow solo plastic cups were sprayed with Tangle foot and placed in fields to catch Leaf miner flies. Traps were replaced on a weekly basis and flies tabulated. First trap catches occurred on May 11, 1987, and increased up to 275 on August 3, 1987.

All treatments gave better Leafminer control as compared to the untreated Check. All insecticides gave good early season control of Leafminers when populations were low. When fly populations increased, in the middle of the season, Trigard 75WP at 2.6 ounces/A. gave best control of all treatments. Diazinon, Pounce and Cygon insecticides all gave acceptable commercial Leafminer control throughout the season. Trigard was ineffective for onion thrip.

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1987 Oregon Onion Co. Leafminer Trial  
Bennett Farm  
Brooks, Oregon

NO.	TREATMENT	RATE PER ACRE	AVERAGE PER REPLICATE 10 LEAVES PER PLOT		
			7/6/87	7/20/87	8/3/87
1.	PENNCAP-M 2EC	2 pt.	4.5 a	7.0 a	10.3 c <u>1/</u>
2.	DIAZINON 4EC	1 pt.	2.8 a	5.5 a	4.8 ab
3.	POUNCE 3.2EC	5 oz.	1.8 a	2.5 a	4.3 ab
4.	CYGON 2.67EC	1 pt.	0.8 a	4.5 a	6.3 ab
5.	TRIGARD 75WP	2.6 oz.	2.5 a	4.0 a	3.0 a
6.	CHECK	Ø	5.3 a	13.3 b	7.0 bc

Treatment applied: June 8, June 15, June 29, July 13, July 27, 1987.  
Sample size: 10 leaves per replicate with individual mines counted.  
Pea Leaf Miner (*Liriomyza huidobrensis*).  
1/ Any value followed by a common letter is not significantly different (P=0.5%) according to Duncan's Multi Range Test.