Section 1 Mites and Sap-Sucking Insects

INSECTICIDES FOR CONTROL OF ONION THRIPS D.F. Mayer, K.C. Volker and J.D. Lunden Wash. St. Univ., Prosser, WA 99350 and ICI. Yakima, WA 98908

This study was designed to evaluate ICIA0321 1EC (ICI), Cymbush 3EC (ICI), Ambush 2EC (ICI) and Parathion 8A for control of onion thrips (Thrips tabaci) when applied to bulb onions (Allium cepa).

Plots were established in a commercial field of 'Magnum' onions located near Warden WA. Onions were planted in May on double rows. Standard fertility, irrigation, and weed control practices were followed. Plot size was 0.005 acre and arranged in a randomized complete block design with 4 replications. Spray applications were done 12 July with a R&D CO₂ pressurized sprayer at 20 gallons of water per acre with a hand-held boom with 4 (LF3) nozzles. Applications were at 9 am. Temperature was 85° F., solar radiation 43 langleys, relative humidity 33, and no wind. Spray water pH was 7.6

Evaluations were made on 15, 19, 26 July and 2 August by counting all thrips adults and nymphs found on 5 plants in the center of each of the plots.

Results:

No phytotoxicity was observed.

- ICIA0321. There were significantly fewer onion thrips in the plots treated with ICIA0321 at 3, 7, 14, and 21 days after application as compared to the untreated check (Table 1).
- Cymbush. There were significantly fewer onion thrips in the plots treated with Cymbush at 3, 7, 14, and 21 days after application as compared to the untreated check (Table 1).
- Ambush. There were significantly fewer onion thrips in the plots treated with Ambush at 7, 14, and 21 days after application as compared to the untreated check (Table 1).
- Parathion. There were significantly fewer onion thrips in the plots treated with Parathion at 3, 7, and 14 days after application as compared to the untreated check (Table 1).

Table 1. Effect of insecticides applied on 12 July to 0.005 acre plots of 'Magnum' onions on onion thrips. Warden, WA. 1991.

Treatment		Me	Mean No. thrips per plant			
	lb/(AI)a	<u>15 Jul</u>	<u>19 Jul</u>	26 Jul	2 Aug	
ICIA0321 1EC	0.025	1.5a	1.9a	4a	38a	
Cymbush 3EC	0.08	2.9a	7.4a	7.8a	43a	
Ambush 2EC	0.3	6.4ab	8.1a	12.5a	53ab	
Parathion 8A	0.75	3.4a	7.9a	10.6a	70bc	
Untreated check	y applications, w	9.1b	22.4b	38.1b	77c	

Means within a column followed by the same letter are not significantly different at the P = 0.05 level, Newman-Keuls studentized range test.

Evaluations were made on 15, 19, 26 July

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