

Section I. MITES AND SAP-SUCKING INSECTS

IRRIGATION INSECTICIDE INJECTIONS FOR CONTROL OF POTATO
AND GREEN PEACH APHIDS ON POTATOES, 1984

L. E. Sandvol

P.O. Box AA, Aberdeen, ID 83210

MATERIALS AND METHODS

"Russet Burbank" potatoes were planted May 1, 1984 in Purdam silt loam at the University of Idaho, Research and Extension Center, Caldwell, ID. The plots were 80 ft diameter circles (0.1 acre) spaced 80 ft apart. Four treatments were replicated 4 times in a complete randomized block design. Three in. hook-and-latch pipe with 6-1/8 in. nozzles were used in 3 positions on the field. Treatments were applied with a MAZZEIG injector for 20 min. Water was applied at the rate of 0.2 in/hr with a 7 h.p pump. Insect populations were sampled pre-treatment and 1, 3, 7 days post-treatment by counting live aphids per 25 leaves.

RESULTS

Pydrin at the .2 lb rate and Thiodan at 1.0 lb rate controlled potato aphids. The same treatments also reduced green peach aphids significantly. However, the Pydrin treatment did not provide satisfactory control in practical terms.

Treatment and lb ai/acre	<u>Potato aphids/25 leaves</u>			
	7-24	7-25	7-27	7-31
Pydrin .1.....	3.5a*	1.8a	2.5b	2.5b
Pydrin .2.....	7.8a	2.3a	0.8a	0.5a
Thiodan 1.0.....	7.3a	3.0a	0.5a	0.5a
Check.....	10.0a	9.3b	5.8c	10.3c

Treatments and lb ai/acre	<u>Green peach aphids/25 leaves</u>			
	7-24	7-25	7-27	7-31
Pydrin .1.....	15.5a	7.8a	2.3b	2.8b
Pydrin .2.....	12.0a	9.3a	4.5ab	1.5bc
Thiodan 1.0.....	10.0a.....	10.0a	7.5a	0.8c
Check.....	12.8a	9.3a	7.3a	8.5a

* Treatment means flanked by the same letter are not significantly different from each other using Duncan's MRT at the 0.05 level.