

COLORADO POTATO BEETLE CONTROL WITH FOLIAR INSECTICIDAL SPRAYS

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'Russet Burbank' potatoes were planted May 20, 1982 in Declo silt loam soil. The experiment consisted of 18 treatments with 4 replications arranged in a randomized complete block design. Individual plots were 4 rows (12 ft) wide and 36 ft long. Treatments were applied July 20, using a CO₂ pressurized Aztec sprayer at 40 PSI to apply 20 gal H₂O/A.

Beetles were allowed to invade and multiply naturally. Pre- and post-treatment counts were taken by recording the total number of beetles in 36 ft of row. All synthetic pyrethroid formulations were effective in controlling Colorado potato beetles. Nor-am and Standack treatments were somewhat less effective.

Section II
 Foliage - and Seed-Feeding and Mining Insects

		<u>Colorado potato beetle/36 ft row</u>		
Treatment and lb ai/acre		7-20-82	7-21-82	7-28-82
Nor-Am 72129	.025	.29.5 a ^{1/}	.0 a	.3 a
Nor-Am 72129	.5	.83.0 a	2.8 b	5.0 bc
Nor-Am 72129	.1	.42.5 a	.8 a	1.5 b
Check.		.72.3 a	10.8 c	60.0 d
Check.		.30.3 a	3.3 b	54.5 d
Payoff 2.5	.12½	.60.5 a	.0 a	.3 a
Payoff 2.5	.25	.17.5 a	.3 a	.0 a
Mavrik 2E	.025	.23.3 a	.5 a	.0 a
Mavrik 2E	.05	.67.0 a	.0 a	.0 a
Mavrik 2E	.10	.54.5 a	.0 a	.0 a
San 410Sc	1 qt	.57.3 a	37.0 c	46.8 d
San 410Sc	2 qt	.72.0 a	13.5 c	1.8 b
FCR 1272 2EC	.125	.76.8 a	.0 a	.0 a
FCR 1272 2EC	.255	.51.0 a	.0 a	.0 a
FCR 1272 2EC	.500	.55.0 a	.0 a	.0 a
Standack 2.6F	1 lb	.68.5 a	.0 a	.0 a
Standack 2.6F	½ lb	.48.9 a	10.0 c	7.0 c
Check.		.17.3 a	23.5 c	71.8 d

^{1/} Numbers followed by the same letter are not significantly different (P=0.05) by Duncan's Multiple Range test.