EFFICACY OF PERMETHRIN FOR CONTROL OF LEPIDOPTERA ON CRUCIFERS

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Highly significant differences in the number of lepidopterous larvae were observed comparing treated and non-treated plots (Table 1). The diamondback moth, P. xylostella, occurred in each crop at high densities in the non-treated plot. However, the presence of diamondback moth larvae in either treated plot was not detectable, indicating that the insecticide applications were very effective for population reduction. Similarly, densities of the cabbageworm, P. rapae, were effectively reduced in the treated plots relative to the non-treated plots. Although no semi-looper larvae were detected in the treated plots on broccoli and cauliflower, the density of larvae in non-treated plots was too low for statistical differentiation. The density of semi-looper larvae on non-treated cabbage was high enough to indicate a significant difference in comparision to the treated plots.

In summary, Pounce® appeared to provide effective population reduction of lepidopterous larvae on broccoli, cabbage and cauliflower. The rate of application at .05 lb. a.i. per acre provided the same degree of control as did .20 lb. a.i. per acre.

Table 1. Number of Lepidopterous larvae on various cole crops treated with Pounce®. Corvallis, OR, September 16, 1980.

Crop	Treatment	Total no. (F-ratio) of larvae: Plutella xylostella	Pieris rapae	Semi-loopers
Cauliflower	Pounce .01 A	0	0	0
	Pounce .02 B	0	0	0
	Check C	50	12	2
		(25.8)**	(12.8)**	(2.3)
Broccoli	A	0	0	0
	B	0	0	0
	C	357	15	2
		(42.4)**	(21.3)**	(2.3)
Cabbage	A	2	0	0
	B	0	0	0
	C	168	66	6
		(15.0)**	(60.9)**	(5.3)