

EVALUATION OF FOLIAR TREATMENTS FOR POTATO LEAFHOPPER ON ALFLAFA, 2001

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Efficacy of six foliar insecticide treatments to control PLH were evaluated on the second cutting of 4th year alfalfa at the OARDC Western Branch Station near South Charleston, OH. Plots were 15 X 60 ft with four replications in a RCBD. Treatments were applied 19 June with a custom-built sprayer having a boom length of 15 ft and TeeJet 8002 nozzles spaced at 15 inch intervals. The system was calibrated to deliver 24 gal./acre at 35psi at a tractor speed of 3 mph. Abundance of PLH adults and nymphs was estimated before treatment and at 7, 14 and 21 days after treatment. Yields were taken with a forage plot harvester.

All chemical treatments achieved significant control of PLH, which significantly reduced stand growth and yield of the untreated check. Significant differences in PLH adult counts among chemical treatments were observed at 14 and 21 DAT. Significant differences in PLH nymph counts were observed among chemical treatments at 21 DAT.

Table 1.

Treatment/ Formulation	Rate/ Acre	No. PLH adults and nymphs/10 sweeps							
		18 June		26 June		2 July		10 July	
		Pre-treatment Adult	Nymph	7 DAT Adult	Nymph	14 DAT Adult	Nymph	21 DAT Adult	Nymph
Baythroid 2	1 fl oz	35.50 a	0.00 a	0.00 a	0.00 a	4.50 a	0.00 a	20.00 a	0.00 a
F0570 0.8 EW*	2.6 fl oz	31.00 a	0.00 a	1.00 a	0.00 a	13.50 a	0.00 a	21.75 ab	0.00 a
Lorsban 4E	1 pint	30.75 a	0.00 a	11.75 b	0.00 a	35.25 bc	5.00 a	39.25 cd	42.25 c
Pounce 3.2EC	6 fl oz	41.25 a	0.00 a	5.25 ab	0.00 a	43.50 c	3.75 a	54.50 d	21.25 b
Warrior T	1.9 fl oz	31.75 a	0.00 a	0.00 a	0.00 a	21.50 ab	0.00 a	25.75 abc	0.00 a
Warrior T	2.56 fl oz	42.00 a	0.00 a	0.25 a	0.00 a	9.50 a	0.00 a	17.75 a	0.00 a
XR-225*	1.9 fl oz	36.25 a	0.00 a	0.25 a	0.00 a	21.25 ab	0.00 a	21.75 ab	0.00 a
Untreated		35.25 a	0.00 a	57.50 c	11.25 b	64.75 d	310.25 b	35.75 bc	274.50 d

Means followed by the same letter in a column are not significantly different (P = 0.05, LSD).

* Not labeled on alfalfa.

Table 2.

Treatment	Form. Rate oz / acre	Stand Height & Growth (inches)			Yield (dry weight) Tons / acre
		18 June Pre-Trt.	10 July Pre-harvest	Stand Growth	
Baythroid 2	1 fl oz	10.78 a	25.80 a	15.03 a	2.05 a
F0570 0.8 EW*	2.6 fl oz	11.05 a	24.40 ab	13.35 ab	2.05 a
Lorsban 4E	1 pint	10.78 a	22.93 b	12.15 b	2.00 a
Pounce 3.2EC	6 fl oz	10.93 a	25.05 a	14.13 a	2.00 a
Warrior T	1.9 fl oz	10.93 a	25.38 a	14.45 a	1.88 a
Warrior T	2.56 fl oz	10.20 a	25.15 a	14.95 a	1.95 a
XR-225*	1.9 fl oz	9.90 a	24.65 ab	14.75 a	1.85 a
Untreated		10.58 a	15.55 c	4.98 c	1.53 b

Means followed by the same letter in a column are not significantly different (P = 0.05, LSD).

* Not labeled on alfalfa.