Section I. Mites and Sap-Sucking Insects

Strawberry Aphid Control on Strawberries

G.C. Fisher, J.D. Calkin, R. Weinzierl, D.E. Burns
Department of Entomology
Oregon State University
Corvallis, OR 97331

Three insecticides were applied on 4-23-84 to control the strawberry aphid and the meadow spittle bug. Leaves were inspected 25 days post spray for differences in spider-mite populations as well. Each treatment and an untreated check were replicated five times in a Latin square design with replications comprising 75 linear feet of row (42 in. centers). Insecticides were applied with an Amerind McKissick Sprayer at ca. 60 psi in the equivalent of 83 gpa spray solution (2 qts./rep.) with a handgun delivering a hollow cone spray to completely cover aerial foliage. No adjuvants were used: pH of water used to formulate spray was 6.5.

Plots were inspected prior to treatment for aphid infestation on 4-17-84 and 2, 7, 15, 22, 28, 36, and 50 days post treatment for aphid control. Total numbers of meadow spittle bug nymphs on foliage were recorded on three randomly selected linear ft. samples per plot 22 days after application. No phytotoxicity was observed in any of the treatments.

Results appear below:

SPIDER MITE CONTROL

Treatment and ai	$\bar{x}$ No. motile mites/leaf [1]
Lorsban 50W 1.5 lb/A	10.3 [2]
Baythroid 2E 25 g/hectare	13.5
Baythroid 2E 50 g/hectare	12.
Metasystox-R 2E 0.75 lb/A	10.6
Untreated Check	9.8

[1] 5 trifoliate leaves inspected/rep., total 25/trmnt.

[2] No statistically significant differences at the 5% level using DMRT.

STRAWBERRY APHID CONTROL

Treatment and ai	$\bar{x}$ No. live aphids per 10 leaves per plot Days post spray [1] Pretreat	2	7	15	22	28	36	50	
Lorsban 50 w 1.5 lb/A	24.2±1.28	0	0	0	0.2±0.2	0	2.±0.77	4	B[2]
Baythroid 2E 25 g/hectare	21.8±3.34	0	0	0	0	0.2±0.20	0.4±0.40	7	B
Baythroid 2E 50 g/hectare	23.8±7.28	0	0.2±0.2	0	0	0.2±0.20	0	1.6	B
Metasystox-R 0.75/A	17.4±4.78	0	0.4±0.4	0	0.2±0.2	0	1.6±1.12	4	B
Untreated Check	23.6±3.84	16.6±4.94	14.6±3.23	23.4±6.71	34.8±6.06	36.4±9.66	40.±11.55	100.2	A

[1] Threshold level in the spring is ≈ 15 aphids per 10 leaf sample.
[2] No.'s followed by same letter are not statistically different at the 5% level based on Duncan's multiple range.

MEADOW SPITTLEBUG CONTROL

Treatment and ai	Mean No. live spittlebugs per 3 linear ft. per plot [1]
Lorsban 50W 1.5 lb/A	3.6±1.03
Baythroid 2E 25 g/hectare	0
Baythroid 2E 50 g/hectare	0
Metasystox-R 2E 0.75/A	6.6±2.69
Untreated Check	53.0±7.46

[1] 22 days post spray