Section 1 Mites and Sap-Sucking Insects

BEAN (SNAP): <u>PHASEOLUS VULGARIS</u> 'PROVIDER' TWO-SPOTTED SPIDER MITE: <u>TETRANYCHUS URTICAE</u> KOCH WESTERN FLOWER THRIPS: <u>FRANKLINIELLA OCCIDENTALIS</u> PERGANDE

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CONTROL OF MITES AND THRIPS ON BEANS, 1982. Garden beans planted at Kimberly, Idaho, May 27 for seed were sprayed July 28 to control mites and thrips. Materials were broadcast applied over the rows with a CO₂ pressurized backpack sprayer, Spraying Systems 8004 nozzles, 30 psi, and at 20 gal finished spray/A. Plot size was six rows (11 feet) by 25 feet. All treatments were replicated three times in a randomized complete block design. Thrips and mites were sampled on August 2, 9, 16, or, 5, 12, and 19 days after application, respectively. On each sampling date, 10 trifoliate leaves were picked from different plants in each plot and examined for mites and thrips.

Spider mite control was best with Comite. After the first sampling date, however, no treatment was significantly different from the check. Thrips reduction was best with Cygon, the area commerical standard, and MSR. Other materials provided significant control when compared to the untreated check through the August 9 sampling date. On August 16, Cygon was the only product providing significant control.

Material and 1b ai/A	mean number mites/10 leaves			mean number thrips/10 leaves		
	8/2*	8/9	8/16	8/?	8/9	8/16
Untreated check	71.3 ab**	109.0 abc	212.0 abc	56.6 a	72.0 a	76.0 ab
Metasystox-R 2E 0.5		57.0 bc	147.3 bc	12.5 bc	21.7 de	27.3 ab
Mavrik 2E 0.05	41.0 b-e	87.7 abc	227.3 abc	14.9 bc	38.7 bcd	46.3 ab
Mavrik 2E 0.10	93.7 a	170.0 a	384.3 a	21.9 bc	26.0 c-e	48.0 ab
Mavrik 2E 0.15	51.0 b-e	115.0 abc	273.7 ab	13.2 bc	26.3 abc	64.3 ab
Comite 6.5 1.6	7.0 e	12.3 c	26.3 c	46.4 a	51.0 ab	52.7 ab
Kelthane 8 EC 0.6	30.3 b-e	38.7 bc	64.7 bc	36.7 abc	52.7 bcd	50.7 ab
Systox 6 EC 0.5	24.0 cde	84.3 abc	159.7 bc	24.2 abc	39.0 bcd	58.7 ab
Phosdrin 4 Misc. 0.5	15.3 de	57.3 bc	132.3 bc	6.7 c	49.0 abc	58.3 ab
Trithion 8 EC 0.5	31.0 b-e	84.7 abc	210.3 bc	28.0 bc	51.7 abc	42.0 ab
Ethion 8 EC 0.5	66.0 abc	134.0 ab	219.3 abc	18.7 bc	37.7 bcd	69.3 ab
Cygon 400 0.5	30.0 b-e	44.3 bc	126.3 bc	5.2 c	8.0 e	25.3 b
Dibrom 8 Misc. 1.0		68.0 abc	140.3 bc	32.7 abc	63.3 ab	80.3 a
Plictran 50 W 0.5		104.3 abc	103.0 bc	37.9 abc	50.7 abc	60.0 ab

* Treated 7/28

** Means followed by the same letter are not significantly different at the 5% level, Duncan's Multiple Range Test.