

Section I
Mite and Sap-Sucking Insects

CONTROL OF TWOSPOTTED SPIDER MITE ON AZUKI BEAN

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Seven chemical were evaluated for control of TSSM at the Irrigated Agriculture Research and Extension Center, Prosser, Benton County, WA. Spray treatments were applied with a CO₂-powered backpack sprayer calibrated to deliver 25 gal/acre at 60 psi from a 6 ft boom with three TXVS-8 conejet nozzles. A completely randomized design was used with 0.01 acre plots replicated 5 times. Treatments were applied on 19 August 1992. TSSM females were sampled by randomly selecting 20 leaflets/plot. Leaflets were placed in paper bags and kept cool in a coldbox until processed with a mite brushing machine. Plots were visually examined for evidence of phytotoxicity.

After 9 days posttreatment, though not significantly different, Capture provided the most effective treatment followed by Avid and combination of Capture + Comite. The remaining four treatments were showing visual evidence of TSSM silvering, bronzing of azuki bean foliage comparable to the untreated plots. These data indicate that acaricidal efficacy may have been better if the treatments were applied a week earlier.

		Mean No. TSSM/leaf*				
Treatment and lb (AI)/acre		7 Jul	3 Aug	10 Aug	22 Aug	28 Aug
Capture 2EC	0.1	0.12ab	1.28a	7.68a	0.48c	1.20e
Avid 0.15EC	0.25	0.22ab	1.26a	14.64a	6.00c	5.04de
Capture 2EC + Comite 30WP	0.06 + 1.6	0.00b	0.67a	7.08a	1.20c	11.88de
Carzol 92SP	0.5	0.12ab	0.76a	7.32a	13.56bc	20.16cd
Comite 30W	2.0	0.34ab	1.60a	9.60a	25.80ab	28.92bc
Apollo 4SC	0.21	0.41ab	1.17a	8.04a	35.88a	44.28ab
Dibeta 5%	0.15	0.30ab	1.72a	10.44a	25.32ab	40.56b
Untreated		0.56a	1.79a	12.60a	34.80a	59.88a

* Means within the same column not followed by the same letter differ significantly (P = 0.05) DNMRT.