

A Layby Weed Control Trial in Watermelons. Mullen, R. J., C. L. Elmore, R. Chavarria. A layby weed control trial in watermelons, evaluating five herbicides, was established at Azevedo Farms (John Azevedo) in French Camp, California, on June 20, 1983. The soil type was a Piper clay loam, and all treatments were applied as a directed spray away from the crop, using a hand-held CO₂ backpack sprayer and immediately soil incorporated three to four inches deep two times--once in each direction (east-west)--using the grower's spike-harrow/ring roller incorporator. The crop was at the 12 to 18 inch rosette stage of growth on the day of treatment. Furrow irrigation followed three days after treatment. Weed control and crop phytotoxicity ratings were taken on 7/1/83 and again on 7/20/83. Over the period of time from application to the last rating date, none of the materials gave good control of sowthistle. Sonalan (ethafluralin), followed by Dual (metolachlor) and Lasso (alachlor), were quite effective in controlling hairy nightshade and barnyardgrass (watergrass); Prowl (pendimethalin) and Devrinol (napropamide) were quite effective in controlling barnyardgrass but weak on hairy nightshade and sowthistle. Some slight growth suppression of the crop temporarily occurred with Sonalan, Lasso, and Devrinol, but otherwise all treatments were quite safe to the watermelons.

<u>Treatment</u>	<u>Rate Lb/Ac</u>	<u>Weed Control^{1/}</u>						<u>Crop ^{1/} Phyto</u>	
		<u>Hairy nightshade</u>		<u>Sowthistle</u>		<u>Barnyardgrass (Light stand)</u>		<u>7/1</u>	<u>7/20</u>
		<u>7/1</u>	<u>7/20</u>	<u>7/1</u>	<u>7/20</u>	<u>7/1</u>	<u>7/20</u>		
pendimethalin	1	5.5	5.1	5.8	5.6	8.5	9.1	0.8	0.5
ethafluralin	1	8.3	8.4	5.5	5.9	8.6	9.0	1.1	1.0
metolachlor	3	8.0	8.0	7.1	4.8	8.5	9.0	0.8	0.5
alachlor	3	8.1	7.6	7.3	5.8	8.3	8.6	1.0	1.1
napropamide	2	5.0	4.5	9.0	5.5	9.1	9.3	1.0	0.9
Control	-	0.0	2.3	0.0	0.5	0.0	1.8	0.6	0.7

1/ Average of four replications:

0 = no weed control; no crop damage
 10 = complete weed control; crop dead