A Layby Weed Control Trial in Bell Peppers. Mullen, R. J., F. Clayton A layby weed control trial in bell peppers, comparing four herbicides, was established at John Kautz Farms west of Lodi, California, on June 21, 1983. The soil type was a Hanford sandy loam, and all treatments were applied as a directed spray, away from the crop, using a handheld CO₂ backpack sprayer and immediately soil incorporated 3 to 4 inches deep two times—once in each direction (east—west)—using the grower's rolling cultivator. The crop was 4 to 6 inches tail at time of treatment. Furrow irrigation followed five days after treatment. Weed control and crop phytotoxicity ratings were taken on 7/11/83 and again on 7/18/83. Best overall weed control occurred with Dual (metolachlor) at the higher rate, followed closely by Dual at the low rate and Lasso (alachlor)—the latter two treatments a little weak on purslane. Sonalan (ethafluralin) was excellent in controlling purslane and hairy nightshade but weak on yellow nutsedge. Prowl (pendimethalin) gave excellent control of purslane, fair results on nightshade, but was weak on yellow nutsedge. All materials were quite safe to the bell pepper crop.

	Weed Control ¹								
	Rate	Purglane		Hairy Nightshade		Yellow Nutsedge		Crop_/ Phyto	
Treatment	Lb/Ac								
pendimethalin	24 23.4	$\frac{7/11}{8.6}$	$\frac{7/18}{9.5}$	$\frac{7/11}{5.5}$	7/18	$\frac{7/11}{4.3}$	7/18	$\frac{7/11}{0.9}$	7/18
ethafluralin	1-1/8	8.1	9.4	9.0	9.3	4.0	4.5	1.0	0.7
alachlor	3	7.9	7.5	8.6	8.3	8.4	8.8	0.6	0.7
metolachlor	2	7.4	7.3	8.5	8.5	9.1	9.0	0.9	0.7
metolachlor	3	7.8	8.1	8.9	8.8	9.5	9.3	0.9	0.7
control	62	2.5	2.5	2.8	2.3	2.5	2.5	0.7	0.6

^{1/} Average of four replications:

^{0 =} no weed control; no crop damage

^{10 =} complete weed control; crop dead