

Celery Weed Control Studies 2011

University of California Cooperative Extension, Monterey County
Richard Smith Farm Advisor

Methods: Trial was conducted in south of King City to test the impact of pre and post transplant applications of herbicides to celery. All pretransplant applications were made on July 27. Over-the-top post transplant applications were made to plots immediately following transplanting on July 28. Irrigation to set the transplants was applied approximately 2 hours following the post transplant treatments were applied. All materials were applied with 2 passes of a one tip wand with an 8008E nozzle at 30 psi applying the equivalent of 68 GPA. Each plot was one 40-inch bed wide by 10 feet long and was replicated three times in a randomized complete block design. Harvest evaluations were not conducted at this site due to a scheduling mix up. Soil type was Mocho silt loam and the variety was 'Greco'. See table for evaluations and dates.

Results: There was intense weed pressure at this site. Malva was the first weed to emerge and was rated on the first evaluation date on August 4 (Table 1). Nortron and Caparol were both weak on this weed, but Chateau and Goal Tender were effective. Post transplant applications of Chateau provided complete control of malva, but were injurious to the celery plants. Purslane and nightshades emerged by the second evaluation date on August 11. Chateau applied both pre and post transplant provided excellent control of malva. Chateau applied post transplant had significant phytotoxicity on this evaluation date. Goal Tender also provided good overall weed control. Caparol was weak on malva, but provided good control of purslane. Nortron provided better control of both malva and purslane at the 48 fl oz rate.

Treatments	a.i./A	Material/A	Timing	4-Aug		11-Aug					
				Malva	Phyto ¹	Malva	Purslane	Night-shades	Other weeds	Total weeds	Phyto ¹
Untreated	----	----	----	36.3	0.0	56.0	28.0	2.0	1.3	87.3	0.0
Chateau 51WG	0.094	3.0 oz	Pre transplant	1.7	0.0	2.7	0.7	0.0	0.0	3.3	0.0
Chateau 51WG	0.188	6.0 oz	Pre transplant	1.3	0.0	1.3	0.0	0.0	0.0	1.3	2.0
Nortron 4SC	0.83	32 fl oz	Pre transplant	27.3	0.0	35.7	15.0	0.0	0.0	50.7	0.0
Nortron 4SC	1.25	48 fl oz	Pre transplant	18.7	0.0	24.7	6.7	0.3	0.3	32.0	0.0
Caparol 4L	1.5	3.00 pints	Pretransplant	33.0	0.0	42.3	2.0	0.3	0.0	44.7	0.3
Goal Tender 4F	0.25	8.0 fl oz	Pre transplant	7.0	0.0	11.3	0.7	0.3	0.0	12.3	1.7
Chateau 51WG	0.094	3.0 oz	Post transplant	0.0	2.7	0.0	0.0	0.0	0.0	0.0	4.0
Chateau 51WG	0.188	6.0 oz	Post transplant	0.0	6.3	0.0	0.0	0.0	0.0	0.0	6.3
			Pr>trt	<0.001	<0.001	<0.001	<0.001	0.002	0.019	<0.001	<0.001
			Pt>block	0.529	0.233	0.484	0.092	0.633	0.259	0.456	0.861
			LSD (0.05)	7.2	0.5	10.5	8.2	0.8	0.7	13.8	0.9