

## **2006 Spinach Weed Control Trials**

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**Methods: Trial No 1:** The trial was established in cooperation with Jerry Rava and Chris Headley in San Ardo. Basamid and Vapam applications were made on June 2, 2006 to 80 inch beds. Basamid was applied to the bed with a 5-foot wide Gandy applicator and Vapam was bladed into the beds with a commercial applicator. Each Basamid plot was one 80 inch bed wide by 300 feet long and replicated 3 times. It was compared with the adjacent Vapam treated bed for the weed evaluations. Following the application, sprinkler irrigation was applied three times a day for three days to seal in the material. The beds were shaped prior to planting. The beds were treated with a low rate of RoNeet following planting (0.75 pint/A) and the germination water was started on July 10. **Trial No. 2:** The trial was established in cooperation with Chris Drew and Roel Rodriguez off Espinosa Road, west of Salinas. All material applied post plant preemergence on August 4. Each plot was one 80 inch bed wide by 15 feet long and replicated four times in a RCBD. All materials applied with four passes of a one nozzle wand with an 8008E teejet tip in the equivalent of 73 GPA of water. Variety = Hellcat. See tables for evaluations and dates.

**Results: Trial No 1:** There was moderate weed pressure in the trial. All of the fumigation treatments reduced weeds, especially by the July 25 evaluation date (Table 1). There were no difference between the fumigation treatments, but there was a trend that indicated that 400 lbs of Basamid provided improved weed control over 200 lbs. **Trial No. 2:** There was good weed pressure in the trial and the various materials had different strengths and weaknesses. RoNeet was more effective than the other materials in controlling malva (Table 2). Triallate at 4.5 lbs a.i./A and all other materials reduced shepherds purse. Triallate at 4.5 lbs a.i./A and Lorox at 0.10 lb a.i./A provided the best control of sow thistle. Given the various strengths and weakness of the materials, there were no statistical differences in total weeds. The combination of RoNeet + Dual Magnum was the most injurious treatment to the crop. RoNeet alone, RoNeet + Dual Magnum and Lorox had the lowest hours per acre to weed. Treatments with the highest yields included: untreated, Triallate at 1.5 lb a.i./A, RoNeet alone and Lorox at 0.10 lb a.i./A.

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Table 1. Trial No. 1. Weed counts (no. weeds/ 9.3 ft<sup>2</sup>) on two dates

Treatment	Material/A	Chenopods	Nightshade	Pigweed	Purslane	Nutsedge	Other	Total Weeds
July 15								
Untreated	---	0.18	0.06	0.04	0.03	0.02	---	0.33
Basamid	200 lbs	0.00	0.00	0.00	0.00	0.01	---	0.01
Basamid	400 lbs	0.00	0.00	0.00	0.00	0.00	---	0.00
Vapam	300 lbs	0.01	0.00	0.00	0.00	0.00	---	0.01
LSD (0.05)		0.05	0.04	0.02	n.s.	n.s.	---	0.01
July 25								
Untreated	---	3.51	0.36	0.52	1.71	0.16	0.34	6.59
Basamid	200 lbs	0.45	0.03	0.00	0.31	0.07	0.34	1.20
Basamid	400 lbs	0.14	0.03	0.00	0.10	0.03	0.07	0.38
Vapam	300 lbs	0.24	0.10	0.12	0.15	0.00	0.10	0.72
LSD (0.05)		1.31	0.23	0.40	0.81	0.15	n.s.	1.63

Table 2. Trial No. 2. Weeds per 60 ft<sup>2</sup> on August 16, time to weed on August 21 and yield on September 5.

Treatment	Lbs a.i./A	Material/A	Malva	Shepherds Purse	Sow Thistle	Total Weeds	Phyto <sup>1</sup>	Hrs/A to weed	Yield Lbs/plot
Untreated	----	---	10.7	8.0	8.0	28.0	0.0	32.9	17.0
Triallate (Far-Go 4E)	1.50	1.50 quarts	11.0	6.7	8.0	26.0	0.0	33.0	17.1
Triallate (Far-Go 4E)	3.00	3.0 quarts	8.7	5.0	4.0	18.0	0.0	29.6	15.9
Triallate (Far-Go 4E)	4.50	4.5 quarts	9.7	4.7	2.0	16.7	0.0	26.0	15.3
RoNeet 6E	0.93	1.25 pints	2.0	1.3	7.3	13.3	0.3	15.1	17.3
RoNeet 6E	0.93	1.25 pints	2.7	2.7	9.3	15.0	2.3	13.7	13.8
+ Dual Magnum 7.63	0.48	0.50 pint							
Dual Magnum 7.63	0.48	0.50 pint	8.0	3.0	4.7	18.0	0.7	23.8	15.2
Dual Magnum 7.63	0.96	1.00 pint	7.7	3.0	3.3	15.7	1.7	20.0	13.1
Lorox 50	0.10	0.2 lbs	12.3	2.0	1.7	16.3	0.0	17.3	16.9
LSD (0.05)			10.3	4.7	7.4	n.s.	0.8	6.9	1.8

1 - Scale: 0 = no crop damage to 10 crop killed.