

## **2013 Parley Weed Control Trial**

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**Methods:** The trial was established in west of Hollister on a site with Sorrento silty clay loam soil. The field was seeded and the preemergence treatments were applied on January 29. The postemergence treatment were applied at the first true leaf stage on March 13. The material was applied with two passes of a one nozzle wand with an 8008E nozzle at 30 psi applying 70 GPA. The trial was arranged in a randomized complete block design with three replications. Each plot was one 80 inch bed wide by 10 feet long.

**Results:** All preemergence treatments provided excellent weed control on the March 4 evaluation date (Table 1). The March 25 evaluation date shows the results of both the preemergence and postemergence applications on weeds and the crop. The postemergence application of Caparol at 2 pints/A had the greatest phytotoxicity rating (Table 2). The postemergence application of Lorox at 1.0 lb/A had an acceptable phytotoxicity rating. The postemergence application of Caparol and Lorox had the lowest number of weeds. Preemergence applications of Caparol and Lorox had more weeds than the postemergence applications. Postemergence applications of Caparol and Lorox also had the lowest weeding time, but postemergence applications of these materials appeared to reduce yields more than preemergence applications. GWN 9994 was not active on nightshade and this weed accounted for the majority of the weeds at this site.

Table 1. Phytotoxicity and weed counts (50 ft<sup>2</sup>) on March 4.

Material	Lbs a.i./A	Material/A	Application	Phyto <sup>1</sup>	Malva	Night-shade	Lambs-quarter	Total weeds
Caparol 4L	1.5	3 pints	Preemergence	0.7	0.0	0.0	0.0	0.0
Caparol 4L	1.0	2 pints	Postemergence	0.0	3.7	2.3	3.7	10.0 <sup>2</sup>
Lorox	0.75	1.5 lbs	Preemergence	0.0	0.0	0.0	0.0	0.0
Lorox	1.5	3.0 lbs	Preemergence	0.0	0.3	0.0	0.0	0.3
Lorox	0.5	1.0 lbs	Postemergence	0.0	1.0	4.0	4.3	10.7 <sup>2</sup>
GWN 9994 <sup>3</sup>	4.0	4 qt	Preemergence	0.0	1.0	2.0	0.0	3.0
Untreated	---	---	---	0.0	0.7	7.3	2.7	10.7
Pr>treatment				0.4682	0.1287	0.3058	<0.0001	<0.0001
LSD (0.05)				ns	ns	ns	1.2	3.8

1 – scale: 0 = no crop damage to 10 crop dead; 2 – post emergence application not yet applied; 3 – new low VOC formulation of bensulide (Prefar);

Table 2. Phytotoxicity, weed counts (50 ft<sup>2</sup>) and yield on March 25.

Material	Lbs a.i./A	Material/A	Application	Phyto <sup>1</sup>	Malva	Night-shade	Lambs-Quarter	Sow Thistle	Purs-Lane	Total Weeds	Weed time hr/A	Yield Grams/0.5 m <sup>2</sup>
Caparol 4L	1.5	3 pints	Preemergence	0.00	0.00	12.33	0.33	0.00	0.00	12.67	24.1	1,302.9
Caparol 4L	1.0	2 pints	Postemergence	4.33	0.33	0.67	0.00	0.00	0.00	1.00	5.6	1,024.4
Lorox	0.75	1.5 lbs	Preemergence	0.00	0.00	37.00	0.00	0.00	0.00	37.00	47.8	1,429.4
Lorox	1.5	3.0 lbs	Preemergence	0.00	0.00	9.00	0.00	0.00	0.00	9.00	19.4	1,267.9
Lorox	0.5	1.0 lbs	Postemergence	1.33	0.00	2.33	0.00	0.33	0.00	2.67	8.7	1,094.5
GWN 9994 <sup>2</sup>	4.0	4 qt	Preemergence	0.00	0.33	41.00	0.67	0.00	0.00	42.00	46.6	1,175.4
Vegetable Pro 4L	1.5	3 pints	Preemergence	0.00	0.67	36.00	2.00	0.00	0.33	39.00	29.5	1,211.3
Prefar <sup>3</sup>	3.0	3 qt										
Untreated	---	---	---	0.00	1.00	45.67	3.67	0.00	1.33	51.67	63.5	1,362.1
Pr>treatment				<0.0001	0.2418	0.2932	<0.0001	0.4706	0.0891	0.2143	0.0382	0.2772
LSD (0.05)				0.52	ns	ns	0.98	ns	0.94	ns	35.7	351.4

1 – scale: 0 = no crop damage to 10 crop dead; 2 – new low VOC formulation of bensulide (Prefar); 3 – standard treatment