

2019 Lettuce Weed Control with Balan Studies

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

Methods: *Trial No. 1.* Material was applied post planting preemergence to lettuce on May 31 on a site with Chualar loam soil. Each plot was one 40-inch bed wide by 20 feet long. The trial was a non-replicated observational trial. *Trial No. 2.* Material was applied post plant preemergence to lettuce on to a site with Salinas clay loam soil. Each plot was one 40 inch bed wide by 20 feet long. The trial was a non-replicated observational trial. *Trial No. 3.* Material was applied post plant preemergence to head lettuce on a site with Chualar loam soil. Each plot was one bed wide by 15 feet long and replicated four times in a randomized complete block design. See tables for dates of weed control evaluations.

Results: *Trial No. 1.* The data is a bit variable, but the data indicate that Kerb provided better weed control than Balan with or without Water Max. *Trial No. 2.* The data indicate that the combination of Balan with Kerb at 3.0 or 4.0 pints/A had improved weed control than Kerb alone. *Trial No. 3.* Weed pressure was light at this site. Most of the weeds that were present are not well controlled by Balan, Kerb or Prefar (sow thistle and groundsel). The only weed that could give a good measure of weed control, shepherd's purse, was present in low densities. There was a fair amount of unevenness in this trial that was associated with the treatments, but also with disease issues which made it difficult to draw conclusions from the phytotoxicity data. There were no significant yield differences among the treatments.

Table 1. Trial No. 1. Weed evaluations on June 20

Material	Rate	Shepherd's Purse	Purslane	Phyto
Balan	2.0 lbs	9	0	0
Balan	2.5 lbs	18	0	3
Balan Water Max	2.0 lbs 2.0 qts	18	0	0
Balan Water Max	2.5 lbs 2.0 qts	17	0	4
Kerb	3.0 pts	6	0	0
Untreated	---	20	4	0

Table 2. Trial No. 2. Weed evaluation on June 29

Material	Rate	Shepherd's Purse	Nettle leaf goosefoot	Sow thistle	Nettle	Total weeds	Phyto
Balan Kerb Water Max	2.0 lbs 1.0 pt 2.0 qts	1	4	1	8	14	0
Balan Kerb Water Max	2.0 lbs 2.0 pts 2.0 qts	2	4	1	6	13	0
Balan Kerb Water Max	2.0 lbs 3.0 pts 2.0 qts	1	3	0	5	9	0
Balan Kerb Water Max	2.0 lbs 4.0 pts 2.0 qts	1	2	0	7	10	0
Kerb	3.0 pts	0	4	0	12	16	0
Untreated	---	4	3	0	13	20	0

Table 3. Trial No. 3. Weed counts on September 4 and phytotoxicity ratings on two dates

Material	Rate	Sow Thistle	Groundsel	Shepherd's Purse	Total Weeds	Phyto Sept 4	Phyto Oct 10	Mean Head lbs Oct 21
Balan	2.0 lbs	0.5	1.8	1.0	3.3	0.0	1.3	1.7
Balan Water Max	2.0 lbs 2.0 qts	0.3	1.0	0.0	1.5	0.0	0.0	1.7
Balan Kerb Water Max	2.0 lbs 2.5 pts 2.0 qts	0.0	1.3	0.5	1.8	0.0	1.3	1.5
Balan Kerb Water Max	2.0 lbs 5.0 pts 2.0 qts	0.5	0.3	0.3	1.0	0.0	1.5	1.6
Kerb	2.5 pts	0.5	1.3	0.5	2.3	0.0	1.5	1.7
Kerb	5.0 pts	0.3	2.0	0.3	2.5	0.5	2.0	1.5
Kerb Prefar	2.5 pts 5.0 qts	0.0	1.5	0.8	2.3	0.3	0.3	1.8
Prefar	5.0 qts	0.0	0.5	0.5	1.0	0.3	0.8	1.9
Untreated	---	1.0	2.5	1.3	4.8	0.0	1.3	1.9
Pr>F treat		0.4171	0.3473	0.4510	0.9530	0.1432	0.5883	0.7637
LSD _{0.05}		ns	ns	ns	2.5	ns	ns	ns