

WEED CONTROL IN SWEET CORN
OREGON AGRICULTURAL EXPERIMENT STATION - 1961

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Several herbicides were evaluated for selective weed control in sweet corn in 1961. Various methods of application were compared and a comparison of planting depths was made to determine possible interactive effects with Eptam applications. With the favorable germination conditions existing at the time of planting, the deep planting emerged only about one day after the shallow planting. The weed population was light and consisted primarily of redroot pigweed (*Amaranthus retroflexus*). All herbicide treatments resulted in satisfactory control. Ratings of crop response were made four weeks after planting and crop yields measured at normal time of harvest. This information is presented in the following table.

Chemical	Rate per acre (lbs active)	Timing	Method of Application	Planting	Crop Response Rating 1/	Yield per plot 2/
Eptam	3	preplant	disc deep	deep	3	18.8
"	"	"	" "	shallow	2	19.0
"	"	"	blade deep	deep	1	15.9
"	"	"	" "	shallow	1	18.2
"	"	"	blade shallow	deep	2	18.0
"	"	"	" "	shallow	1	19.8
Randox-T	4.5 (Randox)	"	disc shallow	"	3	8.3
"	"	"	blade shallow	"	3	16.6
"	"	"	blade deep	"	5	11.9
"	"	post-plant	surface	"	0	17.7
"	"	at emergence	"	"	0	19.6
Randox-T (Granular)	"	post-plant	"	"	0	18.6
Atrazine	2	preplant	disc shallow	"	0	19.1
"	"	"	blade shallow	"	1	22.3
"	"	post-plant	surface	"	0	21.0
"	"	at emergence	"	"	0	21.9
"	"	post emergence	"	"	0	19.9
Atrazine (Granular)	"	post-plant	"	"	0	18.8
DuPont 326	2	preplant	blade shallow	"	0	19.7
"	"	post-plant	surface	"	0	21.4
"	"	at emergence	"	"	1	17.3
"	"	post emergence	"	"	2	19.6
Untreated check					0	17.8

1/ Response rating 0= no effect, 10= complete kill.

2/ Yield in pounds of graded husked ears.

Blade applications were made with a single nozzle underneath a 12 inch sweep. Deep applications were approximately four inches and shallow applications approximately two inches.

It will be noted that the Eptam incorporated by deep discing resulted in observable crop injury early in the season but this was not reflected in loss of yield. All plots of Radox-T that were incorporated into the soil showed some plant injury in the ratings, but of these, applications from the deep blade or incorporated by shallow discing were all that resulted in important yield losses.