

Evaluation of the low rates of Select Max[®] (clethodim) for control of Roundup Ready[®] field corn in a replant situation at Potsdam, MN in 2006.

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The objective of this trial was to evaluate the performance of low rates of Select Max[®] (clethodim) for control of Roundup Ready[®] field corn in a replant situation in southeastern Minnesota. The research site was a Port Byron silt loam soil with an organic matter of 3.2%, pH of 6.7, and soil test P and K levels of 65 ppm and 273 ppm, respectively. The field was spring disked, and field cultivated twice prior to planting. The corn hybrid DKC 51-45RR2, was planted on June 13, 2006 at a depth of 1.5 inches in 30 inch rows at 32,000 seeds per acre. A randomized complete block design was used with four replications. Preemergence (PRE) and postemergence (POST) treatments were applied with a tractor-mounted sprayer delivering 20 gpa at 32 psi using TurboTee 11002 nozzles. All plots were damaged with a wire-tined leaf rake to simulate hail injury one day prior to SelectMax[®] applications. Evaluations of the plots were taken on July 7, July 13, July 21 and August 30. Application dates, environmental conditions, and weed stages are listed below.

CONCLUSIONS: Select Max[®] applications at all rates applied at POST I provided 96% or better control of Roundup Ready[®] field corn by the August 30th rating. POST II applications were not as consistent with the 1.98 oz rate of Select Max[®] providing only 61% control on the August 30th rating. (University of Minnesota Extension Service, Regional Center, Rochester, MN).

Date	May 8	June 26	July 3
Treatment	PRE	POST I	POST II
Temperature (F)			
air	68	78	78
soil	60	--	82.5
Relative Humidity (%)	63	39	74
Wind (mph)	18	8	5
Soil moisture	adequate	adequate	dry
Corn			
stage	--	2 collar	4 collar
height (inch)	--	5	11
Rainfall after each application (inch)			
week 1	1.36	0.00	0.12
week 2	0.03	0.12	0.90
week 3	0.11	0.90	1.86

Table. Performance of low rates of Select Max[®] (clethodim) for control of Roundup Ready[®] field corn on July 7, July 13, July 21, and August 30 at Potsdam, MN in 2006.

Treatment	Rate	Corn control			
		7/7	7/13	7/21	8/30
	(rate/A)	(%)			
PRE / POST I					
Harness Xtra / Agri-Dex COC	1.8 qt / 1 qt	0	0	0	0
Harness Xtra / Select Max + Agri-Dex COC	1.8 qt / 1.98 oz + 1 qt	73	78	94	98
Harness Xtra / Select Max + Agri-Dex COC	1.8 qt / 3.96 oz + 1 qt	80	87	97	96
Harness Xtra / Select Max + Agri-Dex COC	1.8 qt / 7.9 oz + 1 qt	89	95	99	98
PRE / POST II					
Harness Xtra / Agri-Dex COC	1.8 qt / 1 qt	0	0	0	0
Harness Xtra / Select Max + Agri-Dex COC	1.8 qt / 1.98 oz + 1 qt	13	65	61	61
Harness Xtra / Select Max + Agri-Dex COC	1.8 qt / 3.96 oz + 1 qt	23	77	81	95
Harness Xtra / Select Max + Agri-Dex COC	1.8 qt / 7.9 oz + 1 qt	30	86	89	99
LSD (P=0.10)		4	3	6	6