Roundup Ultra Max and Roundup WeatherMax

Evaluation of Roundup Ultra Max and Roundup WeatherMax for weed control in corn at Potsdam, MN in 2002. Schaufler, Kristal L., Fritz R. Breitenbach, and Lisa M. Behnken. The objective of this trial was to evaluate the weed control performance of Roundup Ultra Max and Roundup WeatherMax in corn in southeastern Minnesota. The research site was a silt loam containing 3.2% organic matter with a pH of 6.7 and soil test P and K levels of 66 and 376 ppm, respectively. The previous crop was soybean. The site was chisel plowed in the fall and field cultivated once in the spring. The corn hybrid, Dekalb 53-34, was planted on May 3, 2002, at a 2-inch depth in 30-inch rows at 31,000 seeds/A. A randomized complete block design with four replications was used. Postemergence (POST) treatments were applied with a tractor-mounted sprayer delivering 20 gallons per acre at a pressure of 32 psi using TurboTee 11002 nozzles. Evaluations of the plot were made on June 24 and July 5, 2002. Application dates, environment conditions, and crop and weed stages are listed below.

Date	Jun 14	June 24
Treatment	POST I	POST II
Temperature (F)		
air	68	86
soil		
Relative humidity (%)	60	50
Wind (mph)	15	18
Soil moisture	adequate	adequate
Corn		
Stage	4 collar	6 collar
height (inch)	10	13
Common lambsquarter		
weed density/ft ²	49	
height (inch)	2.75	1
Wild proso millet		
weed density/ft ²	17	
height (inch)	1.5	1
Velvetleaf	_	
weed density/ft ²	5	
height (inch)	1	1
Rainfall after application (inch)		
week 1	2.23	0.33
week 2	0.53	0.20
week 3	0.00	0.29

The sequential applications of Roundup Ultra Max and Roundup WeatherMax provided the best overall weed control of all treatments, giving excellent control of common lambsquarter, velvetleaf and wild proso millet. Single applications of Roundup Ultra Max at 26 oz/A and Roundup WeatherMax at 21.7 oz/A gave better control of common lambsquarters than the lower rates of 13 oz/A and 10.8 oz/A, respectively. Single applications of both herbicides, at the low and high rates, resulted in similar control of velvetleaf and wild proso millet. All treatments had yields significantly less than the weed free check, presumably because of early season weed competition. However, corn yields were similar for all herbicide treatments, except for the low rate, single application of Roundup Ultra Max, which had a slightly lower yield. (Southeast District, University of MN Extension Service, Rochester).

Table. Roundup Ultra Max and Roundup WeatherMax weed control performance in corn on July 5 at Potsdam, MN in 2002 (Schaufler, Breitenbach, and Behnken).

Treatment	Rate	Common lambsquarter control	Velvetleaf control	Wild proso millet control	Crop Injury	Corn yield
Postemergence I	(rate/A)	(%)	(%)	(%)	(%)	(bu/A)
Roundup Ultra Max + AMS	13 oz+2.5 lb	83	86	95	0	186
Roundup WeatherMax + AMS	10.8 oz+2.5lb	82	86	95	0	203
Roundup Ultra Max + AMS	26 oz+2.5 lb	91	85	95	0	193
Roundup WeatherMax + AMS	21.7 oz+2.5lb	89	87	95	0	212
Postemergence I/Postemergence II						
RoundupUltra Max+AMS / Roundup Ultra Max+AMS	26oz+2.5lb / 26oz+ 2.5lb	99	96	99	0	203
Roundup WeatherMax+AMSS / Roundup WeatherMax+AMS	21.7oz+2.5lb / 21.7oz+2.5lb	99	96	99	0	203
Untreated		0	0	0	0	29
Weed Free		100	100	100	0	235
	LSD (0.10)	4	2	1	0	22