

**Corn response to special product tank mixtures with glyphosate, Carrington, 2010.**  
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The field trial was conducted at the NDSU Carrington Research Extension Center to examine corn performance with nutritional product and fungicide tank mixtures with glyphosate. Experimental design was a randomized complete block with three replications. The reduced-till trial was conducted on previous wheat ground with spring soil analysis: 3.5% organic matter, 6.7 pH, 94 lb/A nitrate-N, 10 ppm phosphorus, 153 ppm potassium, 16 lb/A chloride, 46 lb/A sulfur, 0.5 ppm boron, 0.69 ppm zinc, and other micronutrients at medium to high levels. DeKalb 'DKC33-53' Roundup Ready corn was planted May 4 at a targeted rate of 26,000 seeds/A in 30-inch rows. Glyphosate at 0.56 lb ae/A was applied across the trial on June 2. Treatments were applied with a CO<sub>2</sub>-pressurized hand-boom sprayer delivering 12 gal/A at 35 psi with 8001 flat-fan nozzles on June 21 with 72 F, 81% RH, 6 mph wind, and 75% cloudy sky to 5-collar corn, 2- to 4-leaf grass weeds (yellow and green foxtail, and barnyardgrass) and 1- to 2-inch height annual broadleaf weeds (common lambsquarters, prostrate and redroot pigweed, and wild buckwheat). The trial was harvested with a plot combine on October 13.

Weed control with Makaze (3 lb ae/gal glyphosate-ipa; UAP) tank mixtures generally were similar (table). Corn silk date, seed yield and moisture, and test weight with Makaze tank mixtures were similar. Silk date, seed yield and moisture, and test weight with glyphosate and fungicide (Evito, Headline, Quadris and Stratego Pro) tank mixtures were similar. However, seed yield with Evito tended to be higher compared to other treatments containing fungicides.

Table.										
Treatment <sup>1</sup>			Corn				Weed control (%) <sup>2</sup>			
Name	Rate	Unit	Silk date	Seed yield	Test weight	Seed moisture	7/9		7/29	
			Jday	bu/A	lb/bu	%	grass	broadleaf	grass	broadleaf
Untreated check	x	x	208	132.7	53.7	15.9	0	0	0	0
LI6339	32	fl oz/a	208	134.2	53.9	15.4	72	83	67	75
WeatherGard	0.5	% v/v								
Makaze	32	fl oz/a								
Black Jack Zn	16	fl oz/a	208	131.2	53.3	16.3	79	91	68	74
Weathergard	0.5	% v/v								
Makaze	32	fl oz/a								
BoMnZn	10	fl oz/a	208	127.6	53.5	16.1	79	90	69	77
WeatherGard	0.5	% v/v								
Makaze	32	fl oz/a								
WeatherGard	0.5	% v/v	207	133.4	53.7	16.3	77	88	68	74
Makaze	32	fl oz/a								
Evito	2	fl oz/a	208	150.3	53.6	16.6				
RU PowerMax	22	fl oz/a								
NIS	0.25	% v/v								
AMS	64	fl oz/a								
Headline	6	fl oz/a	207	136.8	53.6	15.8				
RU PowerMax	22	fl oz/a								
NIS	0.25	% v/v								
AMS	64	fl oz/a								
Quadris	6	fl oz/a	208	141.1	54.4	16.1				
RU PowerMax	22	fl oz/a								
NIS	0.25	% v/v								
AMS	64	fl oz/a								
Stratego Pro	2.5	fl oz/a	208	135.9	53.4	16.3				
RU PowerMax	22	fl oz/a								
NIS	0.25	% v/v								
AMS	64	fl oz/a								
C.V. (%)			0.3	8.1	1.8	3.9	6.4	5.6	3.1	2.5
LSD (0.05)			NS	NS	NS	NS	7	7	3	3

<sup>1</sup>NIS=Preference (WinField Solutions); AMS=N-Pak AMS Liquid (WinField Solutions).

<sup>2</sup>Grass=yellow and green foxtail, and barnyardgrass; Broadleaf=common lambsquarters, prostrate and redroot pigweed, and wild buckwheat.