

2008 metolachlor vs. acetochlor - corn efficacy

Trial ID: 08 MAN Parallel	Protocol ID: 08 MAN Parallel
Location: Pierce, NE	Study Director: Stevan Knezevic
	Investigator: Stevan Knezevic

General Trial Information

Study Director: Stevan Knezevic
Investigator: Stevan Knezevic

Trial Location

City: Pierce
State/Prov.: NE
Postal Code: 68767
Country: USA

Cooperator/Landowner

Cooperator: Haskell Agricultural Laboratory	Country: USA
Organization: University of Nebraska	Phone No: 402-584-2261
Address 1: 57905 866 RD	Fax No: 402-584-3859
City: Concord	
State/Prov: NE	
Postal Code: 68728	

Crop Description

Crop 1: ZEAMX Zea mays	Corn
Variety: Garst 8452 CB LL	Description: Liberty Link
BBCH Scale: BCOR	Planting Date: 05-17-08
Planting Method: seeded	Rate, Unit: 26000 s/a
Depth, Unit: 1.5 in	
Row Spacing, Unit: 36 in	
	Emergence Date: 05-26-08
Harvest Date: 11-04-08	Harvest Equipment: Almaco sheller
Harvested Width, Unit: 6 ft	Harvested Length, Unit: 12 ft
% Standard Moisture: 15.5	Moisture Meter: Dickey John GAC 2000
Weighing Equipment: Ohaus 100# scale	

Pest Description

Pest 1 Type: W	Code: DIGSA	Digitaria sanguinalis (L.) Scop.
	Common Name: Crabgrass, large	
Pest 2 Type: W	Code: AMBEL	Ambrosia elatior L.
	Common Name: Ragweed, common	
Pest 3 Type: W	Code: SOLPT	Solanum ptycanthum Dunal
	Common Name: Nightshade, eastern black	

Site and Design

Plot Width, Unit: 10	FT	Site Type: FIELD
Plot Length, Unit: 30	FT	Tillage Type: CONVENTIONAL-TILL
Replications: 4		Study Design: Randomized Complete Block

Soil Description

% Sand: 80	% OM: 1.7	Texture: LOAMY SAND
% Silt: 14	pH: 5.8	
% Clay: 6	CEC: 8.6	Fert. Level: FAIR
Analyzed By: Midwest Labs		

	Date	Amount	Unit	Type
1.	05-18-08	0.35	IN	SPRINKLER - CENTER PIVOT
2.	05-20-08	0.95	IN	SPRINKLER - CENTER PIVOT
3.	05-23-08	0.70	IN	RAIN
4.	05-24-08	1.00	IN	RAIN
5.	05-27-08	1.30	IN	RAIN
6.	05-29-08	0.60	IN	RAIN
7.	06-03-08	0.25	IN	RAIN
8.	06-05-08	0.90	IN	RAIN
9.	06-07-08	1.00	IN	RAIN
10.	06-15-08	1.20	IN	SPRINKLER - CENTER PIVOT
11.	06-18-08	1.00	IN	SPRINKLER - CENTER PIVOT
12.	06-19-08	1.00	IN	RAIN
13.	06-27-08	0.90	IN	SPRINKLER - CENTER PIVOT
14.	06-28-08	1.20	IN	SPRINKLER - CENTER PIVOT
15.	06-29-08	1.10	IN	SPRINKLER - CENTER PIVOT

Application Description

	A
Application Date:	05-18-08
Time of Day:	8 am
Application Method:	spray
Application Timing:	PRE
Application Placement:	surface
Applied By:	js
Air Temperature, Unit:	58 F
% Relative Humidity:	44
Wind Velocity, Unit:	2 mph
Wind Direction:	SE
Soil Temperature, Unit:	50 F
Soil Moisture:	adequate
% Cloud Cover:	0
Next Rain Occurred On:	05-19-08

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMX BCOR

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	DIGSA W
Pest 2 Code, Disc., Scale:	AMBEL W
Pest 3 Code, Disc., Scale:	SOLPT W

Application Equipment

	A
Appl. Equipment:	backpack
Operating Pressure, Unit:	20 psi
Nozzle Type:	Turbo Tee
Nozzle Size:	11003
Nozzle Spacing, Unit:	20 IN
Boom Length, Unit:	10 FT
Boom Height, Unit:	12 IN
Ground Speed, Unit:	2.7 MPH
Carrier:	WATER
Spray Volume, Unit:	20 GPA
Mix Size, Unit:	1.8 Liters
Propellant:	co2

Northeast Research & Extension Center

Description	E.Blk Nightshade'	E.Blk Nightshade'	E.Blk Nightshade'	E.Blk Nightshade'					
Rating Date	07-16-08	08-22-08	08-22-08	09-18-08					
Rating Data Type	Control	Control	Density	Control					
Rating Unit	Percent	Percent	m2 RunCH	Percent					
Days After First/Last Applic.	59 59	96 96	96 96	123 123					
Trt-Eval Interval	59 DA-A	96 DA-A	96 DA-A	123 DA-A					
Plant-Eval Interval	60 DP-1	97 DP-1	97 DP-1	124 DP-1					
Trt No.	Treatment Name	Rate	Other Rate	Other Rate	Growth Stage				
1	Parallel	0.9 pt/a	0.88 lb a/a		PRE	20.0 e	12.5 e	1.8 a	12.5 g
2	Harness	1.0 pt/a	0.875 lb a/a		PRE	20.0 e	16.3 de	2.0 a	22.5 efg
3	Parallel	1.35 pt/a	1.32 lb a/a		PRE	20.0 e	10.0 e	2.8 a	15.0 fg
4	Harness	1.5 pt/a	1.31 lb a/a		PRE	61.7 bcd	35.0 c	1.3 a	23.3 efg
5	Parallel	1.8 pt/a	1.76 lb a/a		PRE	50.0 d	31.3 cd	2.8 a	31.3 def
6	Harness	2.0 pt/a	1.75 lb a/a		PRE	78.8 ab	73.8 b	1.3 a	72.5 bc
7	Parallel	2.25 pt/a	2.2 lb a/a		PRE	57.5 cd	46.3 c	1.0 a	35.0 de
8	Harness	2.5 pt/a	2.19 lb a/a		PRE	73.8 abc	66.3 b	1.3 a	66.3 c
9	Parallel	2.7 pt/a	2.63 lb a/a		PRE	43.3 d	43.3 c	1.0 a	43.3 d
10	Harness	3.0 pt/a	2.63 lb a/a		PRE	93.5 a	78.8 ab	1.3 a	78.8 abc
11	Parallel	5.4 pt/a	5.26 lb a/a		PRE	93.0 a	93.0 a	1.3 a	91.7 a
12	Harness	6.0 pt/a	5.25 lb a/a		PRE	94.5 a	92.3 a	1.0 a	88.8 ab
LSD (P=.05)						20.97	16.09	1.38	17.75
Standard Deviation						14.52	11.14	0.95	12.29
CV						24.68	22.33	61.32	25.39
Grand Mean						58.83	49.88	1.56	48.4
Replicate F						2.629	1.197	2.395	0.812
Replicate Prob(F)						0.0683	0.3276	0.0879	0.4975
Treatment F						15.717	29.503	1.756	22.924
Treatment Prob(F)						0.0001	0.0001	0.1083	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

<u>Additional Treatment Information</u>
<u>Rate Unit</u>
PT/A = Pints Product per Acre (Metric=L/HA)P
<u>Other Rate Unit</u>
LB A/A = Pounds Active Ingredient per Acre