

Sorghum Hybrid Tolerance Screen with Degree Xtra.

Project Code: 06-WF-SW-N Location: Belleville Research Center
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
Trial Status: Final Updated: 10-2-06**Objective:**

To evaluate acetochlor for crop safety and yield across a variety of hybrids.

Crop 1: SORVU sorghum Variety: See treatment list
Planting Method: Seeded Planting Date: 5-26-06
Rate: 7.0 lb/A Depth: 1.0 IN
Row Spacing: 30 INPlot Width, Unit: 10 FT Plot Length, Unit: 40 FT Reps: 4
Tillage Type: Reduced-Till Study Design: Split-block
Previous Crop, Year: GLXMA, 2005
Field Prep./Maintenance: N 150 LB/A, P205 50 LB/A, K20 100 LB/ASoil Name: Ebbert % OM: 2.8 pH: 6.3 CEC: 11
Texture: Silt loam Fert. Level: P1: 76 LB/A, K: 407 LB/A**APPLICATION DESCRIPTION**A
Application Date: 5-26-06
Time of Day: 19:00
Application Method: Spray
Application Timing: PRE
Applic. Placement: BROSOI
Air Temp., Unit: 86 F
% Relative Humidity: 52
Wind Velocity, Unit: 3 MPH
Soil Moisture: NORMAL**CROP STAGE AT EACH APPLICATION**A
Crop 1 Code, Stage: SORVU NA
Height, Unit: NA NA**APPLICATION EQUIPMENT**A
Appl. Equipment: CO2 sprayer
Operating Pressure: 40 PSI
Nozzle Type: Flat fan
Nozzle Size: 8003
Boom Length, Unit: 7.5 FT
Spray Volume, Unit: 20 GPA**NOTES:**

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Weed Code
 Crop Code
 Rating Data Type
 Rating Unit
 Rating Date
 Trt-Eval Interval

SORVU SORVU SORVU SORVU SORVU
 Maturity Moisture Yield GRORED STARED
 DAP Percent bu/A Percent Percent
 9-20-06 9-20-06 6-8-06 6-8-06
 14 DAP 14 DAP

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	SORVU Maturity DAP	SORVU Moisture Percent 9-20-06	SORVU Yield bu/A 9-20-06	SORVU GRORED Percent 14 DAP	SORVU STARED Percent 14 DAP
1	DEGREE XTRA 1 DKS37-07	4	L	3.0	lb ai/a	3	qt/a	PRE	A	105	19.5	121	0	0
2	DEGREE XTRA 2 DK39Y	4	L	3.0	lb ai/a	3	qt/a	PRE	A	91	15.0	111	0	0
3	DEGREE XTRA 3 DK44	4	L	3.0	lb ai/a	3	qt/a	PRE	A	98	17.8	126	0	0
4	DEGREE XTRA 4 DKS54-00	4	L	3.0	lb ai/a	3	qt/a	PRE	A	105	20.2	125	0	0
5	DEGREE XTRA 5 PULSAR	4	L	3.0	lb ai/a	3	qt/a	PRE	A	98	17.4	122	0	0
6	DEGREE XTRA 6 A567	4	L	3.0	lb ai/a	3	qt/a	PRE	A	105	20.0	135	0	0
7	DEGREE XTRA 7 A571	4	L	3.0	lb ai/a	3	qt/a	PRE	A	98	17.2	134	0	0
8	DEGREE XTRA 8 DKS42-20	4	L	3.0	lb ai/a	3	qt/a	PRE	A	98	17.6	119	0	0
9	DEGREE XTRA 9 DKS35-70	4	L	3.0	lb ai/a	3	qt/a	PRE	A	91	16.0	127	0	0
10	DEGREE XTRA 10 DKS36-16	4	L	3.0	lb ai/a	3	qt/a	PRE	A	105	19.5	123	0	0
11	DEGREE XTRA 11 DKS37-07	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	105	19.0	122	0	0
12	DEGREE XTRA 12 DK39Y	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	91	14.2	122	0	0
13	DEGREE XTRA 13 DK44	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	98	18.0	130	0	0
14	DEGREE XTRA 14 DKS54-00	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	105	20.0	126	0	0
15	DEGREE XTRA 15 PULSAR	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	98	17.1	127	0	0
16	DEGREE XTRA 16 A567	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	105	19.7	138	0	0
17	DEGREE XTRA 17 A571	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	98	17.0	133	0	0
18	DEGREE XTRA 18 DKS42-20	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	98	17.2	129	0	0
19	DEGREE XTRA 19 DKS35-70	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	91	16.2	136	0	0
20	DEGREE XTRA 20 DKS36-16	4	L	4.5	lb ai/a	4.5	qt/a	PRE	A	105	19.3	123	0	1
21	LARIAT 21 DKS37-07	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	105	19.8	118	0	0
22	LARIAT 22 DK39Y	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	91	14.2	120	0	0
23	LARIAT 23 DK44	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	98	17.3	129	1	1
24	LARIAT 24 DKS54-00	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	105	19.2	134	0	0
25	LARIAT 25 PULSAR	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	98	17.3	122	0	0

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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	SORVU Maturity DAP	SORVU Moisture Percent	SORVU Yield bu/A	SORVU GRORED Percent	SORVU STARED Percent
26	LARIAT A567	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	105	19.1	139	0	0
27	LARIAT A571	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	98	16.9	133	0	0
28	LARIAT DKS42-20	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	98	16.9	124	0	1
29	LARIAT DKS35-70	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	91	16.2	130	0	0
30	LARIAT DKS36-16	4	SC	3.0	lb ai/a	3	qt/a	PRE	A	105	18.8	128	0	1
LSD (P=.05)										0.0	1.36	11.1	0.3	0.6
Replicate F										0.000	4.462	11.536	1.000	0.046
Replicate Prob(F)										1.0000	0.0058	0.0001	0.3969	0.9868
Treatment F										0.000	12.510	2.853	1.000	0.873
Treatment Prob(F)										1.0000	0.0001	0.0001	0.4798	0.6519

Trial Comments

1. Protocol: Monsanto.
2. Growth reduction and stand reduction 14-21 days after planting; Maturity as days after planting.
3. Yield, seed from plots treated with Degree Xtra must be destroyed.
4. DAP = Days after planting. GRORED = Growth reduction. STARED = Stand reduction.
5. Harvested 9-20-06, (2) 30 inch rows by 37 ft.