

University of Tennessee

INZEN SORGHUM - UNIVERSITY

Trial ID: GSDUP178-15 Location: Jackson, TN Trial Year: 2015
 Protocol ID: USA-15-178 Investigator: Dr. Larry Steckel
 Project ID: Study Director: Larry Steckel
 Sponsor Contact: Ken Carlson/Smith

Trt No. Type	Treatment Name	Form Conc	Form Type	Rate	Unit	Growth Stage	Appl Code	Rep			Notes
								1	2	3	
1	HERB LEADOFF	33.4	WG	2.7	oz/a	15	EPP A	101	204	303	
	HERB RIMSULFURON (SG 25 PC)	25	SG	0.45	oz ai/a	15	EPP A				
	HERB THIFENSULFURON (SG 50 PC)	50	SG	0.45	oz ai/a	15	EPP A				
	HERB ABUNDIT EXTRA (4LG/3AE)	3	SL	32.00	fl oz/a	15	EPP A				
	HERB ZEST (SC 40 GL)	40	SC	12.00	fl oz/a		EPOST C				
	HERB ATRAZINE 4L (SC)	4	SC	0.75	qt/a		EPOST C				
	ADJ CROP OIL (SL 99.00 PC)	99	SL	1.00	% v/v		EPOST C				
	FERT AMS		WG	2.00	lb/a		EPOST C				
2	HERB LEADOFF	33.4	WG	1.5	oz/a	PRE	B	102	201	307	
	HERB RIMSULFURON (SG 25 PC)	25	SG	0.25	oz ai/a	PRE	B				
	HERB THIFENSULFURON (SG 50 PC)	50	SG	0.25	oz ai/a	PRE	B				
	HERB CINCH ATZ (5.5 EC)	5.5	EC	3.20	pt/a	PRE	B				
	HERB ABUNDIT EXTRA (4LG/3AE)	3	SL	32.00	fl oz/a	PRE	B				
	HERB ZEST (SC 40 GL)	40	SC	12.00	fl oz/a	MPOST	D				
	HERB ATRAZINE 4L (SC)	4	SC	0.75	qt/a	MPOST	D				
	ADJ CROP OIL (SL 99.00 PC)	99	SL	1.00	% v/v	MPOST	D				
	FERT		WG	2.00	lb/a	MPOST	D				
3	HERB CINCH ATZ (5.5 EC)	5.5	EC	3.20	pt/a	PRE	B	103	202	301	
	HERB ABUNDIT EXTRA (4LG/3AE)	3	SL	32.00	fl oz/a	PRE	B				
	HERB ZEST (SC 40 GL)	40	SC	12.00	fl oz/a	MPOST	D				
	HERB ATRAZINE 4L (SC)	4	SC	0.75	qt/a	MPOST	D				
	ADJ CROP OIL (SL 99.00 PC)	99	SL	1.00	% v/v	MPOST	D				
	FERT AMS		WG	2.00	lb/a	MPOST	D				
4	HERB LEADOFF	33.4	WG	1.5	oz/a	PRE	B	104	207	304	
	HERB RIMSULFURON (SG 25 PC)	25	SG	0.25	oz ai/a	PRE	B				
	HERB THIFENSULFURON (SG 50 PC)	50	SG	0.25	oz ai/a	PRE	B				
	HERB CINCH ATZ (5.5 EC)	5.5	EC	3.20	pt/a	PRE	B				
	HERB ABUNDIT EXTRA (4LG/3AE)	3	SL	32.00	fl oz/a	PRE	B				
5	HERB ABUNDIT EXTRA (4LG/3AE)	3	SL	32.00	fl oz/a	PRE	B	105	206	305	
	HERB ZEST (SC 40 GL)	40	SC	12.00	fl oz/a	EPOST	C				
	HERB ATRAZINE 4L (SC)	4	SC	0.75	qt/a	EPOST	C				
	ADJ CROP OIL (SL 99.00 PC)	99	SL	1.00	% v/v	EPOST	C				
	FERT AMS		WG	2.00	lb/a	EPOST	C				
6	HERB CINCH ATZ (5.5 EC)	5.5	EC	3.20	pt/a	PRE	B	106	203	302	
	HERB ABUNDIT EXTRA (4LG/3AE)	3	SL	32.00	fl oz/a	PRE	B				
7	CHK UNTREATED CHECK							107	205	306	

Sort Order: Replicate 1

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 Project ID: Study Director: Larry Steckel
 Sponsor Contact: Ken Carlson/Smith

General Trial Information

Study Director: Larry Steckel
Investigator: Dr. Larry Steckel

Trial Location

Country: USA United States

Conducted Under GLP: No
Conducted Under GEP: No

Objectives:

Evaluate herbicide programs for weed control and crop tolerance in grain sorghum containing the Inzen trait.

Contacts

Study Director: Larry Steckel

Investigator: Dr. Larry Steckel

Crop Description

Crop 1: SORVU	Sorghum bicolor	Grain sorghum
Variety: YSA4520	BBCH Scale: BGRM	
Description: INZEN Z		
Seed Size, Unit: 29200 KG		
Planting Rate, Unit: 80000 S/A	Planting Date: 4-28-15	
Depth, Unit: 1 IN	Planting Method: PLANTD planted	
Row Spacing, Unit: 30 IN	Planting Equipment: PP Plot Planter	
Spacing Within Row, Unit: 1 IN		
Soil Temperature, Unit: 61 F		
Soil Moisture: EXCELL excellent		
Seed Bed: MEDIUM medium		

Pest Description

Pest 1 Type: W **Code:** AMAPA Amaranthus palmeri
Common Name: Palmer amaranth

Site and Design

Treated Plot Width: 10 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT² **Treatments:** 7 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB L Randomized Complete Block (RCB)

Field Prep./Maintenance:

Jan. 8 - 0-0-60
 March 17 - Roundup PowerMax 32 oz/A + Clarity 8 oz/A
 May 22 - Fertilized with 180 lbs N/A as UAN

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Application Description

	A	B	C	D
Application Date:	4-13-15	4-28-15		
Appl. Start Time:	7:28 AM	2:15 PM		
Appl. Stop Time:	7:32 AM	2:23 PM		
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	15 EPP	PRE	EPOST	MPOST
Application Placement:	BROSOI	BROSOI		
Applied By:	JR	JR		
Air Temperature, Unit:	69 F	64 F		
% Relative Humidity:	69	51		
Wind Velocity, Unit:	3 MPH	6 MPH		
Wind Direction:	ESE	N		
Dew Presence (Y/N):	N no	N no		
Soil Temperature, Unit:	61 F	61 F		
Soil Moisture:	EXCELL	EXCELL		
% Cloud Cover:	100	100		

Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	SORVU BGRM	SORVU BGRM	SORVU BGRM	SORVU BGRM
Stage Scale Used:	--			

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Type, Scale:	AMAPA W	AMAPA W 2LF	AMAPA W	AMAPA W
Height, Unit:		1 IN		
Height Minimum, Maximum:		0.5 1		

Application Equipment

	A	B	C	D
Appl. Equipment:	BACKPACK	BACKPACK		
Equipment Type:	BACCAI	BACCAI		
Operation Pressure, Unit:	40 PSI	40 PSI		
Nozzle Type:	AIXR	AIXR		
Nozzle Size:	11002	11002		
Nozzle Spacing, Unit:	19 IN	19 IN		
Nozzles/Row:	2	2		
Boom Length, Unit:	6.33 FT	6.33 FT		
Boom Height, Unit:	16 IN	16 IN		
Ground Speed, Unit:	4 MPH	4 MPH		
Carrier:	WATER	WATER		
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC		
Mix Size, Unit:	0.528 GAL/AC	0.528 GAL/AC		
Propellant:	CO2	CO2		
Tank Mix (Y/N):	Y yes	Y yes		

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HUSKIE / SORVU / TOLERANCE / EFFICACY

Trial ID: JGSBAYER15 Location: Jackson, TN Trial Year:
 Protocol ID: HP15USASVD Investigator: Dr. Larry Steckel
 Project ID: Study Director:
 Sponsor Contact: BAYLER

Trt No.	Treatment Type Name	Form Conc	Form Type	Rate Rate	Growth Unit	Appl Stage	Code	Rep			Notes
								1	2	3	
1	CHK NONTREATED							101	203	304	
2	HERB HUSKIE	2.08	EC	13	oz/a	POST	A	102	204	301	
	HERB AATREX	4	L	1	pt/a	POST	A				
	FERT AMS		WG	1	lb/a	POST	A				
	ADJ NIS	100	SL	0.25	% v/v	POST	A				
3	HERB HUSKIE	2.08	EC	13	oz/a	POST	A	103	201	302	
	HERB AATREX	4	L	1	pt/a	POST	A				
	HERB BANVEL		EC	4	oz/a	POST	A				
	FERT AMS		WG	1	lb/a	POST	A				
	ADJ NIS	100	SL	0.25	% v/v	POST	A				
4	HERB PEAK	57	WG	0.75	oz/a	POST	A	104	202	303	
	HERB AATREX	4	L	1	pt/a	POST	A				
	HERB BUCTRIL	2	EC	1	pt/a	POST	A				

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Trial ID: JGSBAYER15 Location: Jackson, TN Trial Year:
 Protocol ID: HP15USASVD Investigator: Dr. Larry Steckel
 Project ID: Study Director:
 Sponsor Contact: BAYLER

General Trial Information

Investigator: Dr. Larry Steckel

Conducted Under GLP: No
Conducted Under GEP: No

Investigator: Dr. Larry Steckel

Crop Description

Crop 1: SORVU Sorghum bicolor Grain sorghum
Variety: YSA4520 **BBCH Scale:** BGRM
Planting Date: 4-28-15
Planting Rate, Unit: 80000 S/A **Planting Method:** PLANTD planted
Depth, Unit: 0.5 IN **Planting Equipment:** PP Plot Planter
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 61 f
Soil Moisture: EXCELL excellent
Seed Bed: MEDIUM medium

Pest Description

Pest 1 Type: W **Code:** AMAPA *Amaranthus palmeri*
Common Name: Palmer amaranth

Site and Design

Treated Plot Width: 7.5 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT
Treated Plot Area: 225 FT² **Treatments:** 4 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Field Prep./Maintenance:

Jan. 8 - 0-0-60
 March 17 - Roundup PowerMax 32 oz/A + Clarity 8 oz/A
 APR 24 - Gramoxone SL 48 oz/A + COC 1%
 May 22 - Fertilize 180 lbs N/A as UAN

Application Description

	A
Application Date:	5-26-15
Appl. Start Time:	1:13 pm
Appl. Stop Time:	1:20 PM
Application Method:	SPRAY
Application Timing:	POST
Application Placement:	BROFOL
Applied By:	JR
Air Temperature, Unit:	78 F
% Relative Humidity:	75
Wind Velocity, Unit:	2 MPH
Wind Direction:	SW
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	80 F
Soil Moisture:	EXCELL
% Cloud Cover:	50

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HUSKIE / SORVU / TOLERANCE / EFFICACY

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 Protocol ID: HP15USASVD Investigator: Dr. Larry Steckel
 Project ID: Study Director:
 Sponsor Contact: BAYLER

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	SORVU BGRM
Stage Scale Used:	4 LEAVES
Height, Unit:	5 IN
Height Minimum, Maximum:	4 6

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	AMAPA W 6-8L
Height, Unit:	5 IN
Height Minimum, Maximum:	4 6

Application Equipment

	A
Appl. Equipment:	BACKPACK
Equipment Type:	BACCAI
Operation Pressure, Unit:	30 PSI
Nozzle Type:	AIXR
Nozzle Size:	11003
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	2
Boom Length, Unit:	5 FT
Boom Height, Unit:	16 IN
Ground Speed, Unit:	4 MPH
Carrier:	WATER
Spray Volume, Unit:	15 GAL/AC
Mix Size, Unit:	0.528 GAL/AC
Spray pH:	0.528
Propellant:	CO2
Tank Mix (Y/N):	Y yes