

Disclaimer:

This document is based on the results from an individual trial and may contain experimental use patterns that are currently off-label. **This document does not provide any interpretation and should not be taken as an endorsement of any unregistered use pattern.**

Professional advice should be sought for specific recommendations to ensure access to the most up to date information and knowledge.

Any product referred to in this document must be used strictly as directed, and in accordance with all label or permit instructions. Always consult the label prior to use.

Broadleaf Weed Control in Sorghum

Trial ID: **DK1621** Location: **Yallaro** Trial Year: **2016**
Investigator: **Denielle Kilby**

Objective:	To evaluate in-crop options for broadleaf control in sorghum			
Weed:	Caltrop (<i>Tribulus terrestris</i>)			
Application Date:	17/11/2016			
Application Code:	A	B	C	D
Application Water Volume:	70 L/ha	70 L/ha	50 L/ha	100 L/ha
Nozzle Type:	AIXR110015	DG110015	AIXR110015	AIXR110015
Weed Stage Majority:	1 Leaf			
Weed Stage Range:	1 Leaf – Flower buds visible			
Weed Density:	11/m²			
Trial Reliability:	High			
Keywords:	Caltrop, <i>Tribulus terrestris</i>, knockdown, sorghum			

Pest Scientific Name				<i>Tribulus terrestris</i> Caltrop		Grain Sorghum MR-Scorpio	<i>Tribulus terrestris</i> Caltrop
Pest Name							
Crop Name							
Crop Variety							
Assessment Date				24/11/2016	30/11/2016	30/11/2016	13/01/2017
Description				BURNDOWN	BURNDOWN	NDVI	New Germination
Assessment Type				%	%	RATIO	COUNT
Assessment Unit				41	51	62	/m²
Crop Stage Majority				7 DAA	13 DAA	13 DAA	73
Treatment-Evaluation Interval				ET14	AA		57 DAA
ARM Action Codes							AL T2
Trt No.	Treatment	Product Rate	Appln. Code				
1	Gesaprim 900WG Starane Advanced NIS	1100ml/ha 450ml/ha 0.5% v/v	A	73e	82cd	0.706a	0.3b
2	Gesaprim 900WG Starane Advanced Hasten	1100ml/ha 450ml/ha 0.5% v/v	A	87a-d	92bc	0.721a	0.0b
3	Gesaprim 900WG Starane Advanced Hasten	1100ml/ha 450ml/ha 0.5% v/v	B	83b-e	96b	0.697a	0.0b
4	Gesaprim 900WG Starane Advanced Hasten	1100ml/ha 450ml/ha 0.5% v/v	C	60f	73de	0.693a	0.0b
6	Gesaprim 900WG Starane Advanced Hasten	1100ml/ha 450ml/ha 0.5% v/v	D	80de	80cd	0.693a	0.1b
7	Gesaprim 900WG Starane Advanced Hasten	1100ml/ha 600ml/ha 0.5% v/v	A	77de	88bc	0.684a	0.0b
8	Gesaprim 900WG Cutlass 500 SL Hasten	1100ml/ha 500ml/ha 0.5% v/v	A	82cde	87bcd	0.676a	0.1b
9	Gesaprim 900WG Tordon 75D Hasten	1100ml/ha 500ml/ha 0.5% v/v	A	88a-d	92bc	0.697a	0.0b
10	Gesaprim 900WG Bromicide 200 EC Hasten	1100ml/ha 2000ml/ha 0.5% v/v	A	97a	100a	0.701a	0.0b

Broadleaf Weed Control in Sorghum

Trial ID: DK1621 **Location:** Yallaro **Trial Year:** 2016

Pest Scientific Name				<i>Tribulus terrestris</i>		Grain Sorghum	<i>Tribulus terrestris</i>
Pest Name				Caltrop		MR-Scorpio	Caltrop
Crop Name							
Crop Variety							
Assessment Date				24/11/2016	30/11/2016	30/11/2016	13/01/2017
Assessment Type				CONTROL	CONTROL	NDVI	COUNT
Assessment Unit				%	%	RATIO	/m ²
Crop Stage Majority				41	51	62	73
Treatment-Evaluation Interval				7 DA-A	13 DA-A	13 DA-A	57 DA-A
ARM Action Codes				ET14	AA		AL T2
Trt No.	Treatment	Product Rate	Appln. Code				
11	Terbyne Xtreme 875 WG Hasten	1200g/ha 0.5% v/v	A	85a-e	90bc	0.687a	0.0b
12	Terbyne Xtreme 875 WG Starane Advanced Hasten	950g/ha 450ml/ha 0.5% v/v	A	83b-e	90bc	0.687a	0.1b
13	Gp B I Hasten	750ml/ha 0.5% v/v	A	3g	36f	0.407c	7.7a
14	Gp B I Hasten	1000ml/ha 0.5% v/v	A	35	61e	0.330d	6.2a
15	Gp HC V	1000ml/ha	A	95ab	100a	0.590b	0.0b
LSD P=				11.71	10.40t	0.059	0.13t
Treatment Prob.(F)=				0.0001	0.0001	0.0001	0.0001

NB: Treatment 5 was oversprayed and excluded from the results

Means followed by same letter do not significantly differ (P=.05, LSD)

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

Mean comparisons performed only when AOV Treatment P (F) is significant at mean comparison OSL.

Assessment Type

BURNDOWN = % Burndown or brownout

NDVI = Normalized difference vegetation index

Crop Stage Majority

41 = Flag leaf sheath extending

51 = Beginning of heading

62 = 20% of flowers open or 20% of plants in bloom

67 = Flowering finishing: majority of petals fallen or dry

73 = Early milk

ARM Action Codes

ET14 = Excluded treatment 14

AA = Automatic arcsine square root % transformation

AL = Automatic log transformation of X+1

T1 = Arcsine square root percent ([5])

T2 = LOG ([7] + 1)

DAA = Days after Application

Broadleaf Weed Control in Sorghum

Trial ID: DK1621

Location: Yallaro

Trial Year: 2016

Application Description				
	A	B	C	D
Application Date:	17/11/2016	17/11/2016	17/11/2016	17/11/2016
Application Start Time:	08:25 AM	08:25 AM	08:25 AM	08:25 AM
Application Stop Time:	10:30 AM	10:30 AM	10:30 AM	10:30 AM
Application Method:	SPRAY			
Application Timing:	EARLY POST-EM			
Air Temperature, Unit:	25 C			
% Relative Humidity:	50			
Wind Velocity, Unit:	2 m/s			
Wind Direction:	E			
Dew Presence (Y/N):	No			
% Cloud Cover:	5			

Pest Stage at Each Application				
	A	B	C	D
Pest:	Caltrop (<i>Tribulus terrestris</i>)			
Stage Majority:	1 Leaf emerged			
Stage Minimum:	1 Leaf emerged			
Stage Maximum:	Flower buds visible			
Density, Unit:	11/ m ²			

Application Equipment				
	A	B	C	D
Operation Pressure, Unit:	300 kPa			
Nozzle Type:	AIXR	DG	AIXR	AIXR
Nozzle Size:	110015	110015	110015	110015
Nozzle Spacing, Unit:	50 cm			
Nozzles/Row:	4			
Boom Length, Unit:	4 m			
Boom Height, Unit:	50 cm			
Ground Speed, Unit:	10.3 km/h	10.3 km/h	14.5 km/h	7.2 km/h
Carrier:	WATER			
Spray Volume, Unit:	70 L/ha	70 L/ha	50 L/ha	100 L/ha