

**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: DK1732                      Location: Pallamallawa                      Trial Year: 2017  
Investigator: Denielle Kilby

<b>Objective:</b>	To evaluate in-crop options for <i>Tribulus</i> control in Sorghum			
<b>Application Code:</b>	A	B	C	D
<b>Application Date:</b>	15/11/2017			
<b>Nozzle:</b>	AIXR110015	DG1100015	AIXR110015	AIXR110015
<b>Application Timing:</b>	Post-Emergent Knockdown			
<b>Weed Stage:</b>	Beginning of Flowering			
<b>Weed Population:</b>	1/m <sup>2</sup>			
<b>Crop:</b>	Sorghum cv. MR Taurus			
<b>Planting Date:</b>	8/10/2017			
<b>Row Spacing:</b>	1m			
<b>Keywords:</b>	<i>Tribulus</i> , knockdown, Sorghum			
<b>Trial Reliability:</b>	Poor			
	NB: Very low weeds numbers			

Pest Scientific Name					<i>Tribulus terrestris</i>		<i>Tribulus terrestris</i>	
Pest Name					Caltrop		Caltrop	
Crop Name						Sorghum		
Crop Variety						MR Taurus		
Assessment Date					28/11/2017	28/11/2017	11/12/2017	3/01/2018
Assessment Type					BIO REDN	DISCOLOUR	BIO REDN	SURVIVING
Assessment Unit					%	%	%	%
Pest Stage Majority					71	71	81	
Treatment-Evaluation Interval					13 DAA	13 DAA	26 DAA	49 DAA
ARM Action Codes							AL	T1
Trt No.	Treatment	Product Rate	Appln. Code	Spray Volume				
1	Gesaprim 900WG Starane Advanced NIS	1100g/ha 450ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	25-	0-	27-	85-
2	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 450ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	65-	0-	21-	31-
3	Gesaprim 900WG Starane Advanced Hasten	1550g/ha 450ml/ha 0.5% v/v	B	70L/ha 70L/ha 70L/ha	63-	0-	16-	62-
4	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 450ml/ha 0.5% v/v	C	50L/ha 50L/ha 50L/ha	42-	0-	15-	84-
5	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 450ml/ha 0.5% v/v	D	100L/ha 100L/ha 100L/ha	50-	0-	38-	76-
6	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 600ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	77-	0-	45-	16-
7	Gesaprim 900WG Cutlass 500 SL Hasten	1100g/ha 500ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	57-	0-	16-	70-
8	Gesaprim 900WG Tordon 75D Hasten	1100g/ha 500ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	53-	0-	54-	50-

## Broadleaf Weed Control in Sorghum

Trial ID: DK1732

Location:

Pallamallawa

Trial Year:

2017

Pest Scientific Name					<i>Tribulus terrestris</i>		<i>Tribulus terrestris</i>	
Pest Name					Caltrop		Caltrop	
Crop Name						Sorghum		
Crop Variety						MR Taurus		
Assessment Date					28/11/2017	28/11/2017	11/12/2017	3/01/2018
Assessment Type					BIO REDN	DISCOLOUR	BIO REDN	SURVIVING
Assessment Unit					%	%	%	%
Pest Stage Majority					71	71	81	
Treatment-Evaluation Interval					13 DAA	13 DAA	26 DAA	49 DAA
ARM Action Codes							AL	T1
Trt No.	Treatment	Product Rate	Appln. Code	Spray Volume				
9	Gesaprim 900WG Bromicide 200 EC Hasten	1100g/ha 2000ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	82-	0-	23-	37-
10	Terbyne Xtreme Hasten	1200g/ha 0.5% v/v	A	70L/ha 70L/ha	10-	0-	18-	67-
11	Terbyne Xtreme Starane Advanced Hasten	950g/ha 450ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	78-	0-	40-	44-
LSD P= Treatment Prob.(F)=					nsd 0.1131	nsd 1.0000	nsd 0.3460	nsd 0.0693

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.

nsd = No Significant Difference

## Broadleaf Weed Control in Sorghum

Trial ID: DK1732

Location: Pallamallawa

Trial Year: 2017

Pest Scientific Name					<i>Tribulus terrestris</i> Caltrop 3/01/2018 COUNT /m <sup>2</sup> 49 DAA AL T2
Pest Name					
Assessment Date					
Assessment Type					
Assessment Unit					
Treatment-Evaluation Interval					
ARM Action Codes					
Trt No.	Treatment	Product Rate	Appln. Code	Spray Volume	
1	Gesaprim 900WG Starane Advanced NIS	1100g/ha 450ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	0.58-
2	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 450ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	0.53-
3	Gesaprim 900WG Starane Advanced Hasten	1550g/ha 450ml/ha 0.5% v/v	B	70L/ha 70L/ha 70L/ha	0.49-
4	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 450ml/ha 0.5% v/v	C	50L/ha 50L/ha 50L/ha	0.71-
5	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 450ml/ha 0.5% v/v	D	100L/ha 100L/ha 100L/ha	0.63-
6	Gesaprim 900WG Starane Advanced Hasten	1100g/ha 600ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	0.36-
7	Gesaprim 900WG Cutlass 500 SL Hasten	1100g/ha 500ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	0.61-
8	Gesaprim 900WG Tordon 75D Hasten	1100g/ha 500ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	0.28-
9	Gesaprim 900WG Bromicide 200 EC Hasten	1100g/ha 2000ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	0.30-
10	Terbyne Xtreme Hasten	1200g/ha 0.5% v/v	A	70L/ha 70L/ha	0.63-
11	Terbyne Xtreme Starane Advanced Hasten	950g/ha 450ml/ha 0.5% v/v	A	70L/ha 70L/ha 70L/ha	0.23-
LSD P= Treatment Prob.(F)=					nsd 0.5617

## Broadleaf Weed Control in Sorghum

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Location:

Pallamallawa

Trial Year:

2017

Assessment Type

BIO REDN = Biomass reduction

DISCOLOUR = Phytotoxicity - discoloration

Pest Stage Majority

71 = Fruits begin to develop; G\_Caryopsis watery ripe

81 = Beginning of ripening or fruit coloration

ARM Action Codes

AL = Automatic log transformation of X+1

T1 =  $([C7] / [C1]) * 100$ T2 =  $\text{LOG} ([9] + 1)$ 

DAA = Days after Application

Application Description				
	A	B	C	D
Application Date:	15/11/2017	15/11/2017	15/11/2017	15/11/2017
Appl. Start Time:	8:00 AM	8:00 AM	8:00 AM	8:00 AM
Appl. Stop Time:	10:30 AM	10:30 AM	10:30 AM	10:30 AM
Application Method:	SPRAY			
Application Timing:	Late Post-Emergent Weeds in Crop			
Air Temperature, Unit:	24 C			
% Relative Humidity:	55			
Wind Velocity, Unit:	4 m/s			
Wind Direction:	NE			
Dew Presence (Y/N):	No			
% Cloud Cover:	5			

Crop Stage at Each Application				
	A	B	C	D
Crop:	<i>Sorghum bicolor</i> Sorghum cv. MR Taurus			
Stage Scale Used:	BBCH			
Stage Majority:	First Tiller			
Stage Minimum:	6 leaf			
Stage Maximum:	Second Tiller			

Pest Stage at Each Application				
	A	B	C	D
Pest:	<i>Tribulus terrestris</i> Caltrop			
Pest Stage:	Beginning of Flowering 10% Flowers open			
Diameter, Unit:	20 cm			
Density, Unit:	1 /m <sup>2</sup>			

Application Equipment				
	A	B	C	D
Operation Pressure, Unit:	300 kPa			
Nozzle Type:	AIXR	DG	AIXR	AIXR
Nozzle Size:	015			
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	14.4 km/h	7.2 km/h
Carrier:	WATER			
Spray Volume, Unit:	70 L/ha	70 L/ha	50 L/ha	100 L/ha