

Disclaimer:

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Knockdown Control of Common Sowthistle

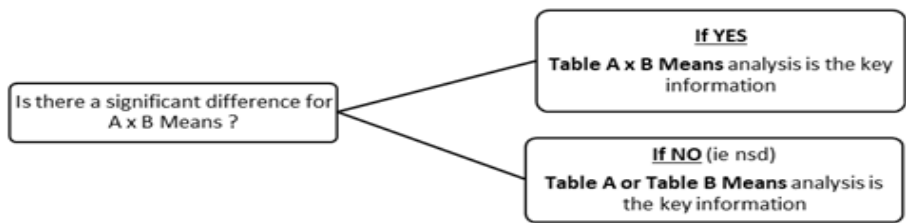
Trial ID: LB1903	Location: Warra	Trial Year: 2019
Investigator: Linda Bailey	Investigator: Linda Bailey	

Objective:	To evaluate alternatives to glyphosate for the knockdown control of common sowthistle		
Situation:	Fallow		
Application Code:	A First Knock	B Second Knock	
Application Date:	2/05/2019	9/05/2019	
Application Timing:	Late post emergent	7 days after Application A	
Nozzles:	AIXR110015		
Volume:	100 L/ha		
Weed:	Common Sowthistle	African Turnip Weed	
Weed Stage at Application:	40% population at 9 leaf	50% population 9 leaf	
Weed Range:	4 leaf to end of flowering	4 leaf to flower buds visible	
Weed Population:	13 plants/m ²	12 plants/m ²	
Keywords:	Common sowthistle, African turnip weed, knockdown, double knock, fallow		

NB: Trial Designed and analysed as a Factorial

	In Simple Terms
Table of A Means:	Mean of 'First Knock' performance with ALL 'Second Knock' treatments
Table of B Means:	Mean of 'Second Knock' performance with ALL 'First Knock' treatments
Table of A x B Means:	'First Knock' performance with EACH 'Second Knock' treatment

How to interpret?



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Pest Scientific Name				<i>Sonchus oleraceus</i>	<i>Sisymbrium thellungii</i>	<i>Sonchus oleraceus</i>	<i>Sonchus oleraceus</i>
Pest Name				Common Sowthistle	African Turnip Weed	Common Sowthistle	Common Sowthistle
Description						Surviving	Regrowing
Assessment Date				17/05/2019	17/05/2019	4/06/2019	4/06/2019
Assessment Type				BURNDOWN	BURNDOWN	COUNT	COUNT
Assessment Unit				%	%	/m ²	/m ²
Treatment-Evaluation Interval				15 DAA/ 8 DAB	15 DAA/ 8 DAB	33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code				
TABLE OF A MEANS (First Knock)							
1	Roundup CT	1000ml/ha	A	65.8d	92.5cd	0.83b	0.38b
2	Roundup CT	2000ml/ha	A	75.8c	95.0abc	0.31de	0.13bcd
3	Roundup CT Amicide 625 Hasten	2000ml/ha 1800ml/ha 1% v/v	A	75.0c	96.7abc	0.73bc	0.31bc
4	Amicide 625 Hasten	1800ml/ha 1% v/v	A	67.5d	84.2f	0.58bcd	0.04cd
5	Tordon 75-D	1000ml/ha	A	65.0d	62.5h	0.75b	0.06cd
6	Roundup CT Sharpen Hasten	2000ml/ha 17g/ha 1% v/v	A	96.7a	99.2a	0.17e	0.08bcd
7	Amicide 625 Sharpen Hasten	1800ml/ha 9g/ha 1% v/v	A	90.0b	87.5ef	0.25de	0.15bcd
8	Gp HC V Hasten	600ml/ha 1% v/v	A	65.8d	70.0g	0.38cde	0.17bcd
9	Gramoxone	1600ml/ha	A	87.5b	92.5cd	0.19e	0.17bcd
10	Gp C A Gp R R Hasten	2500g/ha 3500ml/ha 1% v/v	A	60.0e	61.7h	1.31a	0.85a
11	Experimental Uptake	4000ml/ha 0.5% v/v	A	85.8b	90.0de	0.13e	0.04cd
12	Pixxaro	400ml/ha	A	73.3c	48.3i	0.56bcd	0.31bc
13	Basta	3750ml/ha	A	95.0a	94.2bcd	0.02e	0.02cd
14	Basta	5000ml/ha	A	95.0a	94.2bcd	0.02e	0.02cd
15	Basta	9000ml/ha	A	98.3a	97.5ab	0.06e	0.00d
16	Basta Amicide 625	3750ml/ha 1800ml/ha	A	95.0a	94.2bcd	0.06e	0.06cd
TABLE OF B MEANS (Second Knock)							
1	First knock only	-	-	65.0b	73.6b	0.76a	0.33a
2	Gramoxone Sharpen Hasten	1600ml/ha 9g/ha 1% v/v	B	96.5a	96.4a	0.04b	0.02b

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

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Pest Scientific Name				<i>Sonchus oleraceus</i>	<i>Sisymbrium thellungii</i>	<i>Sonchus oleraceus</i>	<i>Sonchus oleraceus</i>
Pest Name				Common Sowthistle	African Turnip Weed	Common Sowthistle	Common Sowthistle
Description						Surviving	Regrowing
Assessment Date				17/05/2019	17/05/2019	4/06/2019	4/06/2019
Assessment Type				BURNDOWN	BURNDOWN	COUNT	COUNT
Assessment Unit				%	%	/m ²	/m ²
Treatment-Evaluation Interval				15 DAA/ 8 DAB	15 DAA/ 8 DAB	33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code				
TABLE OF A x B MEANS (First Knock x Second Knock)							
1	Roundup CT	1000ml/ha	A	36.7h	91.7cd	1.50b	0.67b
1b	Roundup CT	1000ml/ha	A	95.0a-d	93.3bcd	0.17def	0.08e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
2	Roundup CT	2000ml/ha	A	56.7g	91.7cd	0.58cde	0.25b-e
2b	Roundup CT	2000ml/ha	A	95.0a-d	98.3ab	0.04ef	0.00e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
3	Roundup CT	2000ml/ha	A	56.7g	93.3bcd	1.42b	0.63bc
	Amicide 625	1800ml/ha	A				
	Hasten	1% v/v	A				
3b	Roundup CT	2000ml/ha	A	93.3bcd	100.0a	0.04ef	0.00e
	Amicide 625	1800ml/ha	A				
	Hasten	1% v/v	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
4	Amicide 625	1800ml/ha	A	40.0h	73.3f	1.08bc	0.08e
	Hasten	1% v/v	A				
4b	Amicide 625	1800ml/ha	A	95.0a-d	95.0a-d	0.08ef	0.00e
	Hasten	1% v/v	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
5	Tordon 75-D	1000ml/ha	A	36.7h	30.0h	1.46b	0.13de
5b	Tordon 75-D	1000ml/ha	A	93.3bcd	95.0a-d	0.04ef	0.00e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
6	Roundup CT	2000ml/ha	A	93.3bcd	98.3ab	0.33def	0.17cde
	Sharpen	17g/ha	A				
	Hasten	1% v/v	A				
6b	Roundup CT	2000ml/ha	A	100.0a	100.0a	0.00f	0.00e
	Sharpen	17g/ha	A				
	Hasten	1% v/v	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				

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Pest Scientific Name				<i>Sonchus oleraceus</i>	<i>Sisymbrium thellungii</i>	<i>Sonchus oleraceus</i>	<i>Sonchus oleraceus</i>
Pest Name				Common Sowthistle	African Turnip weed	Common Sowthistle	Common Sowthistle
Description						Surviving	Regrowing
Assessment Date				17/05/2019	17/05/2019	4/06/2019	4/06/2019
Assessment Type				BURNDOWN	BURNDOWN	COUNT	COUNT
Assessment Unit				%	%	/m ²	/m ²
Treatment-Evaluation Interval				15 DAA/ 8 DAB	15 DAA/ 8 DAB	33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code				
7	Amicide 625	1800ml/ha	A	83.3e	76.7f	0.50def	0.29b-e
	Sharpen	9g/ha	A				
	Hasten	1% v/v	A				
7b	Amicide 625	1800ml/ha	A	96.7abc	98.3ab	0.00f	0.00e
	Sharpen	9g/ha	A				
	Hasten	1% v/v	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
8	Gp HC V	600ml/ha	A	36.7h	43.3g	0.67cd	0.25b-e
	Hasten	1% v/v	A				
8b	Gp HC V	600ml/ha	A	95.0a-d	96.7abc	0.08ef	0.08e
	Hasten	1% v/v	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
9	Gramoxone	1600ml/ha	A	76.7f	91.7cd	0.38def	0.33b-e
9b	Gramoxone	1600ml/ha	A	98.3ab	93.3bcd	0.00f	0.00e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
10	Gp C A	2500g/ha	A	26.7i	26.7h	2.50a	1.58a
	Gp R R	3500ml/ha	A				
	Hasten	1% v/v	A				
10b	Gp C A	2500g/ha	A	93.3bcd	96.7abc	0.13def	0.13de
	Gp R R	3500ml/ha	A				
	Hasten	1% v/v	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
11	Experimental	4000ml/ha	A	73.3f	83.3e	0.25def	0.08e
	Uptake	0.5% v/v	A				
11b	Experimental	4000ml/ha	A	98.3ab	96.7abc	0.00f	0.00e
	Uptake	0.5% v/v	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
12	Pixxaro	400ml/ha	A	53.3g	13.3i	1.08bc	0.58bcd
12b	Pixxaro	400ml/ha	A	93.3bcd	83.3e	0.04ef	0.04e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				

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Pest Scientific Name				<i>Sonchus oleraceus</i>	<i>Sisymbrium thellungii</i>	<i>Sonchus oleraceus</i>	<i>Sonchus oleraceus</i>
Pest Name				Common Sowthistle	African Turnip Weed	Common Sowthistle	Common Sowthistle
Description						Surviving	Regrowing
Assessment Date				17/05/2019	17/05/2019	4/06/2019	4/06/2019
Assessment Type				BURNDOWN	BURNDOWN	COUNT	COUNT
Assessment Unit				%	%	/m ²	/m ²
Treatment-Evaluation Interval				15 DAA/ 8 DAB	15 DAA/ 8 DAB	33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code				
13	Basta	3750ml/ha	A	91.7cd	90.0d	0.04ef	0.04e
13b	Basta	3750ml/ha	A	98.3ab	98.3ab	0.00f	0.00e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
14	Basta	5000ml/ha	A	91.7cd	90.0d	0.04ef	0.04e
14b	Basta	5000ml/ha	A	98.3ab	98.3ab	0.00f	0.00e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
15	Basta	9000ml/ha	A	96.7abc	95.0a-d	0.13def	0.00e
15b	Basta	9000ml/ha	A	100.0a	100.0a	0.00f	0.00e
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				
16	Basta	3750ml/ha	A	90.0d	90.0d	0.13def	0.13de
	Amicide 625	1800ml/ha	A				
16b	Basta	3750ml/ha	A	100.0a	98.3ab	0.00f	0.00e
	Amicide 625	1800ml/ha	A				
	Gramoxone	1600ml/ha	B				
	Sharpen	9g/ha	B				
	Hasten	1% v/v	B				

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Trial Year: 2019

Pest Scientific Name				<i>Sisymbrium thellungii</i>	<i>Sisymbrium thellungii</i>
Pest Name				African Turnip Weed	African Turnip Weed
Description				Surviving	Regrowing
Assessment Date				4/06/2019	4/06/2019
Assessment Type				COUNT	COUNT
Assessment Unit				/m ²	/m ²
Treatment-Evaluation Interval				33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code		
TABLE OF A MEANS (First Knock)					
1	Roundup CT	1000ml/ha	A	0.65bc	0.63bc
2	Roundup CT	2000ml/ha	A	0.00d	0.00d
3	Roundup CT	2000ml/ha	A	0.00d	0.00d
	Amicide 625	1800ml/ha	A		
	Hasten	1% v/v	A		
4	Amicide 625	1800ml/ha	A	0.13cd	0.00d
	Hasten	1% v/v	A		
5	Tordon 75-D	1000ml/ha	A	0.15cd	0.02cd
6	Roundup CT	2000ml/ha	A	0.04cd	0.02cd
	Sharpen	17g/ha	A		
	Hasten	1% v/v	A		
7	Amicide 625	1800ml/ha	A	0.10cd	0.04cd
	Sharpen	9g/ha	A		
	Hasten	1% v/v	A		
8	Gp HC V	600ml/ha	A	0.63bc	0.63bc
	Hasten	1% v/v	A		
9	Gramoxone	1600ml/ha	A	0.83b	0.81b
10	Gp C A	2500g/ha	A	0.48bcd	0.38bcd
	Gp R R	3500ml/ha	A		
	Hasten	1% v/v	A		
11	Experimental	4000ml/ha	A	0.17cd	0.15cd
	Uptake	0.5% v/v	A		
12	Pixxaro	400ml/ha	A	3.33a	3.33a
13	Basta	3750ml/ha	A	0.15cd	0.15cd
14	Basta	5000ml/ha	A	0.15cd	0.13cd
15	Basta	9000ml/ha	A	0.10cd	0.10cd
16	Basta	3750ml/ha	A	0.00d	0.00d
	Amicide 625	1800ml/ha	A		
TABLE OF B MEANS (Second Knock)					
1	First Knock only	-	-	0.58a	0.52a
2	Gramoxone	1600ml/ha	B	0.28b	0.28b
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
TABLE OF A x B MEANS (First Knock x Second Knock)					
1	Roundup CT	1000ml/ha	A	0.33-	0.29-
1b	Roundup CT	1000ml/ha	A	0.96-	0.96-
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
2	Roundup CT	2000ml/ha	A	0.00-	0.00-
2b	Roundup CT	2000ml/ha	A	0.00-	0.00-
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		

Knockdown Control of Common Sowthistle

Trial ID: LB1903

Location: Warra

Trial Year: 2019

Pest Scientific Name				<i>Sisymbrium thellungii</i>	<i>Sisymbrium thellungii</i>
Pest Name				African Turnip Weed	African Turnip Weed
Description				Surviving	Regrowing
Assessment Date				4/06/2019	4/06/2019
Assessment Type				COUNT	COUNT
Assessment Unit				/m ²	/m ²
Treatment-Evaluation Interval				33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code		
3	Roundup CT	2000ml/ha	A	0.00-	0.00-
	Amicide 625	1800ml/ha	A		
	Hasten	1% v/v	A		
3b	Roundup CT	2000ml/ha	A	0.00-	0.00-
	Amicide 625	1800ml/ha	A		
	Hasten	1% v/v	A		
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
4	Amicide 625	1800ml/ha	A	0.21-	0.00-
	Hasten	1% v/v	A		
4b	Amicide 625	1800ml/ha	A	0.04-	0.00-
	Hasten	1% v/v	A		
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
5	Tordon 75-D	1000ml/ha	A	0.29-	0.04-
5b	Tordon 75-D	1000ml/ha	A	0.00-	0.00-
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
6	Roundup CT	2000ml/ha	A	0.08-	0.04-
	Sharpen	17g/ha	A		
	Hasten	1% v/v	A		
6b	Roundup CT	2000ml/ha	A	0.00-	0.00-
	Sharpen	17g/ha	A		
	Hasten	1% v/v	A		
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
7	Amicide 625	1800ml/ha	A	0.21-	0.08-
	Sharpen	9g/ha	A		
	Hasten	1% v/v	A		
7b	Amicide 625	1800ml/ha	A	0.00-	0.00-
	Sharpen	9g/ha	A		
	Hasten	1% v/v	A		
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		

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Pest Scientific Name				<i>Sisymbrium thellungii</i>	<i>Sisymbrium thellungii</i>
Pest Name				African Turnip weed	African Turnip weed
Description				Surviving	Regrowing
Assessment Date				4/06/2019	4/06/2019
Assessment Type				COUNT	COUNT
Assessment Unit				/m ²	/m ²
Treatment-Evaluation Interval				33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code		
8	Gp HC V Hasten	600ml/ha 1% v/v	A A	0.92-	0.92-
8b	Gp HC V Hasten Gramoxone Sharpen Hasten	600ml/ha 1% v/v 1600ml/ha 9g/ha 1% v/v	A A B B B	0.33-	0.33-
9	Gramoxone	1600ml/ha	A	1.21-	1.21-
9b	Gramoxone Gramoxone Sharpen Hasten	1600ml/ha 1600ml/ha 9g/ha 1% v/v	A B B B	0.46-	0.42-
10	Gp C A Gp R R Hasten	2500g/ha 3500ml/ha 1% v/v	A A A	0.88-	0.67-
10b	Gp C A Gp R R Hasten Gramoxone Sharpen Hasten	2500g/ha 3500ml/ha 1% v/v 1600ml/ha 9g/ha 1% v/v	A A A B B B	0.08-	0.08-
11	Experimental Uptake	4000ml/ha 0.5% v/v	A A	0.29-	0.29-
11b	Experimental Uptake Gramoxone Sharpen Hasten	4000ml/ha 0.5% v/v 1600ml/ha 9g/ha 1% v/v	A A B B B	0.04-	0.00-
12	Pixxaro	400ml/ha	A	4.04-	4.04-
12b	Pixxaro Gramoxone Sharpen Hasten	400ml/ha 1600ml/ha 9g/ha 1% v/v	A B B B	2.63-	2.63-
13	Basta	3750ml/ha	A	0.29-	0.29-
13b	Basta Gramoxone Sharpen Hasten	3750ml/ha 1600ml/ha 9g/ha 1% v/v	A B B B	0.00-	0.00-

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Pest Scientific Name				<i>Sisymbrium thellungii</i>	<i>Sisymbrium thellungii</i>
Pest Name				African Turnip Weed	African Turnip Weed
Description				Surviving	Regrowing
Assessment Date				4/06/2019	4/06/2019
Assessment Type				COUNT	COUNT
Assessment Unit				/m ²	/m ²
Treatment-Evaluation Interval				33 DAA/ 26 DAB	33 DAA/ 26 DAB
Trt No.	Treatment	Product Rate	Appln. Code		
14	Basta	5000ml/ha	A	0.29-	0.25-
14b	Basta	5000ml/ha	A	0.00-	0.00-
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
15	Basta	9000ml/ha	A	0.21-	0.21-
15b	Basta	9000ml/ha	A	0.00-	0.00-
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		
16	Basta	3750ml/ha	A	0.00-	0.00-
	Amicide 625	1800ml/ha	A		
16b	Basta	3750ml/ha	A	0.00-	0.00-
	Amicide 625	1800ml/ha	A		
	Gramoxone	1600ml/ha	B		
	Sharpen	9g/ha	B		
	Hasten	1% v/v	B		

COMPLETE STRIP-BLOCK AOV						
<i>Sonchus oleraceus</i> - Common Sowthistle						
17/05/2019						
BURNDOWN % 15 DAA/ 8 DAB						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	52548.958333				
R	2	6.770833	3.385417	0.215	0.8074	
A	15	16440.625000	1096.041667	65.558	0.0001	4.8
RA	30	501.562500	16.718750			
B	1	23751.041667	23751.041667	13029.144	0.0001	1.2
RB	2	3.645833	1.822917			
AB	15	11373.958333	758.263889	48.261	0.0001	6.6
RAB	30	471.354167	15.711806			

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COMPLETE STRIP-BLOCK AOV For <i>Sisymbrium thellungii</i> - African Turnip Weed 17/05/2019 BURNDOWN % 15 DAA/ 8 DAB						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	50000.000000				
R	2	48.437500	24.218750	1.833	0.1774	
A	15	21658.333333	1443.888889	103.572	0.0001	4.4
RA	30	418.229167	13.940972			
B	1	12376.041667	12376.041667	6789.144	0.0001	1.2
RB	2	3.645833	1.822917			
AB	15	15098.958333	1006.597222	76.189	0.0001	6.1
RAB	30	396.354167	13.211806			

COMPLETE STRIP-BLOCK AOV <i>Sonchus oleraceus</i> - Common Sowthistle Surviving 4/06/2019 COUNT /m ² 33 DAA/ 26 DAB						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	40.343587				
R	2	0.010091	0.005046	0.044	0.9574	
A	15	12.195150	0.813010	9.005	0.0001	0.35
RA	30	2.708659	0.090289			
B	1	12.308757	12.308757	5817.308	0.0002	0.04
RB	2	0.004232	0.002116			
AB	15	9.641764	0.642784	5.549	0.0001	0.57
RAB	30	3.474935	0.115831			

COMPLETE STRIP-BLOCK AOV For <i>Sonchus oleraceus</i> - Common Sowthistle Regrowing 4/06/2019 COUNT /m ² 33 DAA/ 26 DAB						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	14.139974				
R	2	0.072591	0.036296	0.427	0.6561	
A	15	4.139974	0.275998	4.004	0.0006	0.31
RA	30	2.068034	0.068934			
B	1	2.266276	2.266276	109.638	0.0090	0.13
RB	2	0.041341	0.020671			
AB	15	3.004557	0.200304	2.359	0.0221	0.49
RAB	30	2.547201	0.084907			

Knockdown Control of Common Sowthistle

Trial ID: LB1903

Location:

Warra

Trial Year:

2019

COMPLETE STRIP-BLOCK AOV For <i>Sisymbrium thellungii</i> - African Turnip Weed Surviving 4/06/2019 COUNT /m ² 33 DAA/ 26 DAB						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	81.683431				
R	2	1.270833	0.635417	3.234	0.0535	
A	15	60.008952	4.000597	15.110	0.0001	0.61
RA	30	7.942708	0.264757			
B	1	2.078288	2.078288	245.558	0.0040	0.08
RB	2	0.016927	0.008464			
AB	15	4.471191	0.298079	1.517	0.1612	0.74
RAB	30	5.894531	0.196484			

COMPLETE STRIP-BLOCK AOV <i>Sisymbrium thellungii</i> - African Turnip Weed Regrowing 4/06/2019 COUNT /m ² 33 DAA/ 26 DAB						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	82.259766				
R	2	0.944336	0.472168	2.496	0.0994	
A	15	61.348307	4.089887	15.075	0.0001	0.61
RA	30	8.138997	0.271300			
B	1	1.438151	1.438151	34.116	0.0281	0.18
RB	2	0.084310	0.042155			
AB	15	4.629557	0.308637	1.631	0.1238	0.73
RAB	30	5.676107	0.189204			

Assessment Type

BURNDOWN = % Burndown/brown out

DAA = Days after Application A

DAB = Days after Application B

Knockdown Control of Common Sowthistle

Trial ID: LB1903

Location: Warra

Trial Year: 2019

Conclusions:

Application was on common sowthistle at a population of ~13/m² at large rosette stage (~40% at 30 cm in diameter). A second knock of Gramoxone 1.6 L/ha + Sharpen 9 g/ha + Hasten 1% was applied 7 days later. Data on African turnip weed was also generated.

First knock treatments alone of Roundup + Sharpen + Hasten, together with all treatments that included Basta alone or in mixture, provided >90% sowthistle burndown at 15 days after first knock application.

The second knock application significantly improved burndown overall, with all double knocked treatments rated as 93-100% burndown at 8 days after the second knock application. The double knocked treatments of Roundup + Sharpen, Basta 9 L/ha and Basta + Amine 625 all provided 100% sowthistle burndown.

Weed counts were conducted earlier than ideal (33 days after first knock application) to fit a planting opportunity. First knock treatments alone of Roundup + Sharpen + Hasten, Amicide + Sharpen or Gramoxone together with all treatments that included Basta alone or in mixture, provided >95% control of common sowthistle. The second knock application significantly improved control overall. All double knocked treatments provided >99% control of common sowthistle. Double knocked treatments of Roundup + Sharpen + Hasten, Amicide + Sharpen, Gramoxone together with all treatments that included Basta alone or in mixture, provided complete control.

In this situation, a number of alternative herbicides provided at least equivalent common sowthistle control to Roundup CT 2 L/ha. Basta (3.75 or 5 L/ha) resulted in the highest level of control of the first knock approaches evaluated and may be an option though optical sprayers. However complete common sowthistle control was only achieved when a second knock of Gramoxone + Sharpen + Hasten was used following an initial treatment of Roundup + Sharpen + Hasten, Amicide + Sharpen, Gramoxone or Basta alone.

Application Description		
	A	B
Application Date:	2/05/2019	9/05/2019
Application Start Time:	11:10 AM	12:45 PM
Application Stop Time:	1:40 PM	12:55 PM
Application Method:	SPRAY	
Application Timing:	LATE POST-EM	
Application Placement:	FOLIAR	
Air Temperature, Unit:	25 C	26 C
% Relative Humidity:	55	37
Wind Velocity, Unit:	12 km/h	2.4 km/h
Wind Direction:	NE	NW
Dew Presence (Y/N):	No	
Soil Moisture:	DRY	
% Cloud Cover:	85	0
Next Moisture Occurred On:	5/05/2019	3/06/2019

Application Equipment		
	A	B
Application Equipment:	Polaris	
Equipment Type:	BOOM	
Operation Pressure, Unit:	350 kPa	
Nozzle Type:	AIXR	
Nozzle Size:	110015	
Nozzle Spacing, Unit:	50 cm	
Nozzles/Row:	8	
Boom Length, Unit:	4 m	3 m
Boom Height, Unit:	70 cm	
Ground Speed, Unit:	7.2 km/h	
Spray Volume, Unit:	100 L/ha	