

SLR-25-SHO-02

Trial Report

Pre and Early Post Emergent Showpiece

Trial location: Cunderdin, Western Australia

Year: 2025



Table of Contents

1.	Objectives	3
2.	Materials and methods.....	4
2.1	Product information	4
2.2	Treatment details and randomisation	5
3.	Results.....	6
3.1	Table of results	6
3.1.1	Annual ryegrass counts (m ²), 28, 33 DA-A and 14, 31, 58 DA-B and panicle counts (m ²) at 120 DA-B	6
3.1.2	Annual ryegrass control (%), 28, 33 DA-A and 14, 31, 58 DA-B and panicle control (%) at 120 DA-B	7
3.1.3	Volunteer lupin counts (m ²), 33 DA-A and 14, 31, 58 DA-B.....	8
3.1.4	Volunteer lupin control (%), 33 DA-A and 14, 31, 58 DA-B.....	9
3.1.5	Crop phytotoxicity (%), 28, 33 DA-A, 14, 31 and 58 DA-B.....	10
3.1.6	Crop biomass (%), 28, 33 DA-A, 14, 31 and 58 DA-B.	11
3.1.7	Crop necrosis (%), 33 DA-A and 14 DA-B	12
3.1.8	Yield data (t/ha)	13
3.2	Figures	14
3.3	Annual ryegrass control (%), 28, 33 DA-A and 14, 31 and 58 DA-B.....	14
3.4	Annual ryegrass panicle control (%), 120 DA-B	15
4.	Chronology of events.....	16
5.	Appendices.....	17
5.1	Experimental details	17
5.2	Treatment application details	18
5.3	Trial site location	19
5.4	Growing conditions.....	20
5.5	Assessment details	21
5.5.1	Crop safety.....	21
5.5.2	Efficacy.....	21
5.6	Statistical analysis.....	22
5.7	Protocol deviations.....	22
6.	Photos.....	23
6.1	Assessment 2 – 7 th July 2025 – 47 DA-A/ 14 DA-B.....	23
6.2	Assessment 4 – 20 th August 2025, 91 DA-A/ 58 DA-B	34
7.	SLR Pre and Early Post Emergent Contributors	45

1. Objectives

1. **Industry Connection:** Serve as a platform for crop protection companies to showcase their products and establish connections with the target market of WA growers.
2. **Direct Grower Education and Extension:** Provide growers in Western Australia with direct exposure to the company's products, showcasing their benefits and in-crop results.
3. **Options for Growers:** Evaluate contributions from various crop protection companies, side by side, offering growers a range of options to suit their cropping programs.
4. **Market Platform:** Provide a marketing opportunity for crop protection companies, allowing them to highlight their products directly to the target audience.

2. Materials and methods

2.1 Product information

Product	Active ingredient	Formulation type
Valor EZE	Flumioxazin 480g/L	SC
Pyroxasulfone	Pyroxasulfone 850g/kg	WG
Valor WG	Flumioxazin 500g/kg	WG
Trifluralin	Trifluralin 600g/L	EC
Terrain Flow	Flumioxazin 480g/L	SC
Spruce/GPH1121	Pyroxasulfone + Diflufenican	SC
Preceed	Pyroxasulfone 850g/kg	WG
Wingman	Flumioxazin 500g/kg	WG
Saffire	Saflufenacil 250g/L	SC
Luximax	Cinmethylin 750g/L	EC
Voraxor	Saflufenacil 250g/L Trifludimoxazin 125g/L	SC
Boxer Gold	S-metolachlor 120g/L Prosulfocarb 800g/L	SC
Overwatch	Bixlozone 400g/L	SC
Mateno	Aclonifen 400g/L Diflufenican 66g/L Pyroxasulfone 100g/L	SC
FMC410	Bixlozone + Diflufenican	WG
Prosulfocarb	Prosulfocarb 800g/L	EC

2.2 Treatment details and randomisation

Treatment No.	Treatment Name	Rate	Rate Unit	Appl Timing	Appl Code
1	Untreated Control	-	-	-	-
2	Valor EZE	125	mL/ha	IBS	A
	Pyroxasulfone	118	g/ha	IBS	A
3	Valor WG	120	g/ha	IBS	A
	Pyroxasulfone	118	g/ha	IBS	A
4	Trifluralin	2	L/ha	IBS	A
	Terrain Flow	125	mL/ha	IBS	A
5	Spruce/GPH1121	500	mL/ha	IBS	A
6	Trifluralin	2	L/ha	IBS	A
	Pyroxasulfone	118	g/ha	IBS	A
7	Pyroxasulfone	118	g/ha	IBS	A
	Terrain Flow	125	mL/ha	IBS	A
8	Preceed	118	g/ha	IBS	A
	Wingman	600	mL/ha	IBS	A
9	Preceed	118	g/ha	IBS	A
	Saffire	240	mL/ha	IBS	A
	Wingman	480	mL/ha	IBS	A
10	Luximax	500	mL/ha	IBS	A
	Voraxor	200	mL/ha	IBS	A
11	Pyroxasulfone	118	g/ha	IBS	A
	Boxer Gold	2.5	L/ha	IBS	A
12	Pyroxasulfone	118	g/ha	IBS	A
	Trifluralin	2	L/ha	IBS	A
	Boxer Gold	2.5	L/ha	IBS	A
13	Overwatch	1.25	L/ha	IBS	A
	Trifluralin	2	L/ha	IBS	A
14	Overwatch	1.25	L/ha	IBS	A
	Pyroxasulfone	118	g/ha	IBS	A
15	Overwatch	1.25	L/ha	IBS	A
	Boxer Gold	2.5	L/ha	IBS	A
16	Overwatch	1.25	L/ha	IBS	A
	Trifluralin	2	L/ha	IBS	A
	Boxer Gold	2.5	L/ha	IBS	A
17	Trifluralin	2	L/ha	IBS	A
	Mateno	1	L/ha	EPE	B
18	Terrain Flow	125	mL/ha	IBS	A
	Mateno	1	L/ha	EPE	B
19	Boxer Gold	2.5	L/ha	IBS	A
	Mateno	1	L/ha	EPE	B
20	Trifluralin	2	L/ha	IBS	A
	FMC410	1.7	kg/ha	EPE	B
21	Overwatch	1.25	L/ha	IBS	A
	Prosulfocarb	3	L/ha	EPE	B
22	Overwatch	1.25	L/ha	IBS	A
	Mateno	1	L/ha	EPE	B

301 6	302 22	303 19	304 12	305 17	306 20	307 14	308 10	309 15	310 7	311 8	312 16	313 11	314 18	315 13	316 21	317 4	318 3	319 1	320 2	321 9	322 5
201 18	202 21	203 7	204 15	205 12	206 10	207 20	208 14	209 17	210 2	211 22	212 1	213 3	214 16	215 9	216 6	217 19	218 4	219 13	220 8	221 5	222 11
101 1	102 2	103 3	104 4	105 5	106 6	107 7	108 8	109 9	110 10	111 11	112 12	113 13	114 14	115 15	116 16	117 17	118 18	119 19	120 20	121 21	122 22

3. Results

3.1 Table of results

3.1.1 Annual ryegrass counts (m²), 28, 33 DA-A and 14, 31, 58 DA-B and panicle counts (m²) at 120 DA-B

Table 1. ANOVA means table of results showing annual ryegrass counts (m²) 28, 33 DA-A and 14, 31, 58 DA-B and panicle counts (m²) at 120 DA-B

Rating Date					18/06/2025	23/06/2025	7/07/2025	24/07/2025	20/08/2025	21/10/2025
SE Description					ARG m2	ARG m2	ARG m2	ARG m2	ARG m2	Panicle m2
Rating Unit					m2	m2	m2	m2	m2	m2
Number of Subsamples					3	3	3	3	3	3
Days After First/Last Appl.					28 DA-A	33 DA-A	47 DA-A, 14 DA-B	64 DA-A, 31 DA-B	91 DA-A, 58 DA-B	153 DA-A, 120 DA-B
ARM Action Codes					1	7	16	25	33	41
Trt No.	Treatment Name	Rate	Unit	Appl Code						
1	UTC				17.78 a	76 a	143.11 a	80.89 a	147.56 a	50.89 a
2	Valor EZE	125	ml/ha	A	1.33 bcd	5.78 bcd	22.67 b	8.89 bc	12.89 b	11.67 def
	Pyroxasulfone	118	g/ha	A						
3	Valor WG	120	g/ha	A	0.78 d	7.11 bcd	15.56 b-g	7.56 bc	12.44 b	13 cde
	Pyroxasulfone	118	g/ha	A						
4	Trifluralin	2	l/ha	A	1.44 bcd	11.56 bcd	23.56 b	9.33 bc	19.11 b	20.56 bc
	Terrain Flow	125	ml/ha	A						
5	Spruce/GPH1121	500	ml/ha	A	0.56 d	6.22 bcd	4 hi	12 bc	16.89 b	14 cde
6	Trifluralin	2	l/ha	A	2.56 bcd	12.44 bc	4.89 hi	10.22 bc	10.22 b	15.78 bcd
	Pyroxasulfone	118	g/ha	A						
7	Pyroxasulfone	118	g/ha	A	1.56 bcd	4.44 cd	18.67 b-f	12.44 bc	14.22 b	13.78 cde
	Terrain Flow	125	ml/ha	A						
8	Preceed	118	g/ha	A	0.33 d	6.67 bcd	10.22 f-i	11.56 bc	13.78 b	12.78 cde
	Wingman	600	ml/ha	A						
9	Preceed	118	g/ha	A	0.67 d	6.67 bcd	10.22 f-i	9.33 bc	12.44 b	14.33 cde
	Saffire	240	ml/ha	A						
	Wingman	480	ml/ha	A						
10	Luximax	500	ml/ha	A	2.11 bcd	5.78 bcd	21.78 bc	13.33 bc	20.44 b	22.67 b
	Voraxor	200	ml/ha	A						
11	Pyroxasulfone	118	g/ha	A	0.11 d	2.67 cd	15.11 b-g	13.33 bc	14.67 b	11 def
	Boxer Gold	2.5	l/ha	A						
12	Pyroxasulfone	118	g/ha	A	0.22 d	3.11 cd	2.67 i	7.11 c	9.78 b	11.67 def
	Trifluralin	2	l/ha	A						
	Boxer Gold	2.5	l/ha	A						
13	Overwatch	1.25	l/ha	A	1.78 bcd	7.56 bcd	9.33 f-i	11.11 bc	19.11 b	21 bc
	Trifluralin	2	l/ha	A						
14	Overwatch	1.25	l/ha	A	0.56 d	4.89 cd	8.89 ghi	8.89 bc	7.11 b	10.56 def
	Pyroxasulfone	118	g/ha	A						
15	Overwatch	1.25	l/ha	A	1.11 cd	5.78 bcd	7.11 ghi	12.44 bc	12 b	16.44 bcd
	Boxer Gold	2.5	l/ha	A						
16	Overwatch	1.25	l/ha	A	0.67 d	12.44 bc	20 b-e	11.11 bc	18.22 b	13.22 cde
	Trifluralin	2	l/ha	A						
	Boxer Gold	2.5	l/ha	A						
17	Trifluralin	2	l/ha	A	2.33 bcd	8.89 bcd	11.56 d-i	11.56 bc	11.11 b	7.22 ef
	Mateno	1	l/ha	B						
18	Terrain Flow	125	ml/ha	A	4.44 bc	15.56 b	20.89 bcd	17.33 b	20 b	13.33 cde
	Mateno	1	l/ha	B						
19	Boxer Gold	2.5	l/ha	A	1.11 cd	7.11 bcd	11.11 e-i	8.44 bc	11.11 b	7.22 ef
	Mateno	1	l/ha	B						
20	Trifluralin	2	l/ha	A	1.89 bcd	8.44 bcd	4.44 hi	4 c	4.89 b	4.44 f
	FMC410	1.7	kg/ha	B						
21	Overwatch	1.25	l/ha	A	4.78 b	1.78 d	5.33 hi	9.78 bc	14.22 b	14.22 cde
	Prosulfocarb	3	l/ha	B						
22	Overwatch	1.25	l/ha	A	1.11 cd	8.89 bcd	12.89 c-h	3.56 c	6.67 b	4.44 f
	Mateno	1	l/ha	B						
LSD P=.05					3.535	9.863	9.445	10.042	17.45	8.24
Standard Deviation					2.145	5.986	5.732	6.094	10.59	5.001
CV					95.88	57.31	31.21	45.57	54.32	33.93

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

3.1.2 Annual ryegrass control (%), 28, 33 DA-A and 14, 31, 58 DA-B and panicle control (%) at 120 DA-B

Table 2. ANOVA means table of results showing annual ryegrass control (%) 28, 33 DA-A and 14, 31, 58 DA-B and panicle control (%) at 120 DA-B.

Rating Date					18/06/2025	23/06/2025	7/07/2025	24/07/2025	20/08/2025	21/10/2025
SE Description					ARG control	ARG control	ARG control	ARG control	ARG control	Panicle control
Rating Unit					%UNCK	%UNCK	%UNCK	%UNCK	%UNCK	%UNCK
Number of Subsamples					1	1	1	1	1	1
Days After First/Last Appl.					28 DA-A	33 DA-A	47 DA-A, 14 DA-B	64 DA-A, 31 DA-B	91 DA-A, 58 DA-B	153 DA-A, 120 DA-B
ARM Action Codes					TAB[1]	TAB[7]	TAB[16]	TAB[25]	TAB[33]	TAB[41]
Trt No.	Treatment Name	Rate	Unit	Appl Code						
1	UTC				0 e	0 d	0 j	0 e	0 j	0 g
2	Valor EZE	125	m/ha	A	92.33 ab	92.63 ab	84.3 hi	88.06 a-d	90.72 b-h	76.55 abc
	Pyroxasulfone	118	g/ha	A						
3	Valor WG	120	g/ha	A	95.27 ab	90.55 abc	89 e-i	90.42 abc	91.46 a-f	75.04 bcd
	Pyroxasulfone	118	g/ha	A						
4	Trifluralin	2	U/ha	A	91.36 ab	84.22 bc	83.65 i	87.83 a-d	86.35 f-i	59.64 def
	Terrain Flow	125	m/ha	A						
5	Spruce/GPH1121	500	m/ha	A	97.89 a	91.75 abc	97.2 ab	84.68 cd	88.4 d-i	73.06 b-e
6	Trifluralin	2	U/ha	A	86.55 abc	83.93 bc	96.5 ab	87.41 a-d	92.49 a-d	69.27 c-f
	Pyroxasulfone	118	g/ha	A						
7	Pyroxasulfone	118	g/ha	A	90.94 ab	94.41 ab	86.78 f-i	83.4 cd	89.31 c-i	72.39 b-e
	Terrain Flow	125	m/ha	A						
8	Preceed	118	g/ha	A	98.73 a	91.14 abc	93.04 a-e	85.24 bcd	88.96 d-i	74.68 bcd
	Wingman	600	m/ha	A						
9	Preceed	118	g/ha	A	95.5 ab	91.08 abc	92.91 a-e	88.9 abc	91.38 a-g	72.44 b-e
	Saffire	240	m/ha	A						
	Wingman	480	m/ha	A						
10	Luximax	500	m/ha	A	86.62 abc	92.63 ab	84.72 hi	82.42 cd	84.66 i	55.89 f
	Voraxor	200	m/ha	A						
11	Pyroxasulfone	118	g/ha	A	99.07 a	96.54 a	89.41 d-h	83.59 cd	88.05 d-i	77.57 abc
	Boxer Gold	2.5	U/ha	A						
12	Pyroxasulfone	118	g/ha	A	98.15 a	96.28 a	98.17 a	91.74 abc	92.08 a-e	75.22 bc
	Trifluralin	2	U/ha	A						
	Boxer Gold	2.5	U/ha	A						
13	Overwatch	1.25	U/ha	A	89.14 abc	90.15 abc	93.69 a-e	86.31 bcd	85.75 ghi	58.57 ef
	Trifluralin	2	U/ha	A						
14	Overwatch	1.25	U/ha	A	95.93 ab	93.8 ab	93.74 a-e	89.26 abc	95.01 ab	79.06 abc
	Pyroxasulfone	118	g/ha	A						
15	Overwatch	1.25	U/ha	A	92.04 ab	91.38 abc	94.92 a-d	82.88 cd	90.77 b-h	66.33 c-f
	Boxer Gold	2.5	U/ha	A						
16	Overwatch	1.25	U/ha	A	95.13 ab	84.2 bc	85.44 ghi	87.28 a-d	86.61 e-i	74.23 bcd
	Trifluralin	2	U/ha	A						
	Boxer Gold	2.5	U/ha	A						
17	Trifluralin	2	U/ha	A	82.57 bcd	88.45 abc	91.8 b-f	85.21 bcd	91.35 a-g	85.85 ab
	Mateno	1	U/ha	B						
18	Terrain Flow	125	m/ha	A	72.53 d	79.89 c	84.97 hi	78.82 d	85.42 hi	74.29 bcd
	Mateno	1	U/ha	B						
19	Boxer Gold	2.5	U/ha	A	91.75 ab	90.85 abc	91.96 b-f	89.65 abc	92.19 a-e	86.53 ab
	Mateno	1	U/ha	B						
20	Trifluralin	2	U/ha	A	91	88.52 abc	96.88 ab	94.24 ab	96.56 a	91.28 a
	FMC410	1.7	kg/ha	B						
21	Overwatch	1.25	U/ha	A	76.6 cd	97.74 a	96.16 abc	87.41 a-d	88.95 d-i	71.52 b-e
	Prosulfocarb	3	U/ha	B						
22	Overwatch	1.25	U/ha	A	92.67 ab	89.31 abc	90.81 c-g	96.2 a	94.9 abc	91.1 a
	Mateno	1	U/ha	B						
LSD P=.05					13.949	11.986	5.586	9.493	5.635	15.562
Standard Deviation					8.465	7.274	3.39	5.761	3.42	9.444
CV					9.74	8.43	3.89	6.92	3.98	13.31

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

3.1.3 Volunteer lupin counts (m²), 33 DA-A and 14, 31, 58 DA-BTable 3. ANOVA means table of results showing volunteer lupin counts (m²) 33 DA-A and 14, 31, 58 DA-B.

Rating Date					23/06/2025	7/07/2025	24/07/2025	20/08/2025
SE Description					Lupin m2	Lupin m2	Lupin m2	Lupin m2
Rating Unit								
Number of Subsamples					3	3	3	3
Days After First/Last Appl.					33, 33 DA-A	47, 14 DA-B	64, 31 DA-B	91, 58 DA-B
ARM Action Codes								
Trt No.	Treatment Name	Rate	Unit	Appl Code	11	20	29	37
1	UTC				33.78 a	41.33 a	42.22 a	46.22 a
2	Valor EZE	125	ml/ha	A	10.22 e-h	14.67 c-g	11.11 c-f	13.33 c-f
	Pyroxasulfone	118	g/ha	A				
3	Valor WG	120	g/ha	A	12.44 c-f	12 e-i	12.44 c-f	14.22 c-f
	Pyroxasulfone	118	g/ha	A				
4	Trifluralin	2	l/ha	A	15.11 cde	16.89 c-f	15.11 b-e	16.44 cd
	Terrain Flow	125	ml/ha	A				
5	Spruce/GPH1121	500	ml/ha	A	24.44 b	20.44 bc	24.44 b	25.33 b
6	Trifluralin	2	l/ha	A	19.56 bc	19.56 bcd	18.67 bc	19.11 bc
	Pyroxasulfone	118	g/ha	A				
7	Pyroxasulfone	118	g/ha	A	9.78 e-h	14.67 c-g	12.44 c-f	10.67 c-g
	Terrain Flow	125	ml/ha	A				
8	Preceed	118	g/ha	A	9.78 e-h	14.22 c-h	14.22 cde	13.78 c-f
	Wingman	600	ml/ha	A				
9	Preceed	118	g/ha	A	2.67 h	1.78 k	3.11 f	3.56 g
	Saffire	240	ml/ha	A				
	Wingman	480	ml/ha	A				
10	Luximax	500	ml/ha	A	3.56 gh	3.56 jk	6.67 ef	7.11 efg
	Voraxor	200	ml/ha	A				
11	Pyroxasulfone	118	g/ha	A	11.11 d-g	26.22 b	24.89 b	26.67 b
	Boxer Gold	2.5	l/ha	A				
12	Pyroxasulfone	118	g/ha	A	13.33 c-f	13.33 c-i	16 b-e	14.22 c-f
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
13	Overwatch	1.25	l/ha	A	10.67 e-h	15.11 c-g	11.56 c-f	14.22 c-f
	Trifluralin	2	l/ha	A				
14	Overwatch	1.25	l/ha	A	5.33 fgh	13.78 c-h	13.78 cde	14.67 c-f
	Pyroxasulfone	118	g/ha	A				
15	Overwatch	1.25	l/ha	A	11.11 d-g	18.67 cde	16.89 bcd	18.67 bc
	Boxer Gold	2.5	l/ha	A				
16	Overwatch	1.25	l/ha	A	9.78 e-h	13.78 c-h	12.44 c-f	12 c-g
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
17	Trifluralin	2	l/ha	A	15.11 cde	12.89 d-i	9.33 c-f	8 d-g
	Mateno	1	l/ha	B				
18	Terrain Flow	125	ml/ha	A	19.11 bcd	9.78 f-j	16.44 b-e	9.78 d-g
	Mateno	1	l/ha	B				
19	Boxer Gold	2.5	l/ha	A	17.78 b-e	12.89 d-i	12.89 c-f	15.56 cde
	Mateno	1	l/ha	B				
20	Trifluralin	2	l/ha	A	10.67 e-h	7.11 h-k	8.44 def	4 g
	FMC410	1.7	kg/ha	B				
21	Overwatch	1.25	l/ha	A	11.56 c-g	9.33 g-j	13.33 cde	13.33 c-f
	Prosulfocarb	3	l/ha	B				
22	Overwatch	1.25	l/ha	A	10.67 e-h	6.22 ijk	6.67 ef	6.22 fg
	Mateno	1	l/ha	B				
LSD P=.05					8.118	7.161	10.006	8.447
Standard Deviation					4.926	4.346	6.073	5.126
CV					37.69	30.04	41.35	34.48

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

3.1.4 Volunteer lupin control (%), 33 DA-A and 14, 31, 58 DA-B

Table 4. ANOVA means table of results showing volunteer lupin control (%) 33 DA-A and 14, 31, 58 DA-B

Rating Date					23/06/2025	7/07/2025	24/07/2025	20/08/2025
SE Description					Lupin control	Lupin control	Lupin control	Lupin control
Rating Unit					%UNCK	%UNCK	%UNCK	%UNCK
Number of Subsamples					1	1	1	1
Days After First/Last Appl.					33, 33 DA-A	47, 14 DA-B	64, 31 DA-B	91, 58 DA-B
ARM Action Codes					TAB[11]	TAB[20]	TAB[29]	TAB[37]
Trt No.	Treatment Name	Rate	Unit	Appl Code	12	21	30	38
1	UTC				0 i	0 k	0 e	0 g
2	Valor EZE	125	ml/ha	A	72.35 a-d	64.41 e-i	74.06 abc	70.57 b-e
	Pyroxasulfone	118	g/ha	A				
3	Valor WG	120	g/ha	A	60.23 c-g	70.94 c-g	71.4 abc	70.06 b-e
	Pyroxasulfone	118	g/ha	A				
4	Trifluralin	2	l/ha	A	51.35 d-h	59.87 f-i	62.98 bc	63.46 de
	Terrain Flow	125	ml/ha	A				
5	Spruce/GPH1121	500	ml/ha	A	25.31 hi	50.04 ij	39.78 d	45.95 f
6	Trifluralin	2	l/ha	A	37.83 gh	52.96 hij	58.77 cd	57.27 ef
	Pyroxasulfone	118	g/ha	A				
7	Pyroxasulfone	118	g/ha	A	71.77 a-d	64.88 e-i	71.38 abc	76.68 a-d
	Terrain Flow	125	ml/ha	A				
8	Preceed	118	g/ha	A	67.68 a-e	65.94 d-i	65.37 bc	71.54 b-e
	Wingman	600	ml/ha	A				
9	Preceed	118	g/ha	A	92.43 a	95.56 a	93.64 a	92.62 a
	Saffire	240	ml/ha	A				
	Wingman	480	ml/ha	A				
10	Luximax	500	ml/ha	A	89.17 ab	91.45 ab	85.08 ab	84.89 ab
	Voraxor	200	ml/ha	A				
11	Pyroxasulfone	118	g/ha	A	61.15 c-g	37.19 j	40.57 d	42.69 f
	Boxer Gold	2.5	l/ha	A				
12	Pyroxasulfone	118	g/ha	A	59.28 c-g	67.52 d-h	61.27 cd	69.65 b-e
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
13	Overwatch	1.25	l/ha	A	67.84 a-e	63.73 e-i	70.75 bc	69.59 b-e
	Trifluralin	2	l/ha	A				
14	Overwatch	1.25	l/ha	A	82.86 abc	66.67 d-i	64.4 bc	66.56 cde
	Pyroxasulfone	118	g/ha	A				
15	Overwatch	1.25	l/ha	A	66.42 a-f	54.93 ghi	57.43 cd	58.16 ef
	Boxer Gold	2.5	l/ha	A				
16	Overwatch	1.25	l/ha	A	68.99 a-d	67.09 d-h	70.79 bc	72.51 b-e
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
17	Trifluralin	2	l/ha	A	53.32 d-g	68.63 c-h	77.93 abc	82.92 abc
	Mateno	1	l/ha	B				
18	Terrain Flow	125	ml/ha	A	40.52 fgh	76.3 b-f	57.18 cd	78.88 a-d
	Mateno	1	l/ha	B				
19	Boxer Gold	2.5	l/ha	A	42.7 e-h	69.55 c-h	69.4 bc	66.2 cde
	Mateno	1	l/ha	B				
20	Trifluralin	2	l/ha	A	67.84 a-e	82.77 a-d	78.43 abc	90.48 a
	FMC410	1.7	kg/ha	B				
21	Overwatch	1.25	l/ha	A	59.84 c-g	77.98 b-e	68.27 bc	67.7 cde
	Prosulfocarb	3	l/ha	B				
22	Overwatch	1.25	l/ha	A	64.3 b-f	84.54 abc	84.52 ab	86.08 ab
	Mateno	1	l/ha	B				
LSD P=.05					26.103	16.969	22.383	17.037
Standard Deviation					15.842	10.298	13.584	10.34
CV					26.74	15.81	21	15.32

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

3.1.5 Crop phytotoxicity (%), 28, 33 DA-A, 14, 31 and 58 DA-B

Table 5. ANOVA means table of results showing crop phytotoxicity (%) at 28, 33 DA-A, 14, 31 and 58 DA-B.

Rating Date					18/06/2025	23/06/2025	7/07/2025	24/07/2025	20/08/2025
SE Description					Phytotoxicity	Phytotoxicity	Phytotoxicity	Phytotoxicity	Phytotoxicity
Rating Unit					0-100	0-100	0-100	0-100	0-100
Number of Subsamples					1	1	1	1	1
Days After First/Last Appl.					28 DA-A	33 DA-A	47 DA-A, 14 DA-B	64 DA-A, 31 DA-B	91 DA-A, 58 DA-B
Trt No.	Treatment Name	Rate	Unit	Appl Code	5	13	22	31	39
1	UTC				0 c	0 c	0 e	0 na	0 na
2	Valor EZE	125	ml/ha	A	6.67 ab	0 c	0 e	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
3	Valor WG	120	g/ha	A	5 b	0 c	0 e	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
4	Trifluralin	2	l/ha	A	6.67 ab	0 c	0 e	0 na	0 na
	Terrain Flow	125	ml/ha	A					
5	Spruce/GPH1121	500	ml/ha	A	8.33 ab	0 c	0 e	0 na	0 na
6	Trifluralin	2	l/ha	A	6.67 ab	0 c	0 e	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
7	Pyroxasulfone	118	g/ha	A	6.67 ab	0 c	0 e	0 na	0 na
	Terrain Flow	125	ml/ha	A					
8	Preceed	118	g/ha	A	10 a	0 c	0 e	0 na	0 na
	Wingman	600	ml/ha	A					
9	Preceed	118	g/ha	A	8.33 ab	0 c	0 e	0 na	0 na
	Saffire	240	ml/ha	A					
	Wingman	480	ml/ha	A					
10	Luximax	500	ml/ha	A	6.67 ab	6.67 a	3.33 de	0 na	0 na
	Voraxor	200	ml/ha	A					
11	Pyroxasulfone	118	g/ha	A	8.33 ab	0 c	0 e	0 na	0 na
	Boxer Gold	2.5	l/ha	A					
12	Pyroxasulfone	118	g/ha	A	6.67 ab	1.67 bc	0 e	0 na	0 na
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
13	Overwatch	1.25	l/ha	A	6.67 ab	3.33 b	0 e	0 na	0 na
	Trifluralin	2	l/ha	A					
14	Overwatch	1.25	l/ha	A	10 a	0 c	1.67 e	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
15	Overwatch	1.25	l/ha	A	6.67 ab	3.33 b	1.67 e	0 na	0 na
	Boxer Gold	2.5	l/ha	A					
16	Overwatch	1.25	l/ha	A	8.33 ab	8.33 a	3.33 de	0 na	0 na
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
17	Trifluralin	2	l/ha	A	6.67 ab	6.67 a	6.67 cd	0 na	0 na
	Mateno	1	l/ha	B					
18	Terrain Flow	125	ml/ha	A	5 b	6.67 a	10 abc	0 na	0 na
	Mateno	1	l/ha	B					
19	Boxer Gold	2.5	l/ha	A	8.33 ab	6.67 a	11.67 ab	0 na	0 na
	Mateno	1	l/ha	B					
20	Trifluralin	2	l/ha	A	6.67 ab	8.33 a	13.33 a	0 na	0 na
	FMC410	1.7	kg/ha	B					
21	Overwatch	1.25	l/ha	A	6.67 ab	0 c	8.33 bc	0 na	0 na
	Prosulfocarb	3	l/ha	B					
22	Overwatch	1.25	l/ha	A	8.33 ab	0 c	11.67 ab	0 na	0 na
	Mateno	1	l/ha	B					
LSD P=.05					3.643	3.106	4.014	.	.
Standard Deviation					2.211	1.885	2.436	0	0
CV					31.72	80.27	74.78	0	0

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

Mean separation letters are 'na' (not applicable) when error variance is 0.

3.1.6 Crop biomass (%), 28, 33 DA-A, 14, 31 and 58 DA-B.

Table 6. ANOVA means table of results showing crop biomass (%) at 28 DA-A, 0, 14, 31 and 58 DA-B.

Rating Date					18/06/2025	23/06/2025	7/07/2025	24/07/2025	20/08/2025
SE Description					Biomass	Biomass	Biomass	Biomass	Biomass
Rating Unit					0-100	0-100	0-100	0-100	0-100
Number of Subsamples					1	1	1	1	1
Days After First/Last Appl.					28 DA-A	33 DA-A	47 DA-A, 14 DA-B	64 DA-A, 31 DA-B	91 DA-A, 58 DA-B
ARM Action Codes									
Trt No.	Treatment Name	Rate	Unit	Appl Code	6	15	24	32	40
1	UTC				100 a	100 -	100 a	100 a	100 a
2	Valor EZE	125	ml/ha	A	88.33 cde	96.67 -	98.33 ab	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
3	Valor WG	120	g/ha	A	90 bcd	96.67 -	96.67 abc	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
4	Trifluralin	2	l/ha	A	88.33 cde	98.33 -	98.33 ab	100 a	100 a
	Terrain Flow	125	ml/ha	A					
5	Spruce/GPH1121	500	ml/ha	A	88.33 cde	95 -	95 bcd	100 a	100 a
6	Trifluralin	2	l/ha	A	90 bcd	96.67 -	98.33 ab	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
7	Pyroxasulfone	118	g/ha	A	88.33 cde	98.33 -	95 bcd	100 a	100 a
	Terrain Flow	125	ml/ha	A					
8	Preceed	118	g/ha	A	88.33 cde	96.67 -	98.33 ab	100 a	100 a
	Wingman	600	ml/ha	A					
9	Preceed	118	g/ha	A	85 e	96.67 -	96.67 abc	100 a	100 a
	Saffire	240	ml/ha	A					
	Wingman	480	ml/ha	A					
10	Luximax	500	ml/ha	A	85 e	95 -	95 bcd	100 a	100 a
	Voraxor	200	ml/ha	A					
11	Pyroxasulfone	118	g/ha	A	90 bcd	96.67 -	96.67 abc	100 a	100 a
	Boxer Gold	2.5	l/ha	A					
12	Pyroxasulfone	118	g/ha	A	90 bcd	96.67 -	98.33 ab	100 a	100 a
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
13	Overwatch	1.25	l/ha	A	91.67 bc	96.67 -	98.33 ab	100 a	100 a
	Trifluralin	2	l/ha	A					
14	Overwatch	1.25	l/ha	A	90 bcd	96.67 -	97.33 abc	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
15	Overwatch	1.25	l/ha	A	88.33 cde	94 -	98.33 ab	98.33 a	98.33 a
	Boxer Gold	2.5	l/ha	A					
16	Overwatch	1.25	l/ha	A	86.67 de	95 -	95 bcd	98.33 a	98.33 a
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
17	Trifluralin	2	l/ha	A	93.33 b	95 -	96.67 abc	100 a	100 a
	Mateno	1	l/ha	B					
18	Terrain Flow	125	ml/ha	A	86.67 de	96.67 -	95 bcd	98.33 a	98.33 a
	Mateno	1	l/ha	B					
19	Boxer Gold	2.5	l/ha	A	90 bcd	95 -	95 bcd	100 a	100 a
	Mateno	1	l/ha	B					
20	Trifluralin	2	l/ha	A	90 bcd	95 -	93.33 cd	100 a	100 a
	FMC410	1.7	kg/ha	B					
21	Overwatch	1.25	l/ha	A	90 bcd	96.67 -	91.67 d	98.33 a	98.33 a
	Prosulfocarb	3	l/ha	B					
22	Overwatch	1.25	l/ha	A	90 bcd	96.67 -	81.67 e	81.67 b	81.67 b
	Mateno	1	l/ha	B					
LSD P=.05					4.486	3.666	4.022	2.289	2.289
Standard Deviation					2.723	2.225	2.441	1.389	1.389
CV					3.04	2.31	2.55	1.41	1.41

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

3.1.7 Crop necrosis (%), 33 DA-A and 14 DA-B

Table 7. ANOVA means table of results showing crop necrosis (%) at 33 DA-A and 14 DA-B.

Rating Date					23/06/2025	7/07/2025
SE Description					Necrosis	Necrosis
Rating Unit						
Number of Subsamples					1	1
Days After First/Last Appl.					33, 33 DA-A	47, 14 DA-B
ARM Action Codes						
Trt No.	Treatment Name	Rate	Unit	Appl Code	14	23
1	UTC				0 c	0 b
2	Valor EZE	125	ml/ha	A	8.33 a	5 a
	Pyroxasulfone	118	g/ha	A		
3	Valor WG	120	g/ha	A	8.33 a	5 a
	Pyroxasulfone	118	g/ha	A		
4	Trifluralin	2	l/ha	A	6.67 ab	5 a
	Terrain Flow	125	ml/ha	A		
5	Spruce/GPH1121	500	ml/ha	A	0 c	0 b
6	Trifluralin	2	l/ha	A	0 c	0 b
	Pyroxasulfone	118	g/ha	A		
7	Pyroxasulfone	118	g/ha	A	8.33 a	5 a
	Terrain Flow	125	ml/ha	A		
8	Preceed	118	g/ha	A	6.67 ab	5 a
	Wingman	600	ml/ha	A		
9	Preceed	118	g/ha	A	6.67 ab	6.67 a
	Saffire	240	ml/ha	A		
	Wingman	480	ml/ha	A		
10	Luximax	500	ml/ha	A	5 b	6.67 a
	Voraxor	200	ml/ha	A		
11	Pyroxasulfone	118	g/ha	A	0 c	0 b
	Boxer Gold	2.5	l/ha	A		
12	Pyroxasulfone	118	g/ha	A	0 c	0 b
	Trifluralin	2	l/ha	A		
	Boxer Gold	2.5	l/ha	A		
13	Overwatch	1.25	l/ha	A	0 c	0 b
	Trifluralin	2	l/ha	A		
14	Overwatch	1.25	l/ha	A	0 c	0 b
	Pyroxasulfone	118	g/ha	A		
15	Overwatch	1.25	l/ha	A	0 c	0 b
	Boxer Gold	2.5	l/ha	A		
16	Overwatch	1.25	l/ha	A	0 c	0 b
	Trifluralin	2	l/ha	A		
	Boxer Gold	2.5	l/ha	A		
17	Trifluralin	2	l/ha	A	0 c	0 b
	Mateno	1	l/ha	B		
18	Terrain Flow	125	ml/ha	A	6.67 ab	6.67 a
	Mateno	1	l/ha	B		
19	Boxer Gold	2.5	l/ha	A	0 c	0 b
	Mateno	1	l/ha	B		
20	Trifluralin	2	l/ha	A	0 c	0 b
	FMC410	1.7	kg/ha	B		
21	Overwatch	1.25	l/ha	A	0 c	0 b
	Prosulfocarb	3	l/ha	B		
22	Overwatch	1.25	l/ha	A	0 c	0 b
	Mateno	1	l/ha	B		
LSD P=.05					2.571	2.424
Standard Deviation					1.56	1.471
CV					60.58	71.93

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

3.1.8 Yield data (t/ha)

Table 8. ANOVA means table of results showing yield data (t/ha) at 170 DA-A and 137 DA-B.

Rating Date	SE Description	Rating Type	Rating Unit	Number of Subsamples	Days After First/Last Appl.	7/11/2025 Yield Harvest T-MET	1
Trt No.	Treatment Name	Rate	Unit	Appl Code		170 DA-A, 137 DA-B	44
1	UTC					2.17	c
2	Valor EZE	125	m/ha	A		2.93	ab
	Pyroxasulfone	118	g/ha	A			
3	Valor WG	120	g/ha	A		3.1	ab
	Pyroxasulfone	118	g/ha	A			
4	Trifluralin	2	l/ha	A		2.86	ab
	Terrain Flow	125	m/ha	A			
5	Spruce/GPH1121	500	m/ha	A		2.58	bc
6	Trifluralin	2	l/ha	A		2.93	ab
	Pyroxasulfone	118	g/ha	A			
7	Pyroxasulfone	118	g/ha	A		2.92	ab
	Terrain Flow	125	m/ha	A			
8	Preceed	118	g/ha	A		2.88	ab
	Wingman	600	m/ha	A			
9	Preceed	118	g/ha	A		3.28	a
	Saffire	240	m/ha	A			
	Wingman	480	m/ha	A			
10	Luximax	500	m/ha	A		2.85	ab
	Voraxor	200	m/ha	A			
11	Pyroxasulfone	118	g/ha	A		2.87	ab
	Boxer Gold	2.5	l/ha	A			
12	Pyroxasulfone	118	g/ha	A		3.01	ab
	Trifluralin	2	l/ha	A			
	Boxer Gold	2.5	l/ha	A			
13	Overwatch	1.25	l/ha	A		2.87	ab
	Trifluralin	2	l/ha	A			
14	Overwatch	1.25	l/ha	A		3.14	ab
	Pyroxasulfone	118	g/ha	A			
15	Overwatch	1.25	l/ha	A		2.88	ab
	Boxer Gold	2.5	l/ha	A			
16	Overwatch	1.25	l/ha	A		3.12	ab
	Trifluralin	2	l/ha	A			
	Boxer Gold	2.5	l/ha	A			
17	Trifluralin	2	l/ha	A		3	ab
	Mateno	1	l/ha	B			
18	Terrain Flow	125	m/ha	A		2.92	ab
	Mateno	1	l/ha	B			
19	Boxer Gold	2.5	l/ha	A		3	ab
	Mateno	1	l/ha	B			
20	Trifluralin	2	l/ha	A		3.12	ab
	FMC410	1.7	kg/ha	B			
21	Overwatch	1.25	l/ha	A		2.82	ab
	Prosulfocarb	3	l/ha	B			
22	Overwatch	1.25	l/ha	A		2.99	ab
	Mateno	1	l/ha	B			
LSD P=.05						0.612	
Standard Deviation						0.196	
CV						6.7	
Grand Mean						2.92	
Levene's F^						0.481	
Levene's Prob(F)						0.992	
Rank X2						.	
P(Rank X2)						.	
Shapiro-Wilk^						0.9907	
P(Shapiro-Wilk)^						0.9616	
Skewness^						0.1098	
P(Skewness)^						0.7656	
Kurtosis^						-0.0846	
P(Kurtosis)^						0.8069	
Randomized Complete Block (RCB) AIC						17.5851	
Nearest row and column neighbor (Papadakis) AIC						SPa -8.2753	
Analyzed as						CRD+SPa	
Replicate F						.	
Replicate Prob(F)						.	
Treatment F						3.807	
Treatment Prob(F)						0.0001	

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

3.2 Figures

3.3 Annual ryegrass control (%), 28, 33 DA-A and 14, 31 and 58 DA-B

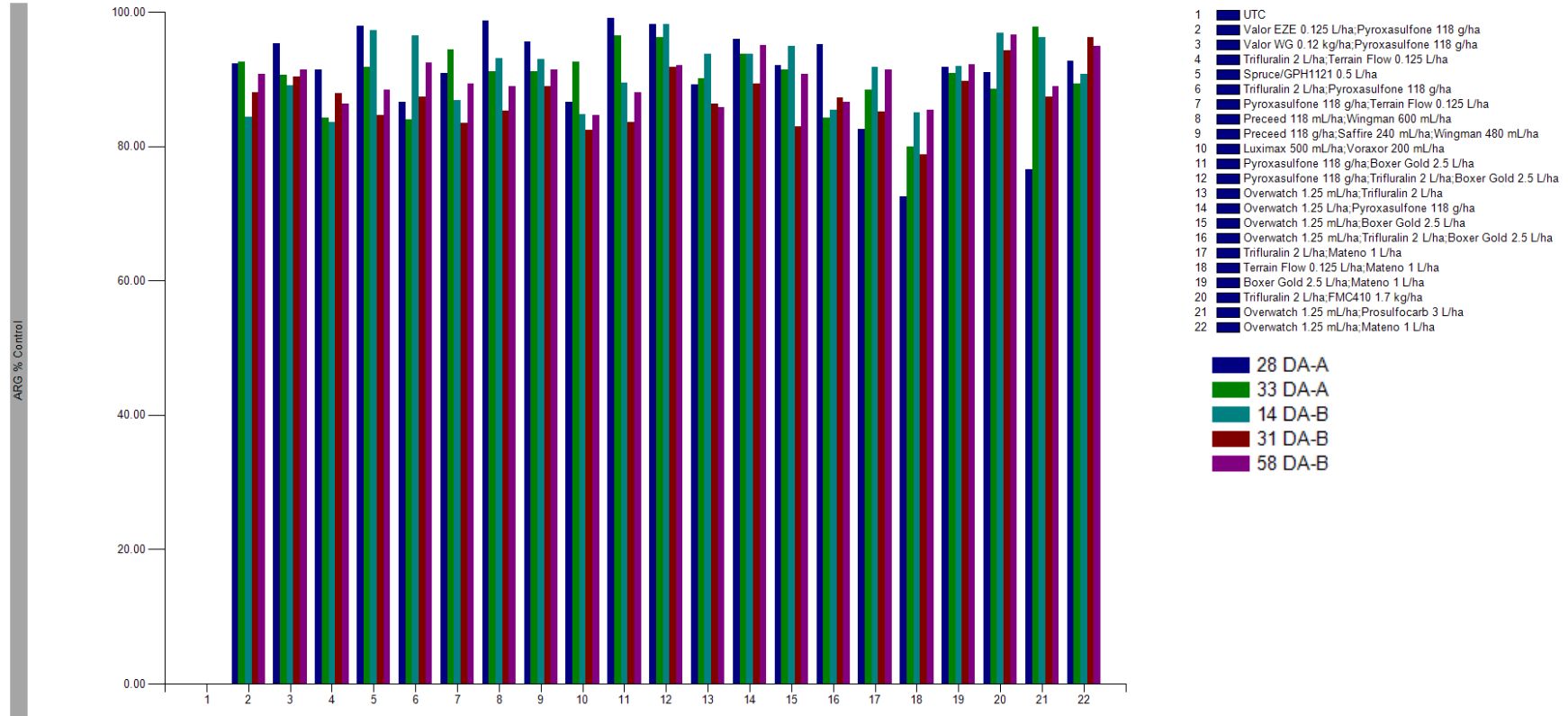


Figure 1. Annual ryegrass control (%) at 120 DA-B, for all treatments.

3.4 Annual ryegrass panicle control (%), 120 DA-B

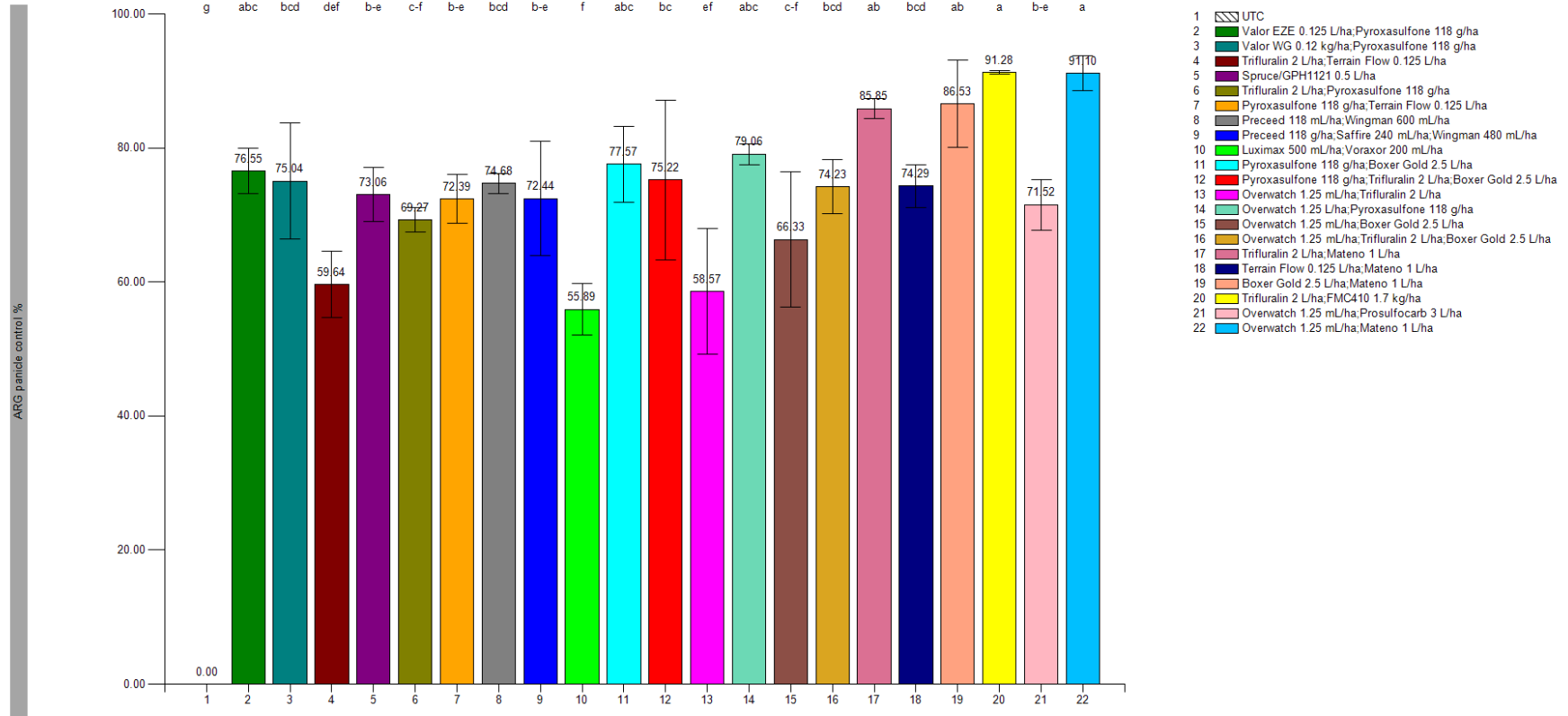


Figure 2. Annual ryegrass panicle control (%) at 120 DA-B, for all treatments.

4. Chronology of events

Date	Event	Crop stage	Days after application
21 st May 2025	IBS application	-	-
21 st May 2025	Sowing	-	0 DA-A
18 th June 2025	Assessment 1	Z12	28 DA-A
23 rd June 2025	EPE application	Z12 to Z13	33 DA-A/0 DA-B
7 th July 2025	Assessment 2	Z14 - 21	47 DA-A/14 DA-B
24 th July 2025	Assessment 3	Z22	64 DA-A/31 DA-B
20 th August 2025	Assessment 4	Z37	91 DA-A/58 DA-B
21 st October 2025	Assessment 5	Z83	153 DA-A/ 120 DA-B
7 th November 2025	Harvest	Z92	170 DA-A/ 137 DA-A

5. Appendices

5.1 Experimental details

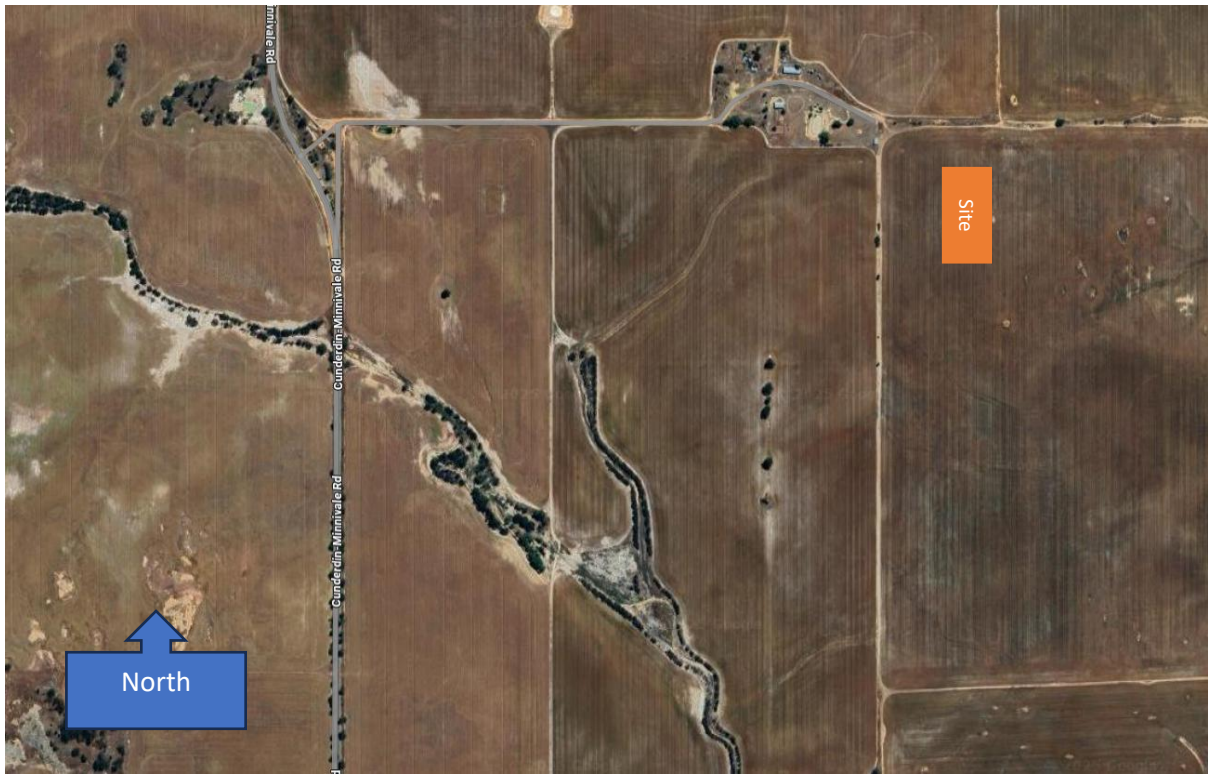
Experimental details	
Location	Cunderdin-Minnivale Road, Cunderdin
GPS	-31.501833, 117.247361
Co-operator	Holly Godfrey
Crop	Wheat
Variety	Scepter
Previous Crop	Lupins
Pest	Annual Ryegrass (<i>Lolium rigidum</i>) Volunteer Lupins (<i>Lupinus angustifolius</i>)
Pest pressure	Moderate
Soil Type	Gravel
Trial design	RCB
Replications	3
Treatment application	IBS and EPE
Plot width sprayed	2m
Sowing date	21 st May 2025
Stubble Load	Low
Seeding machine	Precision trial cone seeder fitted with knife points and trailing press wheels.
Seeding rate	70kg/ha
Seeding depth	30mm @ 8 km/hr
Plot size	2.5m x 12m
Fertiliser and rate	MacroPro Max 80 kg/ha Flexi-N 50 L/ha
Harvest date	7 th November 2025

5.2 Treatment application details

Treatment application	A	B
Application Timing	IBS	EPE
Crop Stage	-	Z12 to Z13 (2 to 3 leaf)
Weed Stage	-	1 leaf ryegrass
Date	21 st May 2025	23 rd June 2025
Time	10:00 to 11:10 am	9:30 to 10:00 am
Cloud cover (%)	0	5
Temperature (°C)	16.5	8.3
Relative Humidity (%)	51.8	83.5
Delta T (°C)	4.8	1.1
Wind Speed Km/hr	13	10
Wind Direction	NE	WSW
Soil moisture	Dry sown	Moisture at soil surface
Dew (°C)	6.5	5.6

Application equipment	A	B
Application equipment	Brolga 2m Hand boom	Brolga 2m Hand boom
Nozzles	110 – 015 Agrotop - Flat fan air induction	110 – 015 Agrotop - Flat fan air induction
Number of nozzles	4	4
Nozzle spacing	50cm	50cm
Boom height	50cm above canopy	50cm above canopy
Water volume	100 L/ha	100 L/ha
Spraying pressure	150 kPa	150 kPa
Mix size	2 L	2 L
Spray Quality	Coarse	Coarse
Propellant	CO ₂	CO ₂

5.3 Trial site location



Trial location, Cunderdin-Minnivale Road, Cunderdin.

5.4 Growing conditions

Meteorological data was obtained from the Meckering North station, 13 km away.

Day	April			May			June			July			August			September			October			November		
	Min temp °C	Max temp °C	Rain mm	Min temp °C	Max temp °C	Rain mm	Min temp °C	Max temp °C	Rain mm	Min temp °C	Max temp °C	Rain mm	Min temp °C	Max temp °C	Rain mm	Min temp °C	Max temp °C	Rain mm	Min temp °C	Max temp °C	Rain mm	Min temp °C	Max temp °C	Rain mm
1st	17.9	32.5	0	13.8	29.9	0	10.6	20.7	1.2	11.1	18.8	0	4.5	17.6	0	5.5	20.1	0	6.9	22.9	0	11.1	23.4	0.2
2nd	16	29.9	0	13.5	27.2	0	11.5	25.2	0	11.5	21.4	0	6.1	18.1	0	7.6	20.1	0	6.6	29.9	0	3	24.9	0
3rd	14.3	30.1	0	13.9	22.6	0.2	13.7	20.8	4	11.5	18.3	1.8	10.2	13.5	12.4	6.4	20.5	0	9.6	28.4	0	8	29.5	0
4th	16.8	22.1	0.2	9.7	21.9	0.2	13.6	19.2	10.2	6.8	15.8	0	4	13.9	18.4	6	17.9	0	10.6	24.2	0	17.5	31.4	0
5th	13.7	21.9	5	10.2	21.6	0	11.7	18.3	0.4	5.2	16.4	0	6	16.1	2.2	5.7	17.5	0.2	11	15.1	6.4	13.6	26.8	5.6
6th	13.1	31.6	0	9.2	22.6	0.2	7.4	17.1	0.2	5.4	21	0	7.9	17.7	0.2	7.9	14.4	9	5.7	20	4.4	9.9	26.2	3.8
7th	17.7	31.1	0	7.7	23.5	0	5.9	18.2	0.2	11.3	16.1	14.2	5.7	18	0	4.2	15.5	0.2	5.4	20.4	0	9.1	24.8	0
8th	15.7	28.8	0	11.1	29.3	0	6.7	21	0	3.3	13.3	2.8	8.6	18.7	0	4.2	14.1	5	6.9	20.7	0	9.4	27.1	0
9th	16.7	27.7	0	15.1	31.7	0	8.4	20.9	0	4.4	14.8	0.4	12.5	19.3	4	2.4	15.6	0	5.1	21.9	0	9.7	28.9	0
10th	11.3	29.3	0	12.1	25.9	0	7.8	20.8	0	3.4	13.9	0.2	9.7	16	8.8	4.4	16.8	0.2	4.9	22.8	0	9.6	30.3	0
11th	16.1	33.4	0	12.8	24.5	0	5.6	16.2	1	4.2	17.5	0	5	17.4	4.6	4.4	19.9	0	5	24.4	0	13.6	32	0
12th	21.4	33.8	0	10.7	27.5	0	6.5	16.6	0	7.9	16.3	0	5.2	21	0	6.6	23.9	0	6.9	27.7	0	17.2	34.7	0
13th	17.7	24.2	0	13.1	23.7	0	8.4	20.7	0	4.6	16.8	3.6	9.5	25.3	0	8.3	23.1	0	8.1	28.2	0	10.3	28	0
14th	16.1	26	3.4	9.7	23.8	0	5.3	18.3	0	8.1	15.6	0.4	8.9	14.8	8	12.4	17.6	3.2	8.5	31.8	0	10.9	27.6	0
15th	12.2	25.6	0.2	10.1	25.4	0	9.5	20.5	0.2	3.5	14.7	0	2.7	13.9	0	4.8	15	2	9.4	25.3	0	7.6	27.6	0
16th	13	28.2	0	11.5	24.3	0	8.8	20.6	0.2	7.3	15.8	0.2	1.8	16.1	0.2	1.1	16.2	0.6	9.7	27.5	0	10.2	29.6	0
17th	15.4	23.7	7	10.8	24.2	0	11.6	24.1	0	6.2	15.2	0.4	6.1	18.7	0	5.4	18.1	0	9.9	35	0	11.8	36.3	0
18th	9.8	20.2	0.2	10.2	23.6	0	13.9	18.2	0	5.7	16.9	0	9.5	20.4	0	6.3	18.4	3.6	12.7	24.9	0	16.3	31.9	0
19th	7	18.9	0	11.6	24.8	0	12.5	18.6	3	4.5	15.7	1	8.8	19.5	0	6.7	19.2	0	7.6	23.5	0	14.1	26.1	11.4
20th	9.9	21.9	0	4.4	19.9	0	11.6	19.5	0.6	7.4	18.3	0	11.8	17.5	9.6	8.5	23.5	0	5.5	20.3	0.2	13.9	28	2.2
21st	12.3	23.8	0	6.6	23	0	7.4	11.7	16.8	2.1	11.7	9.8	7.8	16.6	0.6	8.5	25.3	0.2	7.3	21.7	1.6	13.3	29.3	0
22nd	14.9	32.7	3.2	7.3	23.9	0	8.3	15.6	0	5.3	13.9	0	5.4	17.9	0.2	6.5	25.6	0	5.4	25.8	0	16.7	28.8	0
23rd	19.2	27.3	0	9	15.3	0.2	6.3	15.7	0	7.4	14.6	0.4	7.4	17	0.2	10.6	27.3	0	8.8	26.8	0	11.1	24.1	0
24th	11.4	19	5.6	4.2	16.8	0	5.5	16.4	0.2	4.9	11.8	3.8	9.7	15.8	4.6	11.4	28.6	0	5.4	21.9	0	7.1	23.4	0
25th	5.9	18.4	0	7.4	18	0.4	6.1	17.2	0.2	0.8	12.8	0.2	5.1	10.9	12.2	9.7	30	0	6	23.7	0.2	8.8	25.6	0
26th	9.5	19.2	0.2	3.9	15.7	0.2	6.4	18.2	0	4.9	13.8	0	3	13.7	5.6	8.4	22.9	0	7	24.2	0	9.5	28.6	0
27th	5.7	20.6	0	5.4	19	0.2	7	18.7	0	2.3	10.7	0	3.3	14.2	0.2	5.7	24.6	0	6.5	26.8	0	9.2	26.5	0
28th	8.4	21.2	0	6.7	22.9	0	5.8	18.3	0	4.6	10.8	12	5.4	16.1	4.4	7.2	21.1	0	11.2	34.2	0	6.8	27.7	0
29th	10.3	23.3	0	11.6	24	0	7.8	17.6	0	2.5	12.7	0.2	3	15	0.2	8.8	20.6	1	10	23.7	0	11.2	30.3	0
30th	11	26.8	0	13.3	20.3	5.8	9.7	20.4	0	6.2	14.1	0	3.8	17.5	0	5.4	22.1	0	7.5	25.4	0	11.8	33.8	0
31st				14.5	19.8	6				6	17.1	0.4	4.8	19.3	0.2				8.6	28.4	0			
Total monthly rainfall (mm)			25			13.4			38.4			51.8			96.8			25.2			12.8			23.2

Application
Assessment
Sowing
Harvest

5.5 Assessment details

5.5.1 Crop safety

Crop phytotoxicity: Visual assessments on a whole plot basis, relative to untreated control plots within the trial. Assessment based on a 0-100% scale where 0 = no crop damage and 100 = total loss of crop. Refer to table below.

% Rating	Effects
0	Non-Evident
10	Negligible: Discoloration, distortion and/or stunting barely seen
20*	Slight: discoloration, distortion and/or stunting clearly seen
30	Moderate damage: moderate discoloration, marked distortion and/or stunting, Recovery expected
40	Substantial damage: much discoloration, distortions and/or stunting. Some damage irreversible
50	Majority of plants damaged, may irreversibly; some necrosis, discoloration, and distortions severe
60	Nearly all plants damaged; most irreversibly; some plants killed (<40%); substantial necrosis and distortion
70	Severe: substantial number of plants killed (40-60%); much necrosis and distortion
80	Very severe: majority of plants killed (60-80%); remainder show much necrosis and wilting
90	Remaining live plants (<20%) mostly discoloured and distorted permanently or desiccated
100	Complete loss of plants

**For crop safety, this is the maximum considered commercially acceptable.*

Crop Necrosis: Visual assessment of crop vigour on a whole plot basis, in relation to untreated control. Crop necrosis was recorded on a 0 – 100% scale, where 0 = no loss of plant material equal to UTC, and 100 = total crop death.

Crop Biomass: A visual assessment on a whole plot, relative to untreated control plots within the trial. Crop biomass is rated on a scale of 0 – 100% where 100 = zero loss of vigour or biomass, equal to UTC and 0 = total crop death.

Grain yield: Plots were harvested using a small plot trial harvester. Grain was converted from kg/plot to t/ha.

5.5.2 Efficacy

Weed counts: The number of plants counted within a 50 cm x 50 cm quadrat (.25m²), sampling a minimum of 3 sub samples per plot and record as number of plants per meter squared (plants/m²).

Weed percentage control (Abbott % of untreated): Weed counts are taken using a 50 cm x 50 cm quadrat (0.25 m²), with a minimum of three subsamples recorded per plot. Counts are converted to plants per square meter. Percent weed control is then calculated in ARM using Abbott's transformation, which expresses control as a percentage relative to the untreated check.

5.6 Statistical analysis

Data was recorded in Agriculture Research Manager and statistically analysed using an analysis of variance with mean values summarised and separated using Least Significant Test at the 5% level of probability.

Yield data were analysed using a spatial method, incorporating the Papadakis nearest row and column neighbour adjustment to account for field variation.

5.7 Protocol deviations

There were no recorded reasons why the data generated at that site should be treated as unrepresentative.

6. Photos

6.1 Assessment 2 – 7th July 2025 – 47 DA-A/ 14 DA-B



Treatment 1: Untreated control, 14 DA-B



Treatment 2: Valor EZE 0.125 L/ha + Pyroxasulfone 118 g/ha, 14 DA-B



Treatment 3: Valor WG 0.12 kg/ha + Pyroxasulfone 118 g/ha, 14 DA-B



Treatment 4: Trifluralin 2 L/ha + Terrain Flow 0.125 L/ha, 14 DA-B



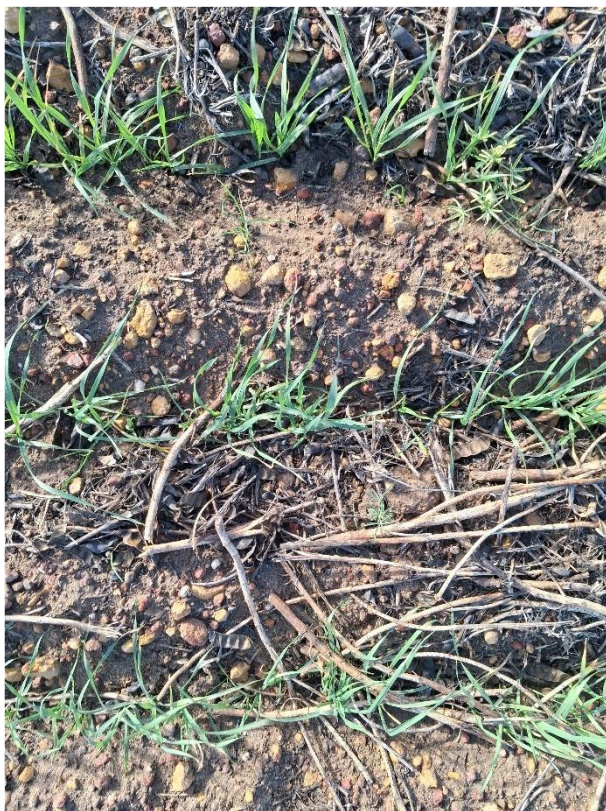
Treatment 5: Spruce/GPH1121 0.5 L/ha, 14 DA-B



Treatment 6: Trifluralin 2 L/ha + Pyroxasulfone 118 g/ha, 14 DA-B



Treatment 7: Pyroxasulfone 118 g/ha + Terrain Flow 0.125 L/ha, 14 DA-B



Treatment 8: Preceed 118 g/ha + Wingman 600 mL/ha, 14 DA-B



Treatment 9: Preceed 118 g/ha + Saffire 240 mL/ha + Wingman 480 mL/ha, 14 DA-B



Treatment 10: Luximax 500 mL/ha + Voraxor 200 mL/ha, 14 DA-B



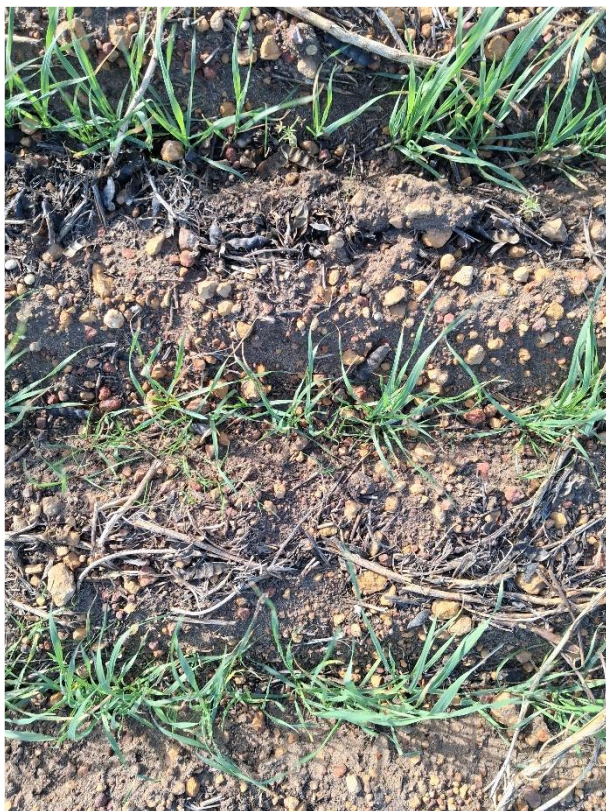
Treatment 11: Pyroxasulfone 118 g/ha + Boxer Gold 2.5 L/ha, 14 DA-B



Treatment 12: Pyroxasulfone 118 g/ha + Trifluralin 2 L/ha + Boxer Gold 2.5 L/ha, 14 DA-B



Treatment 13: Overwatch 1.25 L/ha + Trifluralin 2 L/ha, 14 DA-B



Treatment 14: Overwatch 1.25 L/ha + Pyroxasulfone 118 g/ha, 14 DA-B



Treatment 15: Overwatch 1.25 L/ha + Boxer Gold 2.5 L/ha, 14 DA-B



Treatment 16: Overwatch 1.25 L/ha + Trifluralin 2 L/ha + Boxer Gold 2.5 L/ha, 14 DA-B



Treatment 17: Trifluralin 2 L/ha + Mateno 1 L/ha, 14 DA-B



Treatment 18: Terrain Flow 0.125 L/ha + Mateno 1 L/ha, 14 DA-B



Treatment 19: Boxer Gold 2.5 L/ha + Mateno 1 L/ha, 14 DA-B



Treatment 20: Trifluralin 2 L/ha + FMC410 1.7 kg/ha, 14 DA-B



Treatment 21: Overwatch 1.25 L/ha + Prosulfocarb 3 L/ha, 14 DA-B



Treatment 22: Overwatch 1.25 L/ha + Mateno 1 L/ha, 14 DA-B

6.2 Assessment 4 – 20th August 2025, 91 DA-A/ 58 DA-B



Treatment 1: Untreated control, 58 DA-B



Treatment 2: Valor EZE 0.125 L/ha + Pyroxasulfone 118 g/ha, 58 DA-B



Treatment 3: Valor WG 0.12 kg/ha + Pyroxasulfone 118 g/ha, 58 DA-B



Treatment 4: Trifluralin 2 L/ha + Terrain Flow 0.125 L/ha, 58 D-B



Treatment 5: Spruce/GPH1121 0.5 L/ha, 58 DA-B



Treatment 6: Trifluralin 2 L/ha + Pyroxasulfone 118 g/ha, 58 DA-B



Treatment 7: Pyroxasulfone 118 g/ha + Terrain Flow 0.125 L/ha, 58 DA-B



Treatment 8: Preceed 118 g/ha + Wingman 600 mL/ha, 58 DA-B



Treatment 9: Preceed 118 g/ha + Saffire 240 mL/ha + Wingman 480 mL/ha, 58 DA-B



Treatment 10: Luximax 500 mL/ha + Voraxor 200 mL/ha, 58 DA-B



Treatment 11: Pyroxasulfone 118 g/ha + Boxer Gold 2.5 L/ha, 58 DA-B



Treatment 12: Pyroxasulfone 118 g/ha + Trifluralin 2 L/ha + Boxer Gold 2.5 L/ha, 58 DA-B



Treatment 13: Overwatch 1.25 L/ha + Trifluralin 2 L/ha, 58 DA-B



Treatment 14: Overwatch 1.25 L/ha + Pyroxasulfone 118 g/ha, 58 DA-B



Treatment 15: Overwatch 1.25 L/ha + Boxer Gold 2.5 L/ha, 58 DA-B



Treatment 16: Overwatch 1.25 L/ha + Trifluralin 2 L/ha + Boxer Gold 2.5 L/ha, 58 DA-B



Treatment 17: Trifluralin 2 L/ha + Mateno 1 L/ha, 58 DA-B



Treatment 18: Terrain Flow 0.125 L/ha + Mateno 1 L/ha, 58 DA-B



Treatment 19: Boxer Gold 2.5 L/ha + Mateno 1 L/ha, 58 DA-B



Treatment 20: Trifluralin 2 L/ha + FMC410 1.7 kg/ha, 58 DA-B



Treatment 21: Overwatch 1.25 L/ha + Prosulfocarb 3 L/ha, 58 DA-B

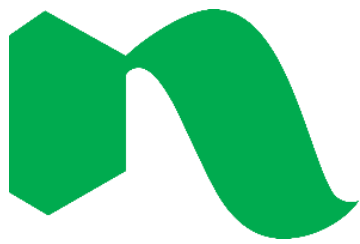


Treatment 22: Overwatch 1.25 L/ha + Mateno 1 L/ha, 58 DA-B

7. SLR Pre and Early Post Emergent Contributors



We create chemistry



Nufarm



UPL



Nutrien



SUMITOMO CHEMICAL