

SLR-25-SHO-03

Trial Report

Pre and Early Post Emergent Showpiece

Trial location: Narrogin, Western Australia

Year: 2025



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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), 47 DA-A and 8, 23, 51 DA-B and panicle counts (m²) at 121 DA-B

Table 1. ANOVA means table of results showing annual ryegrass counts (m²), 47 DA-A and 8, 23, 51 DA-B and panicle counts (m²) at 121 DA-B

Rating Date					16/06/2025	24/06/2025	9/07/2025	6/08/2025	15/10/2025
SE Description					ARG m2	ARG m2	ARG m2	ARG m2	ARG panicle count
Rating Unit					m2	m2	m2	m2	m2
Number of Subsamples					3	3	3	3	3
Rating Timing					A2	A3	A4	A5	
Days After First/Last Appl.					47 DA-A	55 DA-A, 8 DA-B	70 DA-A, 23 DA-B	98 DA-A, 51 DA-B	168 DA-A, 121 DA-B
ARM Action Codes									
Trt No.	Treatment Name	Rate	Unit	Appl Code	16	17	18	19	20
1	UTC				24.44 a	44.89 a	67.56 a	154.22 a	38.11 a
2	Valor EZE	125	ml/ha	A	1.78 d	7.11 b	11.56 bcd	34.67 cd	6.33 bcd
	Pyoxasulfone	118	g/ha	A					
3	Valor WG	120	g/ha	A	1.78 d	6.67 b	14.22 bcd	41.78 c	6.78 bcd
	Pyoxasulfone	118	g/ha	A					
4	Trifluralin	2	l/ha	A	5.33 bcd	4.44 b	8.44 bcd	48.89 bc	7.11 bcd
	Terrain Flow	125	ml/ha	A					
5	Spruce/GPH1121	500	ml/ha	A	1.78 d	2.67 b	6.67 cd	50.22 bc	8.78 bc
6	Trifluralin	2	l/ha	A	4.89 bcd	7.56 b	8.44 bcd	41.33 c	7.67 bcd
	Pyoxasulfone	118	g/ha	A					
7	Pyoxasulfone	118	g/ha	A	5.33 bcd	4 b	19.11 bc	49.78 bc	10.67 b
	Terrain Flow	125	ml/ha	A					
8	Preceed	118	g/ha	A	2.22 cd	7.11 b	7.56 bcd	45.33 bc	5.33 c-f
	Wingman	600	ml/ha	A					
9	Preceed	118	g/ha	A	6.22 bcd	8.44 b	13.78 bcd	46.67 bc	6.22 bcd
	Saffire	240	ml/ha	A					
	Wingman	480	ml/ha	A					
10	Luximax	500	ml/ha	A	1.78 d	10.22 b	17.33 bcd	47.11 bc	10.44 b
	Voraxor	200	ml/ha	A					
11	Pyoxasulfone	118	g/ha	A	1.78 d	5.78 b	11.56 bcd	32 cde	3.44 d-h
	Boxer Gold	2.5	l/ha	A					
12	Pyoxasulfone	118	g/ha	A	2.67 cd	4.89 b	8 bcd	42.22 c	5.22 c-g
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
13	Overwatch	1.25	l/ha	A	4.89 bcd	5.78 b	12.44 bcd	51.56 bc	8.67 bc
	Trifluralin	2	l/ha	A					
14	Overwatch	1.25	l/ha	A	2.22 cd	6.67 b	18.67 bcd	54.22 bc	5.22 c-g
	Pyoxasulfone	118	g/ha	A					
15	Overwatch	1.25	l/ha	A	3.11 bcd	7.56 b	20.89 b	69.33 b	7.44 bcd
	Boxer Gold	2.5	l/ha	A					
16	Overwatch	1.25	l/ha	A	3.56 bcd	8.89 b	19.11 bc	30.22 c-f	6.11 b-e
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
17	Trifluralin	2	l/ha	A	5.78 bcd	3.56 b	7.56 bcd	13.33 def	1.33 e-h
	Mateno	1	l/ha	B					
18	Terrain Flow	125	ml/ha	A	6.67 bc	6.67 b	7.11 bcd	7.56 ef	0.67 fgh
	Mateno	1	l/ha	B					
19	Boxer Gold	2.5	l/ha	A	3.11 bcd	3.56 b	9.33 bcd	12.89 def	0.44 gh
	Mateno	1	l/ha	B					
20	Trifluralin	2	l/ha	A	7.56 b	3.56 b	6.67 cd	8.89 def	0.89 fgh
	FMC410	1.7	kg/ha	B					
21	Overwatch	1.25	l/ha	A	4.44 bcd	8 b	6.67 cd	28.44 c-f	1.11 fgh
	Prosulfocarb	3	l/ha	B					
22	Overwatch	1.25	l/ha	A	2.67 cd	3.56 b	4.89 d	4.89 f	0.11 h
	Mateno	1	l/ha	B					
LSD P=.05					4.772	8.336	13.902	26.431	4.782
Standard Deviation					2.896	5.059	8.437	16.04	2.902
CV					61.26	64.88	60.35	38.54	43.11

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

3.1.2 Annual ryegrass control (%), 47 DA-A and 8, 23, 51 DA-B and panicle control (%) at 121 DA-B

Table 2. ANOVA means table of results showing annual ryegrass control (%), 47 DA-A and 8, 23, 51 DA-B and panicle control (%) at 121 DA-B

Rating Date					16/06/2025	24/06/2025	9/07/2025	6/08/2025	15/10/2025
SE Description					ARG control	ARG control	ARG control	ARG control	ARG panicle control
Rating Unit					%UNCK	%UNCK	%UNCK	%UNCK	%UNCK
Number of Subsamples					1	1	1	1	1
Rating Timing					A2	A3	A4	A5	A6
Days After First/Last Appl.					47 DA-A	55 DA-A, 8 DA-B	70 DA-A, 23 DA-B	98 DA-A, 51 DA-B	168 DA-A, 121 DA-B
ARM Action Codes					TAB[16]	TAB[17]	TAB[18]	TAB[19]	TAB[20]
Trt No.	Treatment Name	Rate	Unit	Appl Code	21	22	23	24	25
1	UTC				0 f	0 g	0 f	0 g	0 g
2	Valor EZE	125	ml/ha	A	92.09 ab	87 a-e	78.84 a-e	77.52 cde	83.28 cde
	Pyroxasulfone	118	g/ha	A					
3	Valor WG	120	g/ha	A	91.63 ab	85.99 a-f	74.48 b-e	73.51 e	81.86 c-f
	Pyroxasulfone	118	g/ha	A					
4	Trifluralin	2	l/ha	A	76.78 a-e	89.37 a-e	84.13 a-d	66.81 ef	80.95 c-f
	Terrain Flow	125	ml/ha	A					
5	Spruce/GPH1121	500	ml/ha	A	91.17 ab	94 a	89.09 ab	66.24 ef	77.13 def
6	Trifluralin	2	l/ha	A	76.53 a-e	84.26 a-f	81.15 a-d	74.25 de	79.19 c-f
	Pyroxasulfone	118	g/ha	A					
7	Pyroxasulfone	118	g/ha	A	74.89 b-e	90.59 a-d	62.57 e	67.49 ef	71.25 f
	Terrain Flow	125	ml/ha	A					
8	Preceed	118	g/ha	A	90.71 ab	83.95 a-f	87.33 abc	70.99 ef	85.75 bcd
	Wingman	600	ml/ha	A					
9	Preceed	118	g/ha	A	70.94 cde	80.54 def	76.96 a-e	69.26 ef	83.61 cde
	Saffire	240	ml/ha	A					
	Wingman	480	ml/ha	A					
10	Luximax	500	ml/ha	A	92.81 a	75.57 f	70.01 cde	68.57 ef	71.85 ef
	Voraxor	200	ml/ha	A					
11	Pyroxasulfone	118	g/ha	A	91.17 ab	85.72 a-f	81.72 a-d	79.19 b-e	91.09 abc
	Boxer Gold	2.5	l/ha	A					
12	Pyroxasulfone	118	g/ha	A	87.93 abc	87.8 a-e	88.96 ab	72.05 ef	85.75 bcd
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
13	Overwatch	1.25	l/ha	A	79.34 a-e	87.48 a-e	81.01 a-d	66.65 ef	76.8 def
	Trifluralin	2	l/ha	A					
14	Overwatch	1.25	l/ha	A	91.88 ab	84.58 a-f	68.15 de	63.66 ef	86.11 bcd
	Pyroxasulfone	118	g/ha	A					
15	Overwatch	1.25	l/ha	A	89.1 ab	83.44 a-f	70.52 cde	54.67 f	79.52 c-f
	Boxer Gold	2.5	l/ha	A					
16	Overwatch	1.25	l/ha	A	85.36 a-d	80.85 c-f	68.38 de	80.53 a-e	82.98 c-f
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
17	Trifluralin	2	l/ha	A	75.89 a-e	91.33 abc	87.59 abc	91.38 a-d	96.34 ab
	Mateno	1	l/ha	B					
18	Terrain Flow	125	ml/ha	A	70.05 de	82.12 b-f	88.27 abc	95.19 ab	98.25 a
	Mateno	1	l/ha	B					
19	Boxer Gold	2.5	l/ha	A	86.29 a-d	92.04 ab	83.03 a-d	91.66 a-d	98.81 a
	Mateno	1	l/ha	B					
20	Trifluralin	2	l/ha	A	65.63 e	90.39 a-d	91 ab	94.25 abc	97.58 ab
	FMC410	1.7	kg/ha	B					
21	Overwatch	1.25	l/ha	A	82.37 a-e	79.18 ef	89.74 ab	81.22 a-e	96.99 ab
	Prosulfocarb	3	l/ha	B					
22	Overwatch	1.25	l/ha	A	88.64 ab	92.62 ab	93.47 a	96.8 a	99.75 a
	Mateno	1	l/ha	B					
LSD P=.05					17.379	10.722	18.409	17.566	11.997
Standard Deviation					10.547	6.507	11.172	10.661	7.281
CV					13.25	7.91	14.49	14.64	8.87

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

3.1.3 Volunteer canola (m²), 47 DA-A and 8, 23, 51 DA-BTable 3. ANOVA means table of results showing volunteer canola counts (m²), 47 DA-A and 8, 23, 51 DA-B.

Rating Date					16/06/2025	24/06/2025	9/07/2025	6/08/2025
SE Description					Canola m2	Canola m2	Canola m2	Canola m2
Rating Unit					m2	m2	m2	m2
Number of Subsamples					3	3	3	3
Rating Timing					A2	A3	A4	A5
Days After First/Last Appl.					47 DA-A	55 DA-A, 8 DA-B	70 DA-A, 23 DA-B	98 DA-A, 51 DA-B
ARM Action Codes								
Trt No.	Treatment Name	Rate	Unit	Appl Code	26	27	28	29
1	UTC				6.11 -	11.11 a	21.33 a	23.56 a
2	Valor EZE	125	ml/ha	A	0.89 -	0.44 b	1.33 efg	5.44 b-e
	Pyroxasulfone	118	g/ha	A				
3	Valor WG	120	g/ha	A	2.22 -	2.67 b	4.89 b-g	4.44 b-f
	Pyroxasulfone	118	g/ha	A				
4	Trifluralin	2	l/ha	A	0 -	0.44 b	4 b-g	4.89 b-f
	Terrain Flow	125	ml/ha	A				
5	Spruce/GPH1121	500	ml/ha	A	0 -	0.89 b	2.22 d-g	3.56 def
6	Trifluralin	2	l/ha	A	2.22 -	1.78 b	1.78 efg	1.78 ef
	Pyroxasulfone	118	g/ha	A				
7	Pyroxasulfone	118	g/ha	A	0.44 -	0.44 b	3.11 c-g	2.22 ef
	Terrain Flow	125	ml/ha	A				
8	Preceed	118	g/ha	A	0.89 -	0.44 b	2.67 d-g	4 c-f
	Wingman	600	ml/ha	A				
9	Preceed	118	g/ha	A	1.33 -	0.44 b	2.22 d-g	1.33 ef
	Saffire	240	ml/ha	A				
	Wingman	480	ml/ha	A				
10	Luximax	500	ml/ha	A	0.44 -	0 b	0.89 fg	0.89 ef
	Voraxor	200	ml/ha	A				
11	Pyroxasulfone	118	g/ha	A	0 -	1.33 b	9.78 b	7.11 bcd
	Boxer Gold	2.5	l/ha	A				
12	Pyroxasulfone	118	g/ha	A	1.78 -	0.44 b	7.56 b-e	7.11 bcd
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
13	Overwatch	1.25	l/ha	A	2.22 -	2.22 b	7.11 b-f	8.44 bc
	Trifluralin	2	l/ha	A				
14	Overwatch	1.25	l/ha	A	1.33 -	0.89 b	8.44 bcd	8.89 b
	Pyroxasulfone	118	g/ha	A				
15	Overwatch	1.25	l/ha	A	1.33 -	0.89 b	1.33 efg	4.44 b-f
	Boxer Gold	2.5	l/ha	A				
16	Overwatch	1.25	l/ha	A	1.78 -	1.78 b	9.33 bc	3.11 def
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
17	Trifluralin	2	l/ha	A	1.33 -	1.33 b	0 g	1.33 ef
	Mateno	1	l/ha	B				
18	Terrain Flow	125	ml/ha	A	2.22 -	0.89 b	0 g	0.44 f
	Mateno	1	l/ha	B				
19	Boxer Gold	2.5	l/ha	A	1.33 -	1.33 b	1.78 efg	0.89 ef
	Mateno	1	l/ha	B				
20	Trifluralin	2	l/ha	A	1.33 -	1.78 b	2.67 d-g	0.89 ef
	FMC410	1.7	kg/ha	B				
21	Overwatch	1.25	l/ha	A	1.78 -	0.89 b	2.67 d-g	1.78 ef
	Prosulfocarb	3	l/ha	B				
22	Overwatch	1.25	l/ha	A	1.78 -	0.44 b	0.44 g	0.44 f
	Mateno	1	l/ha	B				
LSD P=.05					2.881	3.953	6.276	4.705
Standard Deviation					1.748	2.399	3.809	2.856
CV					117.35	160.46	87.69	64.77

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

3.1.4 Volunteer canola control (%), 47 DA-A and 8, 23, 51 DA-B

Table 4. ANOVA means table of results showing volunteer canola control (%), 47 DA-A and 8, 23, 51 DA-B

Rating Date					16/06/2025	24/06/2025	9/07/2025	6/08/2025
SE Description					Canola Control	Canola Control	Canola Control	Canola Control
Rating Unit					%UNCK	%UNCK	%UNCK	%UNCK
Number of Subsamples					1	1	1	1
Rating Timing					A2	A3	A4	A5
Days After First/Last Appl.					47 DA-A	55 DA-A, 8 DA-B	70 DA-A, 23 DA-B	98 DA-A, 51 DA-B
ARM Action Codes					TAB[26]	TAB[27]	TAB[28]	TAB[29]
Trt No.	Treatment Name	Rate	Unit	Appl Code	30	31	32	33
1	UTC				0 -	0 c	0 f	0 f
2	Valor EZE	125	ml/ha	A	91.67 -	97.92 a	94.21 ab	76.39 b-e
	Pyroxasulfone	118	g/ha	A				
3	Valor WG	120	g/ha	A	52.5 -	74.11 b	77.35 a-e	79.26 a-e
	Pyroxasulfone	118	g/ha	A				
4	Trifluralin	2	l/ha	A	100 -	97.92 a	80.82 a-e	80 a-e
	Terrain Flow	125	ml/ha	A				
5	Spruce/GPH1121	500	ml/ha	A	100 -	90.48 ab	90.28 abc	85.93 abc
6	Trifluralin	2	l/ha	A	62.5 -	88.99 ab	91.3 abc	92.41 ab
	Pyroxasulfone	118	g/ha	A				
7	Pyroxasulfone	118	g/ha	A	95.83 -	97.92 a	84.76 a-e	90.56 ab
	Terrain Flow	125	ml/ha	A				
8	Preceed	118	g/ha	A	82.22 -	97.92 a	87.07 a-d	82.96 a-d
	Wingman	600	ml/ha	A				
9	Preceed	118	g/ha	A	78.06 -	95.24 a	89.52 abc	93.7 ab
	Saffire	240	ml/ha	A				
	Wingman	480	ml/ha	A				
10	Luximax	500	ml/ha	A	83.33 -	100 a	96.3 a	96.67 a
	Voraxor	200	ml/ha	A				
11	Pyroxasulfone	118	g/ha	A	100 -	88.39 ab	58.33 e	70.37 cde
	Boxer Gold	2.5	l/ha	A				
12	Pyroxasulfone	118	g/ha	A	66.67 -	97.92 a	66.2 cde	68.89 cde
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
13	Overwatch	1.25	l/ha	A	66.67 -	89.58 ab	68.62 b-e	64.07 de
	Trifluralin	2	l/ha	A				
14	Overwatch	1.25	l/ha	A	62.5 -	90.48 ab	60.75 de	61.3 e
	Pyroxasulfone	118	g/ha	A				
15	Overwatch	1.25	l/ha	A	70.28 -	93.15 ab	94.44 ab	79.44 a-e
	Boxer Gold	2.5	l/ha	A				
16	Overwatch	1.25	l/ha	A	73.89 -	86.31 ab	57.9 e	86.48 abc
	Trifluralin	2	l/ha	A				
	Boxer Gold	2.5	l/ha	A				
17	Trifluralin	2	l/ha	A	70.28 -	88.39 ab	100 a	93.89 ab
	Mateno	1	l/ha	B				
18	Terrain Flow	125	ml/ha	A	74.44 -	93.15 ab	100 a	98.15 a
	Mateno	1	l/ha	B				
19	Boxer Gold	2.5	l/ha	A	70.28 -	85.71 ab	92.06 abc	95.93 a
	Mateno	1	l/ha	B				
20	Trifluralin	2	l/ha	A	75 -	80.95 ab	88.19 a-d	95.93 a
	FMC410	1.7	kg/ha	B				
21	Overwatch	1.25	l/ha	A	73.89 -	93.15 ab	87.67 a-d	92.04 ab
	Prosulfocarb	3	l/ha	B				
22	Overwatch	1.25	l/ha	A	73.89 -	97.92 a	97.92 a	98.15 a
	Mateno	1	l/ha	B				
LSD P=.05					48.553	21.122	27.572	19.426
Standard Deviation					29.466	12.818	16.733	11.789
CV					39.92	14.65	20.87	14.55

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

3.1.5 Crop phytotoxicity (%), 19 and 47 DA-A and 8, 23, 51 DA-B

Table 5. ANOVA means table of results showing crop phytotoxicity (%), 19 and 47 DA-A and 8, 23, 51 DA-B

Rating Date					19/05/2025	16/06/2025	24/06/2025	9/07/2025	6/08/2025
SE Description					Phytotoxicity	Phytotoxicity	Phytotoxicity	Phytotoxicity	Phytotoxicity
Rating Unit					0-100	0-100	0-100	0-100	0-100
Rating Timing					A1	A2	A3	A4	A5
Days After First/Last Appl.					19 DA-A	47 DA-A	55 DA-A, 8 DA-B	70 DA-A, 23 DA-B	98 DA-A, 51 DA-B
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5
1	UTC				0 d	0 c	0 e	0 d	0 na
2	Valor EZE	125	ml/ha	A	0 d	3.33 ab	0 e	0 d	0 na
	Pyroxasulfone	118	g/ha	A					
3	Valor WG	120	g/ha	A	1.67 cd	3.33 ab	0 e	0 d	0 na
	Pyroxasulfone	118	g/ha	A					
4	Trifluralin	2	l/ha	A	1.67 cd	0 c	0 e	0 d	0 na
	Terrain Flow	125	ml/ha	A					
5	Spruce/GPH1121	500	ml/ha	A	3.33 bc	3.33 ab	5 bcd	0 d	0 na
6	Trifluralin	2	l/ha	A	3.33 bc	0 c	1.67 de	0 d	0 na
	Pyroxasulfone	118	g/ha	A					
7	Pyroxasulfone	118	g/ha	A	3.33 bc	3.33 ab	5 bcd	0 d	0 na
	Terrain Flow	125	ml/ha	A					
8	Preceed	118	g/ha	A	1.67 cd	0 c	1.67 de	0 d	0 na
	Wingman	600	ml/ha	A					
9	Preceed	118	g/ha	A	1.67 cd	0 c	3.33 cde	0 d	0 na
	Saffire	240	ml/ha	A					
	Wingman	480	ml/ha	A					
10	Luximax	500	ml/ha	A	0 d	3.33 ab	5 bcd	0 d	0 na
	Voraxor	200	ml/ha	A					
11	Pyroxasulfone	118	g/ha	A	0 d	5 a	0 e	0 d	0 na
	Boxer Gold	2.5	l/ha	A					
12	Pyroxasulfone	118	g/ha	A	0 d	0 c	1.67 de	0 d	0 na
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
13	Overwatch	1.25	l/ha	A	6.67 a	5 a	6.67 abc	0 d	0 na
	Trifluralin	2	l/ha	A					
14	Overwatch	1.25	l/ha	A	5 ab	3.33 ab	8.33 ab	0 d	0 na
	Pyroxasulfone	118	g/ha	A					
15	Overwatch	1.25	l/ha	A	6.67 a	5 a	6.67 abc	0 d	0 na
	Boxer Gold	2.5	l/ha	A					
16	Overwatch	1.25	l/ha	A	3.33 bc	1.67 bc	6.67 abc	0 d	0 na
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
17	Trifluralin	2	l/ha	A	0 d	1.67 bc	5 bcd	5 c	0 na
	Mateno	1	l/ha	B					
18	Terrain Flow	125	ml/ha	A	0 d	0 c	6.67 abc	5 c	0 na
	Mateno	1	l/ha	B					
19	Boxer Gold	2.5	l/ha	A	0 d	0 c	6.67 abc	5 c	0 na
	Mateno	1	l/ha	B					
20	Trifluralin	2	l/ha	A	0 d	1.67 bc	8.33 ab	11.67 a	0 na
	FMC410	1.7	kg/ha	B					
21	Overwatch	1.25	l/ha	A	0 d	5 a	6.67 abc	5 c	0 na
	Prosulfocarb	3	l/ha	B					
22	Overwatch	1.25	l/ha	A	0 d	3.33 ab	10 a	8.33 b	0 na
	Mateno	1	l/ha	B					
LSD P=.05					3.297	2.994	3.342	1.417	.
Standard Deviation					2.001	1.817	2.028	0.86	0
CV					114.84	82.7	46.96	47.3	0

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

3.1.6 Biomass (%), 19 and 47 DA-A and 8, 23, 51 DA-B

Table 6. ANOVA means table of results showing biomass (%), 19 and 47 DA-A and 8, 23, 51 DA-B

Rating Date					19/05/2025	16/06/2025	24/06/2025	9/07/2025	6/08/2025
SE Description					Crop Biomass	Crop Biomass	Crop Biomass	Crop Biomass	Crop Biomass
Rating Unit					0-100	0-100	0-100	0-100	0-100
Number of Subsamples					1	1	1	1	1
Rating Timing					A1	A2	A3	A4	A5
Days After First/Last Appl.					19 DA-A	47 DA-A	55 DA-A, 8 DA-B	70 DA-A, 23 DA-B	98 DA-A, 51 DA-B
ARM Action Codes									
Trt No.	Treatment Name	Rate	Unit	Appl Code	6	7	8	9	10
1	UTC				100 a	100 a	100 a	100 a	100 a
2	Valor EZE	125	ml/ha	A	95 bc	95 bcd	95 bcd	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
3	Valor WG	120	g/ha	A	93.33 c	95 bcd	95 bcd	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
4	Trifluralin	2	l/ha	A	95 bc	95 bcd	95 bcd	100 a	100 a
	Terrain Flow	125	ml/ha	A					
5	Spruce/GPH1121	500	ml/ha	A	95 bc	93.33 cd	93.33 cd	100 a	100 a
6	Trifluralin	2	l/ha	A	100 a	95 bcd	95 bcd	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
7	Pyroxasulfone	118	g/ha	A	96.67 abc	93.33 cd	93.33 cd	100 a	100 a
	Terrain Flow	125	ml/ha	A					
8	Preceed	118	g/ha	A	96.67 abc	96.67 abc	95 bcd	100 a	100 a
	Wingman	600	ml/ha	A					
9	Preceed	118	g/ha	A	96.67 abc	98.33 ab	100 a	100 a	100 a
	Saffire	240	ml/ha	A					
	Wingman	480	ml/ha	A					
10	Luximax	500	ml/ha	A	95 bc	95 bcd	98.33 ab	100 a	100 a
	Voraxor	200	ml/ha	A					
11	Pyroxasulfone	118	g/ha	A	96.67 abc	95 bcd	96.67 abc	100 a	100 a
	Boxer Gold	2.5	l/ha	A					
12	Pyroxasulfone	118	g/ha	A	98.33 ab	96.67 abc	96.67 abc	100 a	100 a
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
13	Overwatch	1.25	l/ha	A	96.67 abc	93.33 cd	96.67 abc	100 a	100 a
	Trifluralin	2	l/ha	A					
14	Overwatch	1.25	l/ha	A	100 a	95 bcd	96.67 abc	100 a	100 a
	Pyroxasulfone	118	g/ha	A					
15	Overwatch	1.25	l/ha	A	100 a	91.67 d	91.67 de	100 a	100 a
	Boxer Gold	2.5	l/ha	A					
16	Overwatch	1.25	l/ha	A	95 bc	95 bcd	96.67 abc	95 b	95 b
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
17	Trifluralin	2	l/ha	A	98.33 ab	100 a	93.33 cd	100 a	100 a
	Mateno	1	l/ha	B					
18	Terrain Flow	125	ml/ha	A	95 bc	98.33 ab	96.67 abc	100 a	100 a
	Mateno	1	l/ha	B					
19	Boxer Gold	2.5	l/ha	A	100 a	92.33 d	95 bcd	100 a	100 a
	Mateno	1	l/ha	B					
20	Trifluralin	2	l/ha	A	100 a	93.33 cd	95 bcd	93.33 b	93.33 b
	FMC410	1.7	kg/ha	B					
21	Overwatch	1.25	l/ha	A	98.33 ab	96.67 abc	96.67 abc	98.33 a	98.33 a
	Prosulfocarb	3	l/ha	B					
22	Overwatch	1.25	l/ha	A	98.33 ab	95 bcd	88.33 e	88.33 c	88.33 c
	Mateno	1	l/ha	B					
LSD P=.05					3.858	3.672	4.884	1.757	1.757
Standard Deviation					2.342	2.229	2.964	1.066	1.066
CV					2.41	2.34	3.1	1.08	1.08

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

3.1.7 Necrosis (%), 19 and 47 DA-A and 8, 23, 51 DA-B

Table 7. ANOVA means table of results showing necrosis (%), 19 and 47 DA-A and 8, 23, 51 DA-B

Rating Date					19/05/2025	16/06/2025	24/06/2025	9/07/2025	6/08/2025
SE Description					Necrosis	Necrosis	Necrosis	Necrosis	Necrosis
Rating Unit					0-100	0-100	0-100	0-100	0-100
Number of Subsamples					1	1	1	1	1
Rating Timing					A1	A2	A3	A4	A5
Days After First/Last Appl.					19 DA-A	47 DA-A	55 DA-A, 8 DA-B	70 DA-A, 23 DA-B	98 DA-A, 51 DA-B
ARM Action Codes									
Trt No.	Treatment Name	Rate	Unit	Appl Code	11	12	13	14	15
1	UTC				0 c	0 c	0 c	0 na	0 na
2	Valor EZE	125	ml/ha	A	5 a	5 a	6.67 a	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
3	Valor WG	120	g/ha	A	5 a	5 a	6.67 a	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
4	Trifluralin	2	l/ha	A	1.67 bc	1.67 b	6.67 a	0 na	0 na
	Terrain Flow	125	ml/ha	A					
5	Spruce/GPH1121	500	ml/ha	A	0 c	0 c	0 c	0 na	0 na
6	Trifluralin	2	l/ha	A	3.33 ab	0 c	0 c	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
7	Pyroxasulfone	118	g/ha	A	0 c	0 c	8.33 a	0 na	0 na
	Terrain Flow	125	ml/ha	A					
8	Preceed	118	g/ha	A	0 c	0 c	8.33 a	0 na	0 na
	Wingman	600	ml/ha	A					
9	Preceed	118	g/ha	A	0 c	0 c	8.33 a	0 na	0 na
	Saffire	240	ml/ha	A					
	Wingman	480	ml/ha	A					
10	Luximax	500	ml/ha	A	0 c	0 c	0 c	0 na	0 na
	Voraxor	200	ml/ha	A					
11	Pyroxasulfone	118	g/ha	A	0 c	0 c	0 c	0 na	0 na
	Boxer Gold	2.5	l/ha	A					
12	Pyroxasulfone	118	g/ha	A	0 c	0 c	0 c	0 na	0 na
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
13	Overwatch	1.25	l/ha	A	0 c	0 c	0 c	0 na	0 na
	Trifluralin	2	l/ha	A					
14	Overwatch	1.25	l/ha	A	0 c	0 c	0 c	0 na	0 na
	Pyroxasulfone	118	g/ha	A					
15	Overwatch	1.25	l/ha	A	0 c	0 c	0 c	0 na	0 na
	Boxer Gold	2.5	l/ha	A					
16	Overwatch	1.25	l/ha	A	0 c	0 c	0 c	0 na	0 na
	Trifluralin	2	l/ha	A					
	Boxer Gold	2.5	l/ha	A					
17	Trifluralin	2	l/ha	A	0 c	0 c	0 c	0 na	0 na
	Mateno	1	l/ha	B					
18	Terrain Flow	125	ml/ha	A	0 c	0 c	3.33 b	0 na	0 na
	Mateno	1	l/ha	B					
19	Boxer Gold	2.5	l/ha	A	0 c	0 c	0 c	0 na	0 na
	Mateno	1	l/ha	B					
20	Trifluralin	2	l/ha	A	0 c	0 c	0 c	0 na	0 na
	FMC410	1.7	kg/ha	B					
21	Overwatch	1.25	l/ha	A	0 c	0 c	3.33 b	0 na	0 na
	Prosulfocarb	3	l/ha	B					
22	Overwatch	1.25	l/ha	A	0 c	0 c	0 c	0 na	0 na
	Mateno	1	l/ha	B					
LSD P=.05					2.224	1.014	2.825	.	.
Standard Deviation					1.35	0.615	1.715	0	0
CV					197.96	116.06	73.01	0	0

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

3.1.8 Yield (t/ha), 204 DA-A and 157 DA-B

Table 8. ANOVA means table of results showing yield data (t/ha), 204 DA-A and 157 DA-B

Rating Date					20/11/2025
SE Description					Yield
Rating Unit					T-MET
Number of Subsamples					1
Rating Timing					Harvest
Days After First/Last Appl.					204 DA-A, 157 DA-B
ARM Action Codes					
Trt No.	Treatment Name	Rate	Unit	Appl Code	34
1	UTC				5.68 -
2	Valor EZE	125	mL/ha	A	5.94 -
	Pyroxasulfone	118	g/ha	A	
3	Valor WG	120	g/ha	A	6.1 -
	Pyroxasulfone	118	g/ha	A	
4	Trifluralin	2	l/ha	A	5.77 -
	Terrain Flow	125	mL/ha	A	
5	Spruce/GPH1121	500	mL/ha	A	6.23 -
6	Trifluralin	2	l/ha	A	5.67 -
	Pyroxasulfone	118	g/ha	A	
7	Pyroxasulfone	118	g/ha	A	6.3 -
	Terrain Flow	125	mL/ha	A	
8	Preceed	118	g/ha	A	6.06 -
	Wingman	600	mL/ha	A	
9	Preceed	118	g/ha	A	6 -
	Saffire	240	mL/ha	A	
	Wingman	480	mL/ha	A	
10	Luximax	500	mL/ha	A	5.92 -
	Voraxor	200	mL/ha	A	
11	Pyroxasulfone	118	g/ha	A	5.97 -
	Boxer Gold	2.5	l/ha	A	
12	Pyroxasulfone	118	g/ha	A	6.05 -
	Trifluralin	2	l/ha	A	
	Boxer Gold	2.5	l/ha	A	
13	Overwatch	1.25	l/ha	A	5.99 -
	Trifluralin	2	l/ha	A	
14	Overwatch	1.25	l/ha	A	5.7 -
	Pyroxasulfone	118	g/ha	A	
15	Overwatch	1.25	l/ha	A	5.67 -
	Boxer Gold	2.5	l/ha	A	
16	Overwatch	1.25	l/ha	A	5.44 -
	Trifluralin	2	l/ha	A	
	Boxer Gold	2.5	l/ha	A	
17	Trifluralin	2	l/ha	A	5.76 -
	Mateno	1	l/ha	B	
18	Terrain Flow	125	mL/ha	A	5.78 -
	Mateno	1	l/ha	B	
19	Boxer Gold	2.5	l/ha	A	5.68 -
	Mateno	1	l/ha	B	
20	Trifluralin	2	l/ha	A	5.63 -
	FMC410	1.7	kg/ha	B	
21	Overwatch	1.25	l/ha	A	5.94 -
	Prosulfocarb	3	l/ha	B	
22	Overwatch	1.25	l/ha	A	5.32 -
	Mateno	1	l/ha	B	
LSD P=.05					0.726
Standard Deviation					0.441
CV					7.54

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

3.2 Figures

3.2.1 Annual ryegrass control (%), 47 DA-A and 8, 23, 51 DA-B

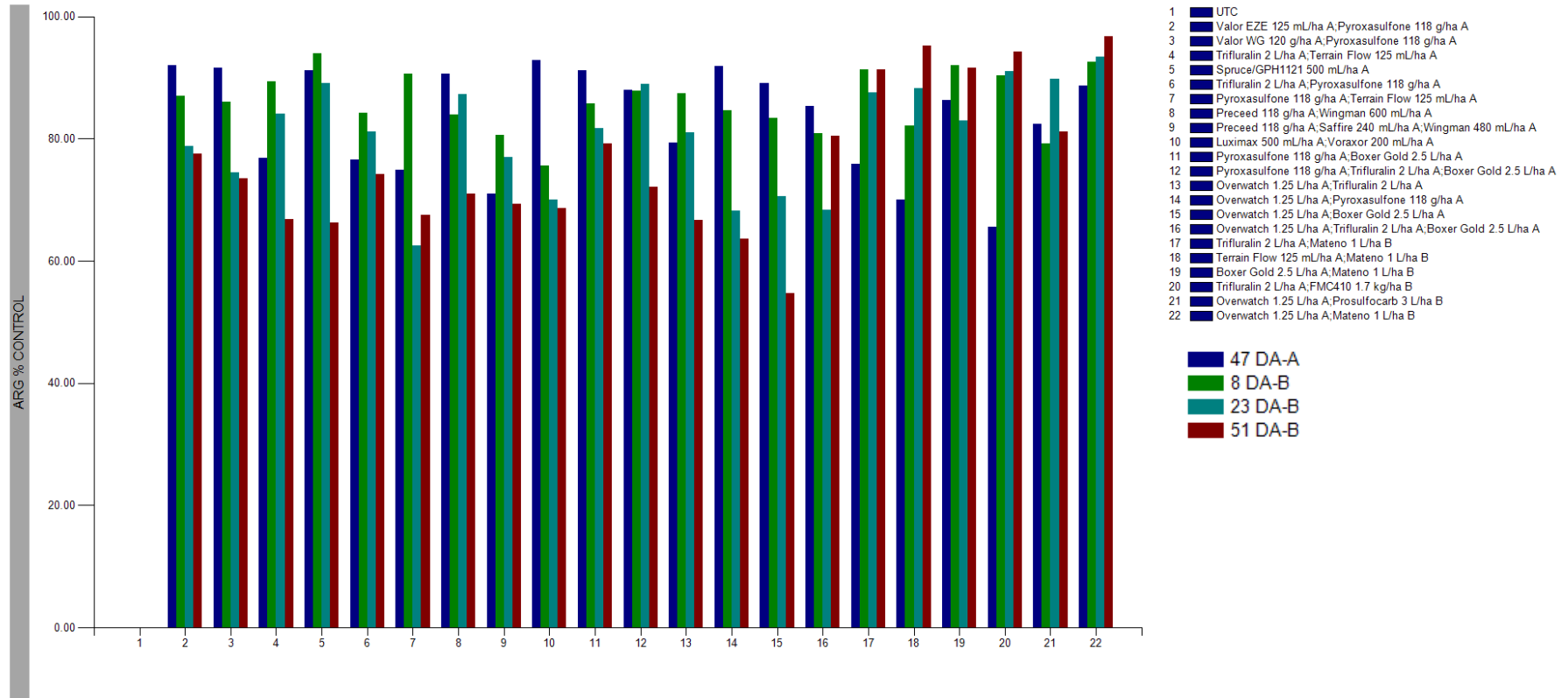


Figure 1. Annual Ryegrass Control (%), 47 DA-A and 8, 23 and 51 DA-B, for all treatments.

3.2.2 Annual ryegrass panicle control (%),121 DA-B

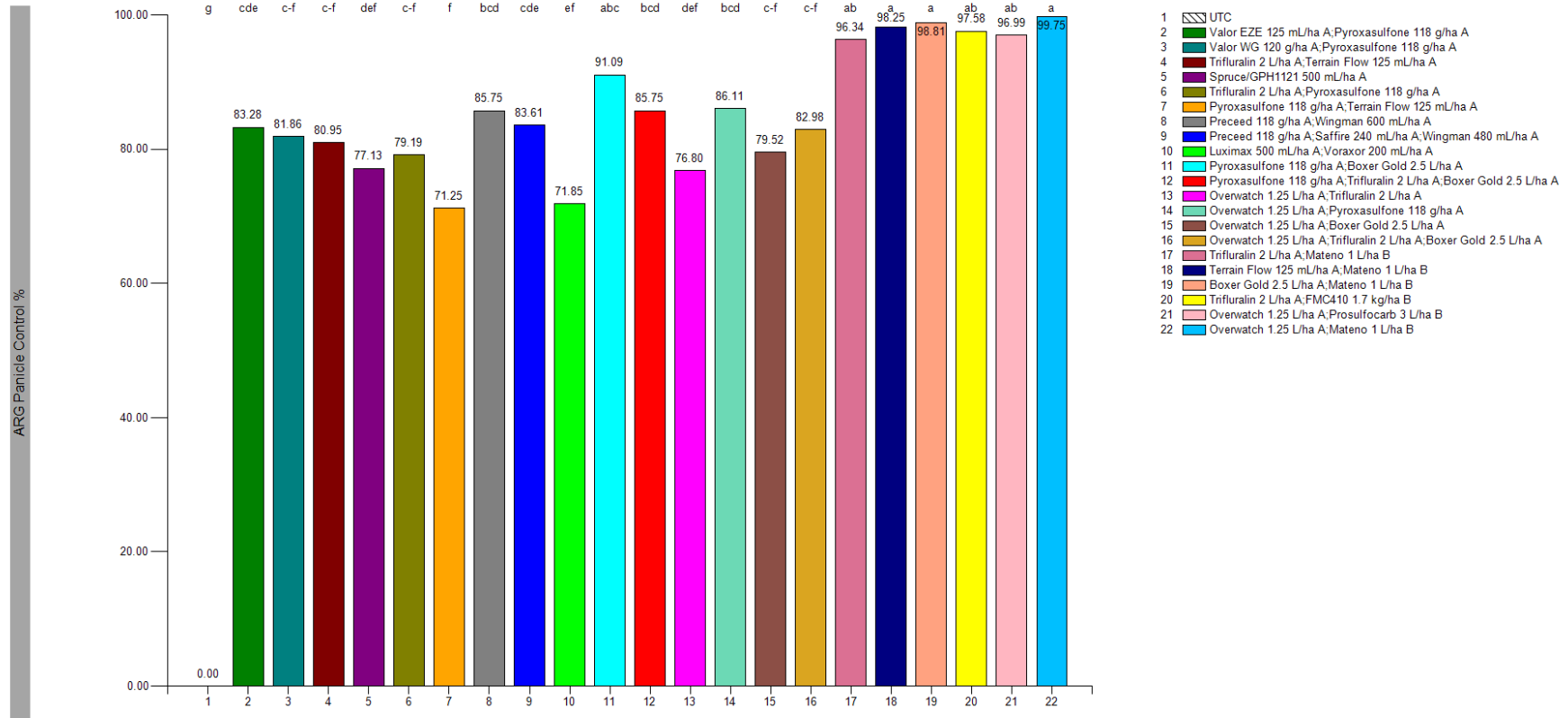


Figure 2. Annual Ryegrass Panicle Control (%), 121 DA-B, for all treatments.

3.2.3 Yield data (t/ha), 204 DA-A and 157 DA-B

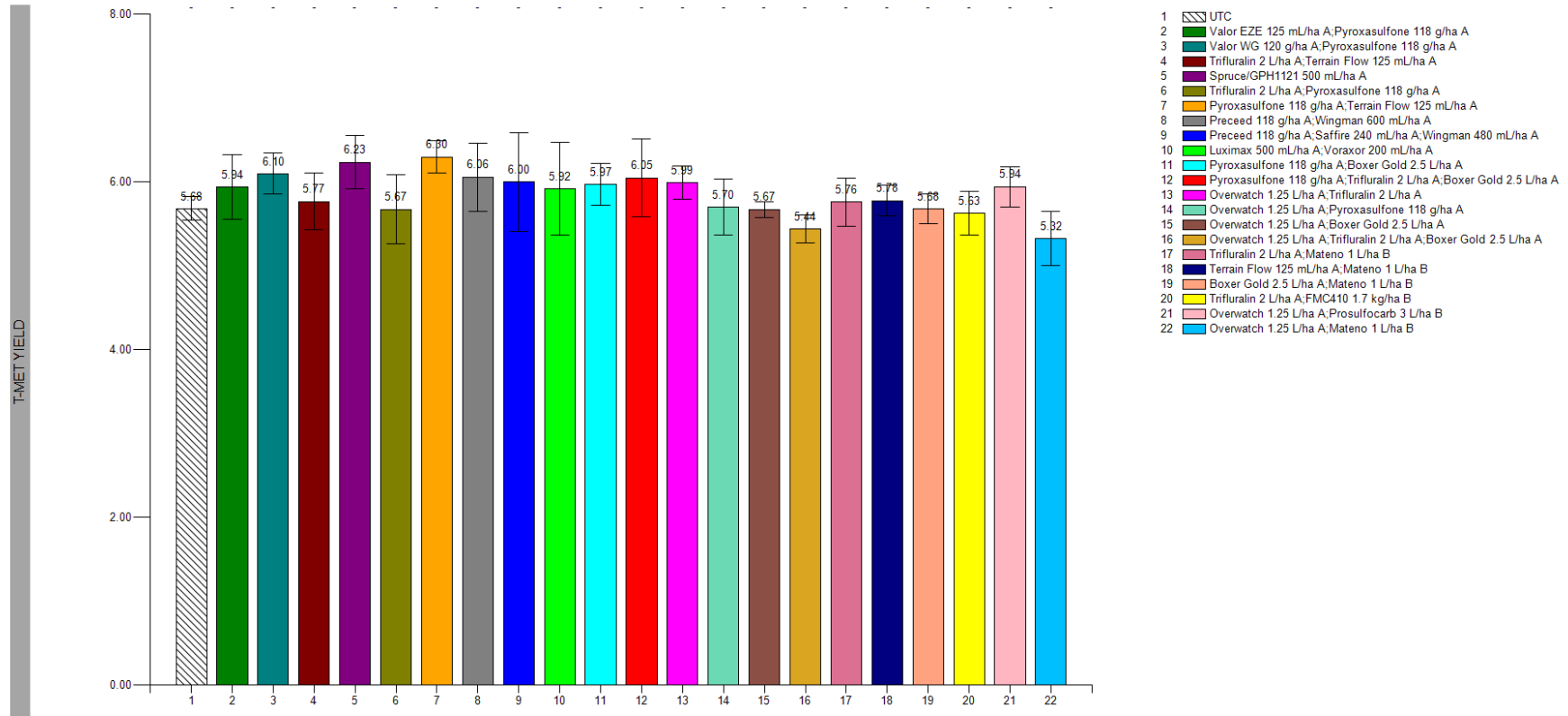


Figure 3. Yield data (t/ha), 204 DA-A and 157 DA-B, for all treatments.

4. Chronology of events

Date	Event	Crop stage	Days after application
30 th April 2025	IBS application	-	-
1 st May 2025	Sowing	-	1 DA-A
19 th May 2025	Assessment 1	Z12	19 DA-A
16 th June 2025	Assessment 2	Z21	47 DA-A/0 DA-B
16 th June 2025	EPE application	Z21	47 DA-A
24 th June 2025	Assessment 3	Z215 to Z22	55 DA-A/8 DA-B
9 th July 2025	Assessment 4	Z31	70 DA-A/23 DA-B
6 th August 2025	Assessment 5	Z39	98 DA-A/51 DA-B
15 th October 2025	Assessment 6	Z71	168 DA-A/ 121 DA-B
20 th November 2025	Harvest	Z92	204 DA-A/ 157 DA-B

5. Appendices

5.1 Experimental details

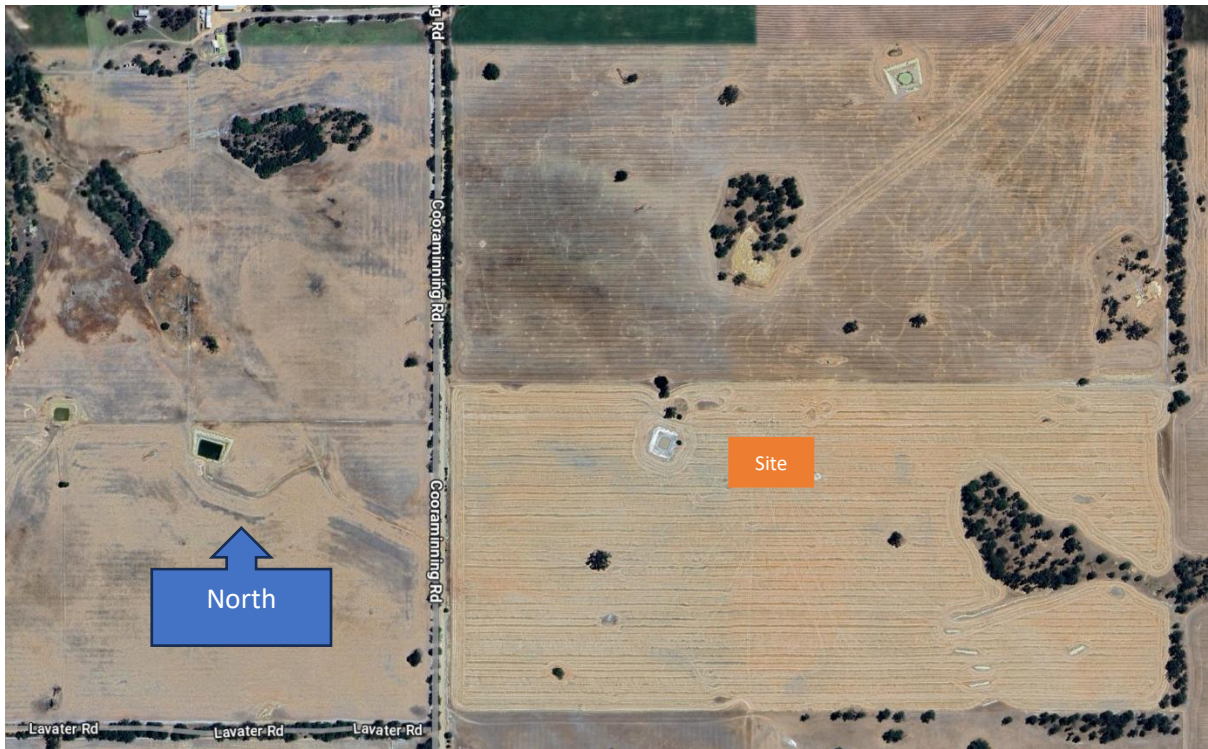
Experimental details	
Location	Cooraminning Road, Narrogin
GPS	-32.989556, 117.142417
Co-operator	Zach Rick
Crop	Wheat
Variety	Kinsei
Previous Crop	Canola
Pest	Annual Ryegrass (<i>Lolium rigidum</i>) Volunteer Canola (<i>Brassica napus</i>)
Pest pressure	Moderate
Soil Type	Grey sand
Trial design	RCB
Replications	3
Treatment application	IBS and EPE
Plot width sprayed	2m
Sowing date	1 st May 2025
Stubble Load	Low
Seeding machine	Precision trial cone seeder fitted with knife points and trailing press wheels. Liquids applied with FMSA Friction flow system.
Seeding rate	95 kg/ha
Seeding depth	30mm
Plot size	2.5m x 12m
Fertiliser and rate	MAP 80% & MOP 20% @ 100 kg/ha Wilchem ZMC @ 5 L/ha
Harvest date	20 th November 2025

5.2 Treatment application details

Treatment application	A	B
Application Timing	IBS	EPE
Crop Stage	-	Z21 Main shoot & 1 tiller
Weed Stage	-	1 to 2 leaf annual ryegrass
Date	30 th April 2025	16 th June 2025
Time	2:00pm to 3:30pm	14:30 to 15:00
Cloud cover (%)	20	15
Temperature (°C)	27.7	16.9
Relative Humidity (%)	20.8	70
Delta T (°C)	12.8	2.8
Wind Speed Km/hr	16	5
Wind Direction	NNW	N
Soil moisture	Dry on soil surface	Full moisture profile
Dew (°C)	3.3	11.3

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, Cooramining Road, Narrogin.

5.4 Growing conditions

Meteorological data was obtained from the Narrogin station, 9 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	15.5	31.7	0	13	28.4	0	7.4	17.1	3	11.3	19.7	0	5.3	16.5	0	0.3	18.4	0	5.1	20.2	0.2	9.8	20.5	3
2nd	14.1	24.4	0	13.5	26	0	9.8	23.3	0.2	5.7	20	0.2	9	13.5	0	3.5	18.5	0.2	0.9	26.3	0	-0.1	23.1	0
3rd	13.1	23.7	0	15.5	19.4	4	13.9	19.8	6.4	9.9	17.3	7.8	8.1	10.6	21.2	2.4	18.5	0	4.4	24	0	6.9	27.4	0
4th	13.6	17.5	16	7.7	19.9	0.4	13.1	18.4	1.4	6.5	14.6	13.2	-0.1	13.4	5.4	7.6	18.5	0	10.7	21.6	0.4	10.6	29.6	0.2
5th	13.6	25.3	4.4	14.3	20.4	0.4	12.6	18.2	0.4	2	14.7	0	3.4	17.6	0.2	4.3	15.9	0	10	15.1	4	14.6	24.8	2.6
6th	15.6	29.3	1.2	4.3	20.9	0.2	3.5	17.8	2.2	7.7	18.5	0	8.7	17.1	0.2	6.5	14.3	18.4	0.1	19.2	0	13.5	23.2	0.4
7th	16.6	30.7	0	5.5	22.6	0	2.6	18.6	0	11.3	12.7	0	3.7	17.1	0	3.4	14.4	1.4	1	18.2	0	4.5	21.7	0
8th	14.7	27.1	0.2	8.6	26.7	0.2	1.5	19.2	0.2	-0.2	15.7	0.4	7.6	17.5	0	-0.2	13.5	2	1.9	18.8	0.8	6.5	25	0
9th	14.5	25.2	0	9.8	30.6	0	1.9	21	0	1	15.2	0.2	10.9	17.5	1.4	-0.7	14.5	0.2	-1	19.3	0.2	10	27.7	0
10th	10.6	26.1	0	8.3	24.5	0	4.7	17	0.2	-0.6	16.5	0.2	7.6	15.4	15	1.9	16.7	0	-0.7	19.5	0	10.2	27.7	0
11th	14	31.6	0	10.9	23.1	0	0.8	16.4	4.8	0.4	18.1	0.2	2.7	17.2	0.2	1	19.3	0	-0.5	22.3	0	10.2	31.5	0
12th	17.1	27.8	1.4	12.7	24	0	1.6	16.6	0	9	16.8	3.2	3.8	18.8	0	4.6	21.4	0	2.6	24.2	0	7.7	31.1	0
13th	16.8	22.5	0	11.4	21.7	0	7.7	17.6	0	1	14.3	1.8	8.4	23.1	0.2	7	21.1	0.8	4.1	26	0	5	25.8	0
14th	15.1	24.7	0.6	6.3	20.9	0	0.2	16.5	0.4	5.2	14.8	0.8	7.9	14.1	5.2	11.2	15.6	4	7.8	29.4	0	5.3	24.9	0
15th	11.2	23.4	0	9	24.3	0	6.5	16.9	0	-0.1	15.2	0	-1.2	15.6	0.2	2.1	14.1	5.8	12.2	23.9	0	2.6	24.4	0
16th	11.5	25.4	0	4.5	24.6	0	8.9	17.3	0	8.1	15.8	1	-0.6	16.8	0.2	-0.9	15.3	0.4	5.4	26.5	0	4.3	27.1	0
17th	12.4	24.4	0	9.2	23.9	0	6.8	17	0	-0.4	15.6	0.2	2.3	16.7	0	6.8	18	2.8	5.4	31.5	0	11.2	33.5	0
18th	9.4	19	0.2	4	23.4	0	12.4	17.2	0.6	7.2	14.9	0.4	9.3	21.2	0	2.6	16.2	4	15.1	22.5	0.4	13.3	27.5	0
19th	3.6	19	0	8.2	23.6	0	12.6	19.6	0.4	-0.2	13.8	1.8	12.7	14.1	7	6.8	18.9	0.2	2.6	19.1	0	13.9	27.4	0
20th	11.1	21.1	0	-0.4	18.8	0	11.6	19.4	0.2	5.5	15.2	0.2	10.2	16.4	15.8	8.5	22	0	2.7	16.8	3.6	14	25.7	4.6
21st	11.3	26.8	0	6.1	22	0	7.4	13.1	1.4	0	12.7	9.6	2.2	15.6	2.8	3.9	22.8	0	9.2	20	5	13.7	27.5	0
22nd	17.3	30.8	0	4.6	22.1	0	7.8	15.8	0	2.1	12.5	0.2	1.8	17.5	0.2	7	22.5	0.2	3.3	23.1	0	13.1	27.4	1.2
23rd	17.1	24.9	2.2	6.5	14.5	5	6.7	14.9	4.6	7.5	15.2	1	3	20.2	0	5.7	25.9	0	7	24.8	0	9.9	19.8	15.8
24th	13.2	18.5	0.2	-0.6	15	0.2	3.2	14.8	0	5.7	11.5	12.2	5.4	15.1	5.2	5.2	26.5	0	2.5	21.4	0	10.6	21.4	0.6
25th	3.4	17.5	0	6.9	15.1	0	3	16.4	0	-0.5	12.5	0.2	4.3	11.4	8.8	2.9	25.9	0	6.5	23.5	2.8	7.4	22.8	0.2
26th	4.3	20.4	0	-0.7	15.6	0.2	1	18.5	0.2	1.1	13.3	0	4.4	13.6	1.4	9.2	20.7	0	6.9	21.7	0	8	25.1	0
27th	5	21.1	0	5.6	18	0	2.6	19.6	0	3.4	9.7	0	-0.3	14.8	1.2	2.4	21.1	0	4.6	25.4	0	6.6	24.1	0
28th	3.8	21.2	0	8.3	21	0	3.5	18.6	0	3.4	10.3	6.6	-0.1	15.8	0	8.5	20	0.4	8.9	32.7	0	6	26.6	0
29th	9.3	22.6	0	9.4	21.7	0	6.4	16.1	0	4.6	13.3	0.2	2	15.3	0.4	7.4	18.9	0.6	8.8	22.7	0	8.5	27.8	0
30th	10	25	0	12.9	18.9	0	9.3	20.2	0	5.7	15.8	0.6	2	17.6	0.2	3	19.5	0	5.3	23.3	0.2	12.6	32.8	0
31st				14.4	19.2	2.4				0.7	16.4	0.2	-0.3	19.6	0.2				6.2	25.7	1.2			
Total monthly rainfall (mm)				13			26.6			62.4			92.6			41.4			18.8			28.6		

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 square (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.

5.7 Protocol deviations

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

Annual ryegrass counts were not recorded at 19 DA-A due to insufficient germination observed in the untreated control plots at that assessment timing.

6. Photos

6.1 Assessment 6 – 15th October 2025, 168 DA-A/ 121 DA-B



Treatment 1: Untreated control, 121 DA-B



Treatment 2: Valor EZE 0.125 L/ha + Pyroxasulfone 118 g/ha, 121 DA-B



Treatment 3: Valor WG 0.12 kg/ha + Pyroxasulfone 118 g/ha, 121 DA-B



Treatment 4: Trifluralin 2 L/ha + Terrain Flow 0.125 L/ha, 121 DA-B



Treatment 5: Spruce/GPH1121 0.5 L/ha, 121 DA-B



Treatment 6: Trifluralin 2 L/ha + Pyroxasulfone 118 g/ha, 121 DA-B



Treatment 7: Pyroxasulfone 118 g/ha + Terrain Flow 0.125 L/ha, 121 DA-B



Treatment 8: Preceed 118 g/ha + Wingman 600 mL/ha, 121 DA-B



Treatment 9: Preceed 118 g/ha + Saffire 240 mL/ha + Wingman 480 mL/ha, 121 DA-B



Treatment 10: Luximax 500 mL/ha + Voraxor 200 mL/ha, 121 DA-B



Treatment 11: Pyroxasulfone 118 g/ha + Boxer Gold 2.5 L/ha, 121 DA-B



Treatment 12: Pyroxasulfone 118 g/ha + Trifluralin 2 L/ha + Boxer Gold 2.5 L/ha, 121 DA-B



Treatment 13: Overwatch 1.25 L/ha + Trifluralin 2 L/ha, 121 DA-B



Treatment 14: Overwatch 1.25 L/ha + Pyroxasulfone 118 g/ha, 121 DA-B



Treatment 15: Overwatch 1.25 L/ha + Boxer Gold 2.5 L/ha, 121 DA-B



Treatment 16: Overwatch 1.25 L/ha + Trifluralin 2 L/ha + Boxer Gold 2.5 L/ha, 121 DA-B



Treatment 17: Trifluralin 2 L/ha + Mateno 1 L/ha, 121 DA-B



Treatment 18: Terrain Flow 0.125 L/ha + Mateno 1 L/ha, 121 DA-B



Treatment 19: Boxer Gold 2.5 L/ha + Mateno 1 L/ha, 121 DA-B



Treatment 20: Trifluralin 2 L/ha + FMC410 1.7 kg/ha, 121 DA-B



Treatment 21: Overwatch 1.25 L/ha + Prosulfocarb 3 L/ha, 121 DA-B



Treatment 22: Overwatch 1.25 L/ha + Mateno 1 L/ha, 121 DA-B

7. SLR Pre and Early Post Emergent Contributors

