

Disclaimer:

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

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

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

Late Application of Group A's to Chickpeas - Bullarah

Trial ID: DK1606

Location: Bullarah

Trial Year: 2016

Investigator: Denielle Kilby

Planting Date:	14/05/2016			
Planting Equipment:	Small Plot Planter			
Row Spacing:	32cm			
Application Code:	A		B	
Application Date:	8/09/2016		27/09/2016	
Application Timing:	Flower Initiation		Full Flowering	
Actual Growth Stage at Application:	% of Crop	Stage	% of Crop	Stage
	50	Flowers Visible (R1)	60	Full Flowering (R4-R5)
Harvest Date:	13/12/2016			
Harvest Equipment:	Small Plot Header			
Trial Reliability:	Marginal, due to waterlogging and missing plots for yield			

Trial designed as Randomised Complete Block and analysed as a Factorial

	In Simple Terms
Table of A Means:	Mean of 'HERBICIDE' performance with ALL 'VARIETY' treatments
Table of B Means:	Mean of 'VARIETY' performance with ALL 'HERBICIDE' treatments
Table of A x B Means:	'HERBICIDE' performance with EACH 'VARIETY' treatment

Is there a significant difference for A x B Means ?

If YES

Table A x B Means analysis is the key information

If NO (ie nsd)

Table A or Table B Means analysis is the key information

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Trial Year: 2016

Crop Name				Chickpea			
Assessment Date				12/07/2016	15/08/2016	15/10/2016	13/12/2016
Assessment Type				EMERGENCE	NDVI	NDVI	YIELD
Assessment Unit				/m ²	RATIO	RATIO	t/ha
Crop Stage Majority				1 st Leaf	2 Side Shoots	End of Flowering	
Treatment-Evaluation Interval						37 DAA	96 DAA
CV %							12.1
ARM Action Codes				T1	AA		
Trt No.	Treatment	Product Rate	Appln. Code				
TABLE OF A MEANS (Herbicide)							
1	Untreated	-	-	28.3-	0.36-	0.722-	1.97-
2	Verdict 520	100ml/ha	A	28.1-	0.37-	0.761-	1.94-
	Status	500ml/ha					
	Uptake	0.5% v/v					
3	Verdict 520	100ml/ha	B	27.4-	0.36-	0.748-	1.97-
	Uptake	0.5% v/v					
4	Status	500ml/ha	B	28.1-	0.37-	0.746-	1.88-
	Uptake	0.5% v/v					
5	Verdict 520	100ml/ha	B	24.3-	0.36-	0.745-	1.83-
	Status	500ml/ha					
	Uptake	0.5% v/v					
6	Elantra Xtreme	190ml/ha	B	28.7-	0.38-	0.755-	1.98-
	Uptake	0.5% v/v					
TABLE OF B MEANS (Variety)							
1	PBA HatTrick			28.4ab	0.34b	0.750a	2.13a
2	PBA Boundary			26.2bc	0.38a	0.774a	2.10a
3	PBA Seamer			30.5a	0.39a	0.781a	2.25a
4	Kyabra			24.8c	0.36b	0.680b	1.22b
TABLE OF A x B MEANS (Herbicide x Variety)							
1	Untreated	-	-	31.1-	0.33-	0.730-	2.27-
1	PBA HatTrick						
2	Verdict 520	100ml/ha	A	22.5-	0.35-	0.767-	2.01-
	Status	500ml/ha					
	Uptake	0.5% v/v					
1	PBA HatTrick						
3	Verdict 520	100ml/ha	B	27.7-	0.33-	0.750-	2.22-
	Uptake	0.5% v/v					
1	PBA HatTrick						
4	Status	500ml/ha	B	31.3-	0.36-	0.761-	2.14-
	Uptake	0.5% v/v					
1	PBA HatTrick						
5	Verdict 520	100ml/ha	B	25.6-	0.32-	0.738-	1.93-
	Status	500ml/ha					
	Uptake	0.5% v/v					
1	PBA HatTrick						
6	Elantra Xtreme	190ml/ha	B	32.2-	0.36-	0.754-	2.22-
	Uptake	0.5% v/v					
1	PBA HatTrick						

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

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Assessment Type				EMERGENCE	NDVI	NDVI	YIELD
Assessment Unit				/m ²	RATIO	RATIO	t/ha
Crop Stage Majority				1 st Leaf	2 Side Shoots	End of Flowering	
Treatment-Evaluation Interval						37 DAA	96 DAA
CV %							12.1
ARM Action Codes				T1	AA		
Trt No.	Treatment	Product Rate	Appln. Code				
1	Untreated	-	-	27.7-	0.40-	0.784-	2.20-
2	PBA Boundary						
2	Verdict 520	100ml/ha	A	29.9-	0.40-	0.791-	2.16-
	Status	500ml/ha					
	Uptake	0.5% v/v					
2	PBA Boundary						
3	Verdict 520	100ml/ha	B	24.2-	0.38-	0.774-	2.12-
	Uptake	0.5% v/v					
2	PBA Boundary						
4	Status	500ml/ha	B	25.0-	0.38-	0.769-	2.06-
	Uptake	0.5% v/v					
2	PBA Boundary						
5	Verdict 520	100ml/ha	B	23.2-	0.36-	0.748-	1.86-
	Status	500ml/ha					
	Uptake	0.5% v/v					
2	PBA Boundary						
6	Elantra Xtreme	190ml/ha	B	27.0-	0.37-	0.780-	2.23-
	Uptake	0.5% v/v					
2	PBA Boundary						
1	Untreated	-	-	31.4-	0.37-	0.747-	1.99-
3	PBA Seamer						
2	Verdict 520	100ml/ha	A	30.1-	0.38-	0.783-	2.18-
	Status	500ml/ha					
	Uptake	0.5% v/v					
3	PBA Seamer						
3	Verdict 520	100ml/ha	B	34.6-	0.42-	0.791-	2.30-
	Uptake	0.5% v/v					
3	PBA Seamer						
4	Status	500ml/ha	B	32.2-	0.38-	0.790-	2.26-
	Uptake	0.5% v/v					
3	PBA Seamer						
5	Verdict 520	100ml/ha	B	24.4-	0.40-	0.780-	2.34-
	Status	500ml/ha					
	Uptake	0.5% v/v					
3	PBA Seamer						
6	Elantra Xtreme	190ml/ha	B	30.5-	0.42-	0.794-	2.40-
	Uptake	0.5% v/v					
3	PBA Seamer						

Late Application of Group A's to Chickpeas

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Trial Year: 2016

Crop Name				Chickpea			
Assessment Date				12/07/2016	15/08/2016	15/10/2016	13/12/2016
Assessment Type				EMERGENCE	NDVI	NDVI	YIELD
Assessment Unit				/m ²	RATIO	RATIO	t/ha
Crop Stage Majority				1 st Leaf	2 Side Shoots	End of Flowering	
Treatment-Evaluation Interval						37 DAA	96 DAA
CV %							12.1
ARM Action Codes				T1	AA		
Trt No.	Treatment	Product Rate	Appln. Code				
1 4	Untreated Kyabra	-	-	22.9-	0.33-	0.627-	1.41-
2 4	Verdict 520 Status Uptake Kyabra	100ml/ha 500ml/ha 0.5% v/v	A	30.1-	0.37-	0.705-	1.39-
3 4	Verdict 520 Uptake Kyabra	100ml/ha 0.5% v/v	B	23.2-	0.33-	0.679-	1.23-
4 4	Status Uptake Kyabra	500ml/ha 0.5% v/v	B	23.8-	0.37-	0.664-	1.04-
5 4	Verdict 520 Status Uptake Kyabra	100ml/ha 500ml/ha 0.5% v/v	B	24.0-	0.37-	0.715-	1.19-
6 4	Elantra Xtreme Uptake Kyabra	190ml/ha 0.5% v/v	B	25.0-	0.36-	0.693-	1.06-

Assessment Type

NDVI = Normalized difference vegetation index

ARM Action Codes

AA = Automatic arcsine square root % transformation

T1 = ([1]/4)/0.32

DAA = Days after Application A

Late Application of Group A's to Chickpeas

Trial ID: DK1606

Location: Bullarah

Trial Year: 2016

POOLED FACTORIAL AOV Chickpea 12/07/2016 EMERGENCE /m ²						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	2926.019033				
R	3	102.202098	34.067366	1.486	0.2261	
A	5	204.881032	40.976206	1.787	0.1270	3.4
B	3	452.187856	150.729285	6.573	0.0006	2.8
AB	15	584.532420	38.968828	1.699	0.0714	6.8
ERROR	69	1582.215627	22.930661			

POOLED FACTORIAL AOV Chickpea 15/08/2016 NDVI RATIO						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	4.665866				
R	3	0.227790	0.075930	1.816	0.1523	
A	5	0.133590	0.026718	0.639	0.6706	0.14
B	3	0.922105	0.307368	7.352	0.0002	0.12
AB	15	0.497576	0.033172	0.793	0.6805	0.29
ERROR	69	2.884806	0.041809			

POOLED FACTORIAL AOV Chickpea 15/10/2016 NDVI RATIO						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	95	0.430723				
R	3	0.013908	0.004636	1.389	0.2536	
A	5	0.014392	0.002878	0.862	0.5111	0.040859
B	3	0.152013	0.050671	15.176	0.0001	0.033361
AB	15	0.020022	0.001335	0.400	0.9747	0.081718
ERROR	69	0.230388	0.003339			

POOLED FACTORIAL AOV Chickpea 13/12/2016 YIELD t/ha						
Source	DF	Sum of Squares	Mean Square	F	Prob.(F)	LSD (.05)
Total	89	22.235183				
R	3	0.229717	0.076572	1.167	0.3295	
A	5	0.283939	0.056788	0.865	0.5094	0.18
B	3	16.235444	5.411815	82.473	0.0001	0.15
AB	15	1.352082	0.090139	1.374	0.1884	0.36
ERROR	63	4.134002	0.065619			

Late Application of Group A's to Chickpeas

Trial ID: DK1606

Location: Bullarah

Trial Year: 2016

Application Description		
	A	B
Application Date:	8/09/2016	27/09/2016
Application Start Time:	12:50 PM	9:55 AM
Application Stop Time:	1:10 PM	11:21 AM
Application Method:	SPRAY	
Application Timing:	PRE FLOWERING	
Application Placement:	FOLIAR	
Air Temperature, Unit:	23 C	20 C
% Relative Humidity:	59	46
Wind Velocity, Unit:	2.6 m/s	2 m/s
Wind Direction:	N	W
Dew Presence (Y/N):	No	
Next Moisture Occurred On:	10/09/2016	30/09/2016

Application Equipment		
	A	B
Application Equipment:	Quad Mounted	
Equipment Type:	Boom Spray	
Operation Pressure, Unit:	310 kPa	
Nozzle Type:	AIXR	
Nozzle Size:	110015	
Nozzle Spacing, Unit:	50 cm	
Nozzles/Row:	5	
Boom Length, Unit:	3 m	
Boom Height, Unit:	50 cm	30 cm
Ground Speed, Unit:	10.3 km/h	
Spray Volume, Unit:	70 L/ha	