

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.

N Management in Wheat 2016 – Billa Billa Varieties

Trial ID: DK1603

Location: Billa Billa

Trial Year: 2016

Investigator: Denielle Kilby

Planting Date:	10/05/2016		
Planting Equipment:	Small Plot Planter		
Wheat Varieties:	EGA Gregory & Lancer		
Row Spacing:	32cm		
Target Plant Population:	100 Plants /m²		
Application Code:	A	B	C
Application Date:	15/02/2016	10/05/2016	11/07/2016
Target/Stage:	Spread Surface Feb	Spread & Incorporated by Sowing	Spread at GS 30
Harvest Date:	14/11/2016		

Crop Name Description Assessment Date Assessment Type Assessment Unit Crop Stage Majority Plant-Evaluation Interval ARM Action Codes				Wheat				
				30/05/2016 EMERGENCE	11/07/2016 NDVI	18/08/2016 NDVI	Total Heads 28/09/2016 COUNT	14/11/2016 YIELD
				/m ²	RATIO	RATIO	/m ²	t/ha
				12	31	61	69	89
				20 DP1	62 DP1	100 DP1	141 DP1	188 DP1
				T1			T2	TY3
				Trt No.	Treatment	Product Rate	Appln Code	
1	Untreated EGA Gregory	-		29.7-	0.45a-e	0.54c-g	165-	1.93gh
2	Urea EGA Gregory	109kg/ha	A	32.2-	0.48ab	0.63ab	174-	2.37cde
3	Urea EGA Gregory	217kg/ha	A	36.3-	0.47abc	0.65a	199-	2.40cd
4	Urea EGA Gregory	435kg/ha	A	32.8-	0.45a-d	0.63ab	183-	2.46bcd
5	Urea Urea EGA Gregory	109kg/ha 109kg/ha	A C	31.4-	0.45a-d	0.62abc	152-	2.10e-h
6	Urea EGA Gregory	109kg/ha	B	30.9-	0.44a-f	0.60a-e	184-	2.35c-f
7	Urea EGA Gregory	217kg/ha	B	37.5-	0.47abc	0.61a-d	202-	2.38cde
8	Urea EGA Gregory	435kg/ha	B	35.9-	0.53a	0.67a	210-	2.51bcd
9	Urea Urea EGA Gregory	109kg/ha 109kg/ha	B C	33.6-	0.44a-e	0.58a-f	196-	2.06fgh
10	Urea EGA Gregory	109kg/ha	C	29.3-	0.38b-g	0.50fg	144-	1.86h
11	Urea EGA Gregory	217kg/ha	C	34.0-	0.45a-e	0.55b-f	139-	1.95gh
12	Urea EGA Gregory	435kg/ha	C	30.7-	0.42b-g	0.54c-f	163-	2.22d-g
13	Untreated Lancer	-		28.3-	0.34fg	0.45g	144-	2.06fgh
14	Urea Lancer	109kg/ha	A	34.2-	0.46a-d	0.59a-f	181-	2.40cd
15	Urea Lancer	217kg/ha	A	33.4-	0.40b-g	0.60a-d	226-	2.61bc
16	Urea Lancer	435kg/ha	A	37.1-	0.40b-g	0.63ab	220-	3.00a

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				30/05/2016 EMERGENCE /m ² 12 20 DP1 T1	11/07/2016 NDVI RATIO 31 62 DP1	18/08/2016 NDVI RATIO 61 100 DP1	Total Heads 28/09/2016 COUNT /m ² 69 141 DP1 T2	14/11/2016 YIELD t/ha 89 188 DP1 TY3
Trt No.	Treatment	Product Rate	Appln Code					
17	Urea Urea Lancer	109kg/ha 109kg/ha	A C	26.4-	0.38c-g	0.57b-f	169-	2.44cd
18	Urea Lancer	109kg/ha	B	31.4-	0.38c-g	0.56b-f	165-	2.58bc
19	Urea Lancer	217kg/ha	B	31.3-	0.39b-g	0.56b-f	167-	2.60bc
20	Urea Lancer	435kg/ha	B	27.0-	0.34fg	0.55b-f	174-	2.75ab
21	Urea Urea Lancer	109kg/ha 109kg/ha	B C	27.0-	0.35efg	0.55b-f	190-	2.58bc
22	Urea Lancer	109kg/ha	C	37.3-	0.41b-g	0.55b-f	161-	2.36cde
23	Urea Lancer	217kg/ha	C	27.0-	0.37d-g	0.51efg	139-	2.35c-f
24	Urea Lancer	435kg/ha	C	25.6-	0.34g	0.53d-g	159-	2.34c-f
LSD P= Treatment Prob.(F)= CV=				nsd 0.0989	0.099 0.0102	0.087 0.0004	nsd 0.0875	0.298 0.0001 8.9

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

Mean comparisons performed only when AOV Treatment P (F) is significant at mean comparison OSL.

nsd = No significant difference

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Trial ID: DK1603

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Trial Year: 2016

Crop Name Assessment Date Assessment Type Assessment Unit ARM Action Codes				Wheat			
				14/11/2016 PROTEIN % ET14	14/11/2016 TEST WEIGHT kg/hL ET11	14/11/2016 SCREENINGS %	14/11/2016 N RECOVERY kg N/ha T4
Trt No.	Treatment	Product Rate	Appln Code				
1	Untreated EGA Gregory	-		11.23k	80.63-	4.40a	37.9k
2	Urea EGA Gregory	109kg/ha	A	11.98j	80.20-	4.08ab	49.7hi
3	Urea EGA Gregory	217kg/ha	A	12.48ghi	79.70-	4.05ab	52.4fgh
4	Urea EGA Gregory	435kg/ha	A	12.58gh	79.80-	3.80abc	54.2e-h
5	Urea Urea EGA Gregory	109kg/ha 109kg/ha	A C	12.40hi	79.63-	4.45a	45.5ij
6	Urea EGA Gregory	109kg/ha	B	12.08ij	80.15-	4.20ab	49.4hi
7	Urea EGA Gregory	217kg/ha	B	12.28hij	79.95-	3.63b-e	51.0ghi
8	Urea EGA Gregory	435kg/ha	B	12.63gh	79.90-	3.73a-d	55.5d-h
9	Urea Urea EGA Gregory	109kg/ha 109kg/ha	B C	12.50gh	79.55-	4.28ab	44.9ij
10	Urea EGA Gregory	109kg/ha	C	11.95j	79.83-	4.40a	38.9jk
11	Urea EGA Gregory	217kg/ha	C	12.40hi	79.98	4.23ab	42.2jk
12	Urea EGA Gregory	435kg/ha	C	12.88fg	80.10-	4.40a	50.1ghi
13	Untreated Lancer	-		12.40hi	80.98-	2.98ef	44.7ij
14	Urea Lancer	109kg/ha	A	13.48	80.55-	2.10g	56.6c-g
15	Urea Lancer	217kg/ha	A	13.80bcd	80.10-	2.70fg	63.0bc
16	Urea Lancer	435kg/ha	A	14.10ab	79.90-	2.73fg	74.1a
17	Urea Urea Lancer	109kg/ha 109kg/ha	A C	13.80bcd	80.05-	2.78fg	59.0c-f
18	Urea Lancer	109kg/ha	B	13.13ef	80.65-	2.55fg	59.5cde
19	Urea Lancer	217kg/ha	B	13.50de	80.43-	2.70fg	61.4cd
20	Urea Lancer	435kg/ha	B	14.23a	79.28-	3.60b-e	68.4ab
21	Urea Urea Lancer	109kg/ha 109kg/ha	B C	13.80bcd	80.73-	3.00def	62.2bc

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Location: Billa Billa

Trial Year: 2016

Crop Name				Wheat			
Assessment Date				14/11/2016	14/11/2016	14/11/2016	14/11/16
Assessment Type				PROTEIN	TEST WEIGHT	SCREENINGS	N RECOVERY
Assessment Unit				%	kg/hL	%	kg N/ha
ARM Action Codes				ET14	ET11		T4
Trt No.	Treatment	Product Rate	Appln. Code				
22	Urea Lancer	109kg/ha	C	13.68cd	80.50-	2.50fg	56.6c-g
23	Urea Lancer	217kg/ha	C	14.05abc	79.65-	3.10c-f	57.8c-f
24	Urea Lancer	435kg/ha	C	14.25a	79.78-	3.15c-f	58.4c-f
LSD P=				0.424	nsd	0.740	6.65
Treatment Prob.(F)=				0.0001	0.0574	0.0001	0.0001

Pest Scientific Name				<i>Fusarium pseudograminearum</i>	
Pest Name				Crown Rot	
Description				Severity	Incidence
Part Assessed				Stubble	Crown
Assessment Type				CR SEVERITY	PRESENCE
Assessment Unit				Rating	%
ARM Action Codes				AS	
Trt No.	Treatment	Product Rate	Appln. Code		
1	Untreated EGA Gregory	-		4.0d	19d
6	Urea EGA Gregory	109kg/ha	B	9.2c	28cd
7	Urea EGA Gregory	217kg/ha	B	10.9bc	36c
8	Urea EGA Gregory	435kg/ha	B	14.6b	56ab
13	Untreated Lancer	-		7.8c	27cd
18	Urea Lancer	109kg/ha	B	10.5bc	53ab
19	Urea Lancer	217kg/ha	B	11.7bc	50b
20	Urea Lancer	435kg/ha	B	22.3a	64a
LSD P=				0.65t	13.5
Treatment Prob.(F)=				0.0001	0.0001

Assessment Type

NDVI = Normalized difference vegetation index

N RECOVERY = Nitrogen Recovery in grain kg N/ha

CR SEVERITY = % basal browning x extent of browning

Crop Stage Majority

12 = 2 leaves unfolded

31 = First node at least 1 cm above tillering node

61 = Beginning of flowering: first anthers visible

69 = End of flowering: all spikelets have finished flowering, some dry anthers remain

89 = Fully ripe: grain hard, difficult to divide with thumbnail

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ARM Action Codes

ET14 = Excluded treatment 14

ET11 = Excluded treatment 11

$T1 = ([C1]/4)/.32$

$T2 = ([C5]/2)/0.32$

$TY3 = 0.5555555 * [C7]$

$T4 = [C8] * [C9] * 1.75$

AS = Automatic square root transformation of $X+0.5$

DP1 = Days after Planting

Application Description			
	A	B	C
Application Date:	15/02/2016	10/05/2016	11/07/2016
Application Start Time:	12:00 PM	11:00 AM	12:00 PM
Application Stop Time:	1:30 PM	12:00 PM	3:00 PM
Application Method:	SPREAD		
Application Timing:	FEBRUARY	IBS	GS30
Application Placement:	SURFACE	INCORPN	TOPDRESS
Air Temperature, Unit:	39 C	23 C	18 C
Dew Presence (Y/N):	No		
Soil Moisture:	FAIR		GOOD
% Cloud Cover:	5	60	65
Next Moisture Occurred On:	20/02/2106	27/05/2016	13/07/2016

Application Equipment			
	A	B	C
Application Equipment:	SPREAD	PLANTER	SPREAD
Equipment Type:	MANUAL	SMALL PLOT PLANTER	MANUAL