

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

Trial ID: DK1601

Location: Billa Billa

Trial Year: 2016

Investigator: Denielle Kilby

Planting Date:	10/05/2016						
Planting Equipment:	Small Plot Planter						
Row Spacing:	32cm						
Planting Depth:	5cm						
Target Plant Population:	100 Plants /m ²						
Application Code:	A	B	C	D	E	F	G
Application Date:	30/11/2015	30/11/2015	15/02/2016	15/02/2016	10/05/2016	10/05/2016	11/07/2016
Target/Stage:	Spread & Incorp. Dec	Spread Surface Dec	Spread & Incorp. Feb	Spread Surface Feb	Spread & IBS	Spread PSPE	Spread GS 30
Harvest Date:	14/11/2016						

Crop Name Crop Variety Assessment Date Assessment Type Assessment Unit Crop Stage Majority Plant-Evaluation Interval ARM Action Codes				Wheat Suntop				
				30/05/2016 EMERGENCE /m ² 12 20 DP1 T1	11/07/2016 NDVI RATIO 31 62 DP1	13/09/2016 NDVI RATIO 65 126 DP1	13/09/2016 HEAD COUNT /m ² 65 126 DP1 ET2 T3	14/11/2016 YIELD t/ha 99 188 DP1 TY2
Trt No.	Treatment	Product Rate	Appln. Code					
1	Untreated	-	-	29.7b-f	0.435a-d	0.488ef	134.4-	2.48h
2	Urea	109kg/ha	A	30.5a-f	0.481abc	0.577abc	198.0	2.87a-e
3	Urea	217kg/ha	A	35.9abc	0.469a-d	0.557a-f	184.0-	2.77b-g
4	Urea	217kg/ha	B	32.4a-e	0.486abc	0.590ab	183.6-	2.85a-e
5	Urea	435kg/ha	A	32.0a-e	0.484abc	0.609a	182.4-	2.99abc
6	Urea	109kg/ha	A	38.7a	0.520a	0.623a	191.0-	2.96a-d
	Urea	109kg/ha	G					
7	Urea	109kg/ha	C	27.0def	0.392cde	0.516b-f	148.8-	2.64e-h
8	Urea	217kg/ha	C	32.0a-e	0.428a-d	0.590ab	185.2-	2.89a-e
9	Urea	217kg/ha	D	24.8ef	0.390cde	0.560a-f	154.3-	2.91a-e
10	Urea	435kg/ha	C	30.3a-f	0.440a-d	0.572a-d	174.2-	3.06a
11	Urea	109kg/ha	C	27.5c-f	0.365de	0.564a-e	154.3-	2.72c-h
	Urea	109kg/ha	G					
12	Urea	109kg/ha	E	27.5c-f	0.387cde	0.530b-f	162.5-	2.79a-g
13	Urea	217kg/ha	E	31.3a-f	0.533a	0.553a-f	184.9-	2.88a-e
14	Urea	217kg/ha	F	22.9f	0.317e	0.483f	127.3-	2.70d-h
15	Urea	435kg/ha	E	32.6a-e	0.491abc	0.588ab	193.2-	3.03ab
16	Urea	109kg/ha	E	34.0a-d	0.405b-e	0.524b-f	166.4-	2.73c-h
	Urea	109kg/ha	G					
17	Urea	109kg/ha	G	34.1a-d	0.437a-d	0.507c-f	175.0-	2.56fgh
18	Urea	217kg/ha	G	25.2ef	0.447a-d	0.495def	145.7-	2.53gh
19	Urea	217kg/ha	B2	32.0a-e	0.434a-d	0.561a-f	162.5-	2.82a-f
20	Urea	217kg/ha	D2	36.3ab	0.498ab	0.576abc	185.2-	2.89a-e
LSD P=				8.50	0.1052	0.0785	nsd	0.278
Treatment Prob.(F)=				0.0391	0.0130	0.0165	0.4962	0.0018
CV=								7.0

NB: Application codes: B2 and D2 (Trts 19 and 20) had urea spread on the soil surface but without prior soil disturbance

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.

Missing data estimates are included in columns: Average= 2, 3, 4, 6, 8, 11, 13.

nsd = No significant difference.

N Management in Wheat 2016 – Billa Billa

Trial ID: DK1601

Location: Billa Billa

Trial Year: 2016

Crop Name Crop Variety Description Assessment Date Assessment Type Assessment Unit ARM Action Codes				Wheat Suntop				
				17/12/2016 PROTEIN %	17/12/2016 TEST WEIGHT kg/hL	17/12/2016 SCREENINGS % AL	17/12/2016 MOISTURE %	N in Grain 17/12/2016 N RECOVERY kg N/ha T4
Trt No.	Treatment	Product Rate	Appln. Code					
1	Untreated	-	-	11.2h	79.9-	3.3-	11.3-	48.5f
2	Urea	109kg/ha	A	11.5gh	80.2-	2.8-	11.2-	57.8b-e
3	Urea	217kg/ha	A	11.5gh	80.6-	2.8-	11.0-	55.8cde
4	Urea	217kg/ha	B	12.3a-d	80.3-	3.3-	11.0-	61.5abc
5	Urea	435kg/ha	A	12.1b-f	80.9-	3.1-	11.2-	63.5ab
6	Urea	109kg/ha	A	12.2a-e	80.7-	3.0-	11.1-	63.2ab
	Urea	109kg/ha	G					
7	Urea	109kg/ha	C	11.7fg	80.9-	3.1-	11.2-	54.2def
8	Urea	217kg/ha	C	12.5ab	80.5-	3.2-	11.0-	63.0ab
9	Urea	217kg/ha	D	12.2a-e	80.4-	3.1-	11.2-	62.2ab
10	Urea	435kg/ha	C	12.4a-d	80.5-	2.9-	11.1-	66.2a
11	Urea	109kg/ha	C	12.6ab	80.4-	3.6-	11.0-	59.7bcd
	Urea	109kg/ha	G					
12	Urea	109kg/ha	E	12.0c-g	80.7-	3.1-	11.2-	58.3b-e
13	Urea	217kg/ha	E	12.5ab	80.5-	3.0-	11.1-	63.4ab
14	Urea	217kg/ha	F	12.5ab	80.7-	4.1-	11.1-	58.9b-e
15	Urea	435kg/ha	E	12.5ab	80.2-	3.2-	10.9-	66.5a
16	Urea	109kg/ha	E	12.4abc	80.7-	3.6-	11.0-	59.2b-e
	Urea	109kg/ha	G					
17	Urea	109kg/ha	G	11.8efg	81.1-	3.4-	11.2-	53.5ef
18	Urea	217kg/ha	G	12.6a	80.4-	3.5-	11.0-	55.9cde
19	Urea	217kg/ha	B2	11.9d-g	80.2-	3.0-	11.1-	58.7b-e
20	Urea	217kg/ha	D2	12.2a-f	80.2-	3.4-	11.0-	61.4abc
LSD P=				0.45	nsd	nsd	nsd	5.85
Treatment Prob.(F)=				0.0001	0.2884	0.1042	0.4203	0.0001

NB: Application codes: B2 and D2 (Trts 19 and 20) had urea spread on the soil surface but without prior soil disturbance

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

65 = Full flowering: 50% of anthers mature

ARM Action Codes

ET2 = Excluded treatment 2

AL = Automatic log transformation of X+1

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

T3 = [C5] /2/.32

TY2 = 0.555555*[C7]

T4 = [C8]*[C9]*1.75

DP1 = Days after Planting

N Management in Wheat 2016 – Billa Billa

Trial ID: DK1601

Location: Billa Billa

Trial Year: 2016

Pest Scientific Name Pest Name Description Assessment Type Assessment Unit				<i>Fusarium pseudograminearum</i> Crown Rot	
				Severity CR SEVERITY Rating	Incidence PRESENCE %
Trt No.	Treatment	Product Rate	Appln. Code		
1	Untreated	-	-	12f	29i
2	Urea	109kg/ha	A	19def	45gh
3	Urea	217kg/ha	A	28bcd	59b-g
4	Urea	217kg/ha	B	18ef	39hi
5	Urea	435kg/ha	A	23b-e	50fgh
6	Urea	109kg/ha	A	29bc	61b-f
	Urea	109kg/ha	G		
7	Urea	109kg/ha	C	21c-f	51e-h
8	Urea	217kg/ha	C	20def	53d-h
9	Urea	217kg/ha	D	29bc	53d-h
10	Urea	435kg/ha	C	29bc	66a-d
11	Urea	109kg/ha	C	29bc	66a-d
	Urea	109kg/ha	G		
12	Urea	109kg/ha	E	26b-e	67a-d
13	Urea	217kg/ha	E	20c-f	49fgh
14	Urea	217kg/ha	F	27b-e	68abc
15	Urea	435kg/ha	E	31ab	73ab
16	Urea	109kg/ha	E	39a	78a
	Urea	109kg/ha	G		
17	Urea	109kg/ha	G	25b-e	58c-g
18	Urea	217kg/ha	G	28bcd	68abc
19	Urea	217kg/ha	B	26b-e	61b-f
20	Urea	217kg/ha	D	25b-e	65a-e
LSD=				8.8	14.6
Treatment Prob.(F)=				0.0002	0.0001

Application Description							
	A	B	C	D	E	F	G
Application Date:	30/11/2015	30/11/2015	15/02/2016	15/02/2016	10/05/2016	10/05/2016	11/07/2016
Application Start Time:			10:30 AM	10:30 AM			
Application Stop Time:			12:00 PM	12:00 PM			
Application Method:	SPREAD						
Application Timing:	DECEMBER	DECEMBER	FEBRUARY	FEBRUARY	IBS	PSPE	GS30
Application Placement:	INCORPN	SURFACE	INCORPN	SURFACE	INCORPN	SURFACE	TOPDRESS
Air Temperature, Unit:			39 C	39 C	23 C	23 C	
Dew Presence (Y/N):	No						
Soil Moisture:			FAIR	FAIR	FAIR	FAIR	DRY
% Cloud Cover:	0	0	5	5	60	60	0
Next Moisture Occurred on:	1/12/2015 – 0.6mm	1/12/2015 – 0.6mm	20/02/2016 – 31mm	20/02/2016 – 31mm	27/05/2016 – 14mm	27/05/2016 – 14mm	13/07/2016 – 0.6mm

Application Equipment							
	A	B	C	D	E	F	G
Application Equipment:	PLANTER	SPREAD	PLANTER	SPREAD	PLANTER	SPREAD	SPREAD
Equipment Type:	SMALL PLOT PLANTER	MANUAL	SMALL PLOT PLANTER	MANUAL	SMALL PLOT PLANTER	MANUAL	