

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.

Plant Growth Regulators in Barley

Trial ID: AM1606

Location: Boggabri

Trial Year: 2016

Investigator: Anthony Mitchell

Planting Date:	5/05/2016		
Planting Equipment:	Commercial Planter		
Row Spacing:	25cm		
Planting Rate:	35 kg/ha		
Application Code:	A	B	C
Application Date:	17/07/2016	17/07/2016	17/08/2016
Growth Stage Application:	Urea Hand Spread at Second Node	Second Node	Flag Leaf just Visible
Harvest Date:	9/11/2016		
Harvested Plot:	10m x 1.8m		
Harvest Equipment:	Small Plot Header		
Lodging %:	% of Plot Lodged x % Drop in Height		
Commercial Fertiliser Application:	40 kg/ha Starter (Granular Z extra) + 60 units of N (approx.120kg/ha Urea spread in June/July)		

Crop Name Crop Variety				Barley Commander					
Description				Height Reduction 31/08/2016	13/09/2016	26/09/2016	20/10/2016	7/11/2016	8/11/2016
Assessment Date				CROP HEIGHT	LODGING	LODGING	LODGING	LODGING	YIELD
Assessment Type				% Reduction	%	%	%	%	t/ha
Assessment Unit				39	61				
Crop Stage Majority				45 DAA	58 DAA	71 DAA	95 DAA	113 DAA	
Treatment-Evaluation Interval				AA			AL	AL	TY1
ARM Action Codes									
Trt No.	Treatment	Product Rate	Appln Code						
1	Untreated	-	-	0c	5.81b	17.0a	23.8a	31.7ab	3.3g
2	Moddus Evo	200ml/ha	B	13b	0.00c	0.6b	5.5a-d	8.6cde	4.8cde
3	Moddus Evo	300ml/ha	B	11b	0.00c	0.0b	0.9cde	2.8efg	5.4a-d
4	Moddus Evo	400ml/ha	B	40a	0.00c	0.0b	0.3e	2.4fg	6.0a
5	Moddus Evo	200ml/ha	B	6b	0.00c	0.0b	0.7de	1.9fg	5.4abc
	Moddus Evo	200ml/ha	C						
6	Moddus Evo	200ml/ha	B	40a	0.00c	0.0b	1.2cde	3.1efg	5.4abc
	Exp 1	1000ml/ha							
7	Moddus Evo	200ml/ha	B	42a	0.00c	0.0b	6.2a-d	10.9bcd	5.8ab
	Exp 1	1300ml/ha							
8	Exp 2	500ml/ha	B	0c	0.08c	2.8b	3.7b-e	5.8def	3.9efg
9	Moddus Evo	200ml/ha	B	50a	0.00c	0.0b	1.5cde	2.9efg	4.9bcd
	Exp 2	500ml/ha							
10	Moddus Evo	400ml/ha	C	0c	0.08c	0.1b	0.3e	0.5g	4.5def
11	Urea	100kg/ha	A	0c	11.55a	22.0a	19.8ab	36.8a	3.8fg
12	Moddus Evo	400ml/ha	B	8b	0.01c	0.8b	7.2abc	24.4abc	5.2a-d
	Urea	100kg/ha	A						
LSD P=				7.0t	4.33	8.22	0.65t	0.44t	0.90
Treatment Prob.(F)=				0.0001	0.0001	0.0001	0.0012	0.0001	0.0001
CV=									12.8

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

t=Mean descriptions are reported in transformed data units, and are not de-transformed.

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

nsd = No significant difference

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Trial Year: 2016

Crop Name Crop Variety Assessment Date Assessment Type Assessment Unit ARM Action Codes			Barley Commander				
			17/11/2016	17/11/2016	17/11/2016	17/11/2016	17/11/2016
			PROTEIN	TEST WEIGHT	SCREENING	MOISTURE	RETENTION
			% AL	kg/hL	% AL	%	%
Trt No.	Treatment	Product Rate					
1	Untreated	-	10.0ab	65.5-	2.1-	11.3-	93.3ab
2	Moddus Evo	200ml/ha	9.5bc	66.9-	1.8-	11.3-	93.9a
3	Moddus Evo	300ml/ha	9.4c	66.3-	2.5-	11.2-	91.6a-d
4	Moddus Evo	400ml/ha	9.6bc	65.9-	2.7-	11.5-	90.3cd
5	Moddus Evo	200ml/ha	9.5bc	65.5-	2.3-	11.6-	92.4abc
	Moddus Evo	200ml/ha					
6	Moddus Evo	200ml/ha	9.2c	65.8-	2.6-	11.6-	91.1a-d
	Exp 1	1000ml/ha					
7	Moddus Evo	200ml/ha	9.2c	65.5-	2.8-	11.5-	90.1cd
	Exp 1	1300ml/ha					
8	Exp 2	500ml/ha	9.3c	66.1-	1.9-	11.1-	93.8a
9	Moddus Evo	200ml/ha	9.5bc	65.8-	3.0-	11.4-	89.8cd
	Exp 2	500ml/ha					
10	Moddus Evo	400ml/ha	9.5bc	66.0-	2.2-	11.5-	90.7bcd
11	Urea	100kg/ha	10.6a	65.0-	2.8-	11.7-	92.3abc
12	Moddus Evo	400ml/ha	10.2a	66.4-	2.9-	11.6-	89.4d
	Urea	100kg/ha					
LSD P=			0.02t	nsd	nsd	nsd	2.73
Treatment Prob.(F)=			0.0008	0.6904	0.1063	0.5521	0.0122

Crop Stage Majority

39 = Flag leaf stage: flag leaf fully unrolled, ligule just visible

61 = Beginning of flowering: first anthers visible

ARM Action Codes

AA = Automatic arcsine square root % transformation

AL = Automatic log transformation of X+1

$$TY1 = (10 / (1.8 * [C7])) * [C6]$$

DAA = Days after Application

Application Description			
	A	B	C
Application Date:	17/07/2016	17/07/2016	17/08/2016
Application Start Time:	1:00 PM	11:00 AM	10:30 AM
Application Stop Time:	1:30 PM	1:00 PM	11:30 AM
Application Method:	HAND SPREAD	SPRAY	
Air Temperature, Unit:		21 C	
% Relative Humidity:		54	54.3
Wind Velocity, Unit:		10 km/h	2 km/h
Wind Direction:		W	NE
Soil Moisture:		GOOD	SLIWET
% Cloud Cover:		0	
Next Moisture Occurred On:		20/07/2016	24/08/2016
Time to Next Moisture, Unit:		3 days	

Plant Growth Regulators in Barley

Trial ID: AM1606 **Location:** Boggabri **Trial Year:** 2016

Application Equipment	
	A
Application Equipment:	Quad Bike
Equipment Type:	BOOM SPRAY
Operation Pressure, Unit:	300 kPa
Nozzle Type:	AIXR
Nozzle Size:	110015
Nozzle Spacing, Unit:	50 cm
Nozzles/Row:	8
Boom Length, Unit:	4 m
Boom Height, Unit:	50 cm
Ground Speed, Unit:	10.3 km/h
Spray Volume, Unit:	70 L/ha