

Project: N for protein - Timing & Method

Trial: RN1308

District: Weemelah

Planting date: 28/05/2013

Application Timing	Date	Crop stage (EGA Gregory)
T1	28/05/2013	Planting
T2	29/07/2013	GS29/30
T3	28/08/2013	GS39
T4	11/09/2013	GS60
T5	24/09/2013	GS71
T6	3/10/2013	GS77

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.

Trt No.	Variety	Product	Units of N applied	Method of Application	Timing of Application	20/06/2013	29/07/2013	27/10/2013	
						Establishment Plants/m ²	NDVI	Yield	
								kg/ha	% of Untreated
1	EGA Gregory	Untreated	-	-	-	79 bcde	0.83	4371 bc	-
2	EGA Gregory	Urea	40	IBS	T1	78 cde	0.83	4453 ab	102
3	EGA Gregory	Urea	20 + 20	IBS & Spread	T1 & T2	76 de	0.80	4360 bc	100
4	EGA Gregory	Urea	40	Spread	T2	79 bcde	0.81	4427 ab	101
5	EGA Gregory	Urea	40	Spread	T3	86 bcde	0.83	4384 abc	100
6	EGA Gregory	Liquid Urea	40	StreamJet	T3	89 bcd	0.83	4405 abc	101
7	EGA Gregory	Liquid Urea	40	Foliar	T3	76 de	0.82	4364 bc	100
8	EGA Gregory	Urea	40	Spread	T4	73 e	0.82	4453 ab	102
9	EGA Gregory	Liquid Urea	40	StreamJet	T4	81 bcde	0.80	4479 ab	102
10	EGA Gregory	Liquid Urea	40	Foliar	T4	93 ab	0.84	4513 a	103
11	EGA Gregory	Urea	40	Spread	T5	89 bcd	0.82	4444 ab	102
12	EGA Gregory	Liquid Urea	40	StreamJet	T5	81 bcde	0.81	4384 abc	100
13	EGA Gregory	Liquid Urea	40	Foliar	T5	91 bc	0.82	4420 abc	101
14	EGA Gregory	Urea	40	Spread	T6	82 bcde	0.82	4362 bc	100
15	EGA Gregory	Liquid Urea	40	StreamJet	T6	86 bcde	0.81	4288 cd	98
16	EGA Gregory	Liquid Urea	40	Foliar	T6	79 bcde	0.82	4384 abc	100
17	Suntop	Untreated	-	-	-	80 bcde	0.80	4185 d	-
18	Sunvale	Untreated	-	-	-	82 bcde	0.76	3880 e	-
19	Spitfire	Untreated	-	-	-	86 bcde	0.79	3932 e	-
20	Merlin	Untreated	-	-	-	105 a	0.82	3845 e	-
						P =	0.01	0.06	<0.01
						LSD =	13.7	nsd	134.0
						CV =			2.2%

Trt No.	Variety	Product	Units of N applied	Method of Application	Timing of Application	Grain Quality				
						Protein %	Moisture %	Test Weight kg/hL	Screenings %	N Recovery kg N/ha
1	EGA Gregory	UTC	-	-	-	11.2 hi	9.6 ab	83.1 cdef	2.9 abcde	85.9
2	EGA Gregory	Urea	40	IBS	T1	12.2 bc	9.4 bcdef	82.7 def	3.3 ab	94.9
3	EGA Gregory	Urea	20 + 20	IBS & Spread	T1 & T2	12.1 cd	9.4 abcde	82.4 f	3.2 abc	92.0
4	EGA Gregory	Urea	40	Spread	T2	12.1 bcd	9.4 cdef	82.6 ef	3.5 a	93.9
5	EGA Gregory	Urea	40	Spread	T3	11.7 defgh	9.2 f	83.7 bc	2.8 bcde	89.5
6	EGA Gregory	Liquid Urea	40	StreamJet	T3	12.0 cdef	9.4 bcdef	83.0 cdef	3.1 abcd	92.1
7	EGA Gregory	Liquid Urea	40	Foliar	T3	11.5 fghi	9.4 abcde	83.5 bcd	2.9 bcde	88.0
8	EGA Gregory	Urea	40	Spread	T4	11.8 cdefg	9.4 abcde	83.3 cdef	2.5 defg	91.6
9	EGA Gregory	Liquid Urea	40	StreamJet	T4	11.9 cdefg	9.5 abcd	82.9 def	2.9 abcde	92.9
10	EGA Gregory	Liquid Urea	40	Foliar	T4	12.0 cdef	9.4 abcde	83.4 bcde	2.4 efg	94.4
11	EGA Gregory	Urea	40	Spread	T5	11.4 ghi	9.5 abc	82.7 def	3.1 abcd	88.0
12	EGA Gregory	Liquid Urea	40	StreamJet	T5	11.4 ghi	9.4 cdef	83.2 cdef	2.8 bcde	87.7
13	EGA Gregory	Liquid Urea	40	Foliar	T5	12.0 cde	9.5 abcde	82.9 cdef	2.8 bcde	93.0
14	EGA Gregory	Urea	40	Spread	T6	11.2 i	9.3 cdef	83.7 bc	2.7 cdef	85.3
15	EGA Gregory	Liquid Urea	40	StreamJet	T6	11.8 cdefg	9.4 bcdef	83.2 cdef	3.2 abc	88.7
16	EGA Gregory	Liquid Urea	40	Foliar	T6	11.8 cdefg	9.5 abcde	83.1 cdef	2.7 bcde	90.6
17	Suntop	UTC	-	-	-	11.6 efghi	9.3 ef	83.2 cdef	2.1 g	84.7
18	Sunvale	UTC	-	-	-	12.0 cde	9.6 a	84.2 ab	2.1 fg	81.5
19	Spitfire	UTC	-	-	-	12.6 ab	9.3 def	84.6 a	0.7 h	86.6
20	Merlin	UTC	-	-	-	12.8 ab	9.2 f	84.8 a	0.3 h	85.8
					P =	<0.01	<0.01	<0.01	<0.01	<0.01
					LSD =	0.45 to 0.49	0.2	0.9	0.6	3.8 to 4.2

Factorial Analysis (Treatments 5 - 16)		27/10/2013						
		Yield		Protein %	Moisture %	Test Weight kg/hL	Screenings %	N Recovery kg N/ha
		kg/ha	% of Untreated					
Method of application								
	Foliar	4420	101	11.8 a	9.4	83.2	2.7	91.5 a
	Spread	4411	101	11.5 b	9.4	83.3	2.8	88.7 b
	StreamJet	4389	100	11.8 a	9.4	83.1	3.0	90.4 ab
	P =	0.61		0.01	0.36	0.46	0.16	0.02
	LSD =	nsd		0.21	nsd	nsd	nsd	1.9
Timing of Application								
	T3	4384 b	100	11.7	9.3	83.4	2.9	89.9 b
	T4	4482 a	103	11.9	9.4	83.2	2.6	93.0 a
	T5	4416 ab	101	11.6	9.4	82.9	2.9	89.6 b
	T6	4345 b	99	11.6	9.4	83.3	2.9	88.2 b
	P =	<0.01		0.17	0.36	0.28	0.33	<0.01
	LSD =	74.7		nsd	nsd	nsd	nsd	2.2
Method x Timing interaction								
	P =	0.71		<0.01	0.37	0.48	0.73	0.03
	LSD =	nsd		0.4 to 0.5	nsd	nsd	nsd	3.8 to 4.1