FLEXI-N SCORCH

FARMER NAG (Flexi-N)	AREA Binnu	TRIAL NO N11W1	YEAR 2011

SITE HISTORY: Native vegetation: Tamma, Tea tree. 2010: unfertilised pasture; 2009: triticale; 2008: unfertilised pasture.

SOIL ANALYSIS:

	Description	pH	EC	OC	N(Nit)	N(Amm)	P	PBI	K	S
0 - 10	Gravelly sandy loam	4.7	0.02	0.7	7	2	7	33	154	3
10 - 20		4.7	0.02	0.3	2	1	2	34	95	3
20 – 30cm		4.6	0.02	0.2	3	1	2	45	78	9

	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	ECEC	Al	Ex Al%	Cu	B
0 - 10	1.3	0.4	0.3	0.03	0.15	2.2	1	7	0.5	0.5
10 -20	0.9	0.4	0.2	0.03	0.22	1.7	1	13	0.4	0.5
20 – 30cm	1.2	0.4	0.2	0.03	0.14	2.0	1	7	0.4	0.4

AIM: To compare the effectiveness of various Flexi-N strategies and to determine the effect of leaf scorch on yield.

MANAGEMENT:

Apr	Site ploughed.
12 May	1.8 L/ha Treflan, 35 g/ha logran and 300 ml/ha lorsban. 80 kg/ha Wyalkatchem wheat dry sown.
14 Jun	Z14 Flexi-N (cool, overcast day, persistent light showers). Sprayed 500 ml/ha Jaguar for radish.
19 Jul	Flexi-N applied (Z37).
3 Aug	Supercharge has blown the flag leaf away, but only minimal scorch from the Flexi-N applied neat.
20 Oct	Harvest.

RESULTS AND DISCUSSION:

Plant tests and yield results show that this site was highly variable and there were no significant responses to Flexi-N.

There was little scorch from Flexi-N applied on its own, but there was severe scorch with the wetter (Supercharge).

Site variability meant that any effects of scorch on yield could not be quantified.

	Treatment						Harvest			
Trt	Banded (L/ha)	Banded (kg/ha)	Z14 (L/ha)	Z37 (L/ha)	N	P	Yield (t/ha)	Protein (%)	HL wt. (kg/HL)	Scrns. (%)
1	-	Nil	-	-	0	0	1.6	10.0	80	0.7
2	-	130 Agflow Extra	-	-	17	23	3.4	9.5	81	1.1
3	60 FN	130 Agflow Extra	-	-	42	23	3.8	9.8	81	0.9
4	-	130 Agflow Extra	60FN	-	42	23	3.8	9.3	81	0.9
5	-	130 Agflow Extra	60FN + SC*	-	42	23	3.7	9.3	81	1.2
6	-	130 Agflow Extra	-	60FN	42	23	3.8	9.5	80	1.0
7	-	130 Agflow Extra	-	60FN + SC*	42	23	3.6	10.6	81	1.1
8	25 FN	130 Agflow Extra	-	35 FN	42	23	3.6	9.4	80	1.2
9	-	130 Agflow Extra	55 Urea	-	42	23	3.9	9.7	80	1.0
						Prob	<0.001	0.47	0.60	0.44
						Lsd	0.75	ns	ns	ns

* SC = Supercharge (1.5%)

The research contained in this document was funded by CSBP as part of our commitment to maximising the sustainability and profitability of our customers' farming operations.

CONCLUSION:

In general, timing of nitrogen application does not have much affect on yield but it is important for risk management. It is about getting the rate right. Increasing N inputs from 17 to 42 kg N/ha cost $30/ha but increased returns by $92/ha.

The biggest drain on resources for farmers is that 3 – 4 leaf stage. Putting some nitrogen down the tube gives you time to come back later in the crops life after early post emergent herbicide spraying when there can be a better assessment of the season and requirements.

This trial was also trying to understand the significance of any scorch effects from Flexi N on yield. The Supercharge was used to deliberately 'hot up' the mix, and the resulting scorch effects showed that it did a good job of it. Interestingly, the scorch from 60 L/ha applied neat was negligible. The Flexi-N and Supercharge at Z37 caused severe scorch to the flag leaf but doesn't appear to have reduced yield.

FOR MORE INFORMATION: Contact Stuart Wakelam 0409 205978

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