Flexi-N Timing

Aim: Compare Flexi-N timing especially for late protein boost application in wheat.

Research Officer: Troy Conley & Luigi Moreschi
Company: CSBP

Farmer: BA Shaw & Co.
Location: Liebe Main Trial Site, Buntine

Background: Flexi-N is continuing it's widespread acceptance throughout the wheat growing regions of the state due to the advantages it has to offer including,

- Greater in paddock efficiencies ie. Split applications of N without adding an extra pass
- More accurate application
- Reduced volatility
- Ability to 'play the season' with N application

Trial Details:

Plot size and replication	20m*1.8m * 3 reps
Soil type	Gravelly Loamy Sand
Sowing date	12th June 2002
Conditions at sowing	Dry
Machinery	Conserva Pak 9" spacings
Seeding rate	70 kg Carnamah
Fertiliser	Basal 113 kg/ha Agflow + 40 kg Potash
Herbicides and Insecticides	1 L/ha Treflan + 35 g/ha Logran
Paddock History	2001 = Poor pasture , 2000 = Wheat

Results: Due to the dry season there was insufficient grain to harvest. Tissue tests taken at late tillering indicated low nitrogen uptake on all treatments (even the + N treatments), due to the reduced availability of the nitrogen at the root surface because of the poor soil moisture conditions. Soil test taken in November showed a good correlation between applied N in 2002 and the level of N in the soil.

	Plot 1	Plot 2	Plot 3	Plot 13	Plot 20	Plot 19
Treatment – Flexi-N	Nil	50 L/ha	100 L/ha	Nil	50 L/ha	100 L/ha
Nitrate mg/kg	9	9	14	11	11	14
Ammonium mg/kg	6	12	26	5	13	19
Approx. kg of N / ha	24	34	64	26	38	53

Interpretations/Comments: These results show a strong trend towards N applied and what is remaining in the soil after the failed wheat crop.

We hope to continue monitoring the N levels at the site and measure a carryover response in 2003.