

4.8 MONTY'S PLANTFOOD NUTRITION TRIAL (INVERLEIGH VIC)

Assessing the Effectiveness of Monty's Plant Food on Wheat Yield and Grain Quality

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Location: SFS Inverleigh Research site

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Rainfall (2005): 500.5 mm

GSR: (Apr – Nov) 350.3 mm

Summary:

The use of Monty's Plant Food had no significant effect on wheat yield or quality.

Background:

There is thought that nutrition supplement in the form of foliar and seed soaking products could give some yield and grain quality benefits to wheat.

Objectives:

To evaluate the effect of Monty's 4-15-12 as a seed soak product and Monty's 8-16-8 as a foliar spray on wheat grain yield and quality.

Methodology:

4 treatments and 4 replicates of each treatment were set up in a randomized block design. The plot length was 13 metres and width was 2.0 metres. The trial was grown on raised beds.

Treatments:

Trt	Treatment List
1	Control consisting of 100 kg/ha MAP +CuZn at sowing + 50 kg/ha Nitrogen at GS31
2	Control treatment plus a seed soak with Monty's 4-15-12 (2 Litres/100 kg seed) + Monty's 8-16-8 (1.5 L/Ha) at 2 nd leaf stage + Monty's 8-16-6 (1.5 L/Ha) at GS39 (flag leaf)
3	Control + Monty's 8-16-6 (1.5 L/ha) at GS39
4	Control + Monty's 8-16-8 (1.5 L/Ha) at 2 nd leaf stage + Monty's 8-16-8 (1.5 L/Ha) at GS39

Fertiliser:

Urea applied at 100 kg/ha on 18th August 2005.

Fungicide:

Folicur 145 ml/ha applied on 23rd September for rust control.

Variety: Mitre

Seed dressing: Jockey ® at label rates.

Results and Discussion

Table 4-20: Grain Yield and Quality

Trt	Yield T/ha	Protein %	Grain Retention %	Screenings %	Test Wt kg/hl	TGW grams
1	4.518	11.60	97.91	2.085	71.69	35.40
2	4.848	11.53	97.74	2.340	71.88	35.90
3	4.558	11.32	97.91	2.160	72.73	37.27
4	4.393	11.38	98.15	1.917	72.59	35.50
Average	4.579	11.46	97.93	2.126	72.23	36.02
LSD 5%	0.402	0.46	0.62	0.597	2.85	0.850

Table 4-20 shows that there is no significant difference between treatments for grain yield and grain quality. Hence there is no advantage to using the Monty treatments in addition to the control treatment. Therefore no recommendation can be given at this stage to use Monty's Plant Food. Further testing may be undertaken to evaluate Monty's Plant Food with no other nutrition supplement, against the standard practice nutrition programme.