

10.3 WHEAT SEED DRESSING TRIAL - GNARWARRE (LANDMARK)

Location: "South Roxby" Gnarwarre

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Aim:

To evaluate a number of seed dressings in wheat.

Trial Design:

Four replicates of small plots 1.7m x 15

Crop type:	Tamaroi Durum wheat		
Sowing date:	12 th June 2003		
GSR (April – Nov):	387.5 mm		
Soil type:	clay loam		

Background:

This trial was one of many Landmark R&D established in 2003 to evaluate the performance of a number of seed dressings on wheat. While Jockey is known to suppress Take-all in wheat the other treatments were included for their activity on the root rotting disease *Pythium*.

Pythium is known to occur at damaging levels in soils of rainfall zones >350mm and trial work over the last couple of years has found disease reduction and yield increases with certain seed dressings. The main crop symptom of *Pythium* is low vigour which results from the fungus stripping the outer layer of the primary roots leaving only a 'steely' cortex that is unable to take up water and nutrients.

Results:

Table 78: Summary of Monitoring and Yield Data

Treatment /100kg	Plant count /m2	Yield T/ha	% Untreated	Avg. Victoria (3 trials)
Untreated	111	4.29		
Jockey 450ml	139	4.47	104	103
Dividend 130ml	106	4.33	101	102
Dividend 260ml	120	4.38	102	103
Exp. Pythium control 75ml	96	4.53	106	104
Exp. Strobilurin 200ml	111	4.53	106	103
Exp. Strobilurin 400ml	82	4.42	103	103
Exp. Phosphoric acid 700ml	126	4.41	103	102
Exp. General fungicide 250ml	125	4.59	107	102
Exp. Rhizoctonia control 100ml	129	4.39	102	100
Exp. Rhizoctonia control 150ml	129	4.38	102	103
CV		4.78%		
LSD		0.32		

Not statistically significant

Discussion:

The plant roots in this trial were not assessed for disease incidence and there were no above ground symptoms of any diseases, however results above (although not statistically significant) show some modest yield increases at Gnarwarre that are consistent with the other trials conducted in Victoria.

A number of the treatments above are only in the experimental stage at present and some may never be registered in wheat, however one product that will be available to some extent in 2004 is Dividend ®.

Dividend ® is a new product from Syngenta that, as well as controlling smuts and bunts, also contains an ingredient that has activity on *Pythium* and our trials from 2003 show that this product has some promise in the mid to high rainfall zones.