Crop Performance of Biological Stimulant TM21 vs Untreated



Barry Porter, Technical Rep, RYMC Pty Ltd.

AIM

To compare the performance of wheat crops grown using normal farming practices and inputs, to those grown with 2x250 ml/ha applications of the biological stimulant TM21 in addition to the normal farming practices and inputs.

BACKGROUND

Rising costs, pressure on margins and increased risk have resulted in a review of best practice to maximize sustainable outcomes. Improved efficiency of nutrient and water utilisation by plants in soils with higher levels of biological activity have been noted by researchers in many organizations world wide. TM21 is a biological stimulant and as such may increase biological activity in soils, thus improving the comparative performance of crops, where soil is lacking in biological activity, moisture or nutrient supply.

TRIAL DETAILS

Property	McIlroy family, Pithara		
Plot size & replication	50m x 8m x 3 replicates		
Soil type	Sandy Loam		
Sowing date	28/05/09		
Seeding rate	65 kg/ha Arrino		
Fertiliser (kg/ha)	28/05/09: 80 kg/ha Agras 17/08/09: 80 kg/ha Flexi N		
TM21 applications	1x250 mL /ha prior to seeding and 1x250 mL/ha at mid tillering		
Herbicides	As per farmer practice		
Growing Season Rainfall	201mm		

RESULTS

Table 1: Yield and quality of wheat sown at Pithara.

Treatment	Yield	Protein	Screening	% Control	Gross Margin \$/ha
	t/ha	(%)	(%)		
TM21x2x250ml/	1.44	12.0	3.3	89	326.88
ha applications					
untreated	1.62	11.6	3.9	100	367.74
TM21x2x250ml/	1.82	12.0	3.3	110	413.14
ha applications					
Untreated	1.65	11.6	3.9	100	374.55
TM21x2x250ml/	1.78	12.0	3.3	119	404.06
ha applications					
Untreated	1.48	11.6	3.9	100	335.96

COMMENTS

Harvest results for this trial show a yield and quality improvement for the areas where the TM21 was
applied. One of the replications was adversely impacted by mechanical damage incurred during either
spraying or fertilizer application in the later stages of crop development.

 During the growing period it was observed that root development in the treated plots to be greater in mass than the untreated areas. Tiller development was also observed to be more even in treated plots with late tillers being less developed in the untreated plots.

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PAPER REVIEWED BY: Stuart McAlpine, McAlpine Farms.

CONTACT:

Name: Barry Porter

Email: bestwabarry@westnet.com.au

Tel: 0439 899 968

General Information