Alternative Nutrition on Wheat

Summary: No significant differences were observed in wheat yield from the application of a range of alternative products. The dry season (Decile 1.5) resulted in very little difference in treatments. The zero P fertiliser treatments yielded as well as the fertilised treatments. This trial will have to be repeated in a better season to observe differences in these products.

Aim: To investigate the effect of a number of biological seed dressings, organic and inorganic fertilisers on wheat yield

Description of Product:

Product	type	application
Pivot Mallee Mix 1	NPKS 8-19-0-3 + Zn 2.0%	80 kg/ha at sowing
Trisert NB	controlled release nitrogen fertiliser (32% N) (w/v)	20L/ha foliar
Trisert NZN	nitrogen/zinc fertiliser (20%N) + Zinc (7%) (w/v)	20L/ha foliar
Natrakelp	liquid seaweed	5L/ha foliar
SC27	live soil microbial solution	4.5L per tonne of seed
Prosperthrive	live soil bacterial and fungal cultures	1kg per tonne of seed
Vitec	fish and kelp products	7L/ha (fish) + 3L (kelp)
Vermacast	worm castings	up to 500kg/ha
RUM#	bacterial worm extract + micronutrients	4.5L/ha soil applied

Revelation Universal Masterpiece

Methods: Ouyen wheat was sown June 3 in a replicated (three) block design. Foliar applications were applied at the 5 leaf stage of the wheat.

Results:

	Application method#	Cost $/ha	Yield t/ha
no fertiliser		0	0.85
MM 1 @ 40	at sowing	17	0.99
MM 1 @ 80	at sowing	35	0.95
Trisert NB + MM1 @ 80	foliar (5 leaf)	40 + 35	1.02
Trisert NZN + MM1 @ 80	foliar (5 leaf)	50 + 35	0.90
Natrakelp + MM1 @ 80	foliar (5 leaf)	30 + 35	0.86
Vitec + MM1 @ 80	foliar (5 leaf)	28 + 35	0.99
SC27 + MM1 @ 80	seed dressing	8 + 35	0.94
SC27 + MM1 @ 40	seed dressing	8 + 17	1.02
Vermacast @ 330 + MM1 @ 26	spread pre sowing	50 + 11	0.86
Vermacast @ 500 + MM1 @ 80	spread pre sowing	75 + 35	0.92
Vermacast @ 500 (no fertiliser)	spread pre sowing	75	0.85
Prosperthrive + MM1 @ 80	seed dressing	na	0.87
RUM + MM1 @ 80	sprayed pre sowing	20 + 35	0.96
Significant Difference:			**P<0.05, LSD=0.12**

Interpretation: if the control yield is taken as Mallee Mix 1 at 80 kg/ha then all of the treatments were not significantly different. In a dry year such as 1997 we did not expect any significant differences in yield due to these products. It is interesting to note that the zero P treatment yielded as well as the Mallee Mix 1 at 80kg/ha. The low rate of P (MM1 at 40kg/ha) yielded the best.

Commercial Practice: Further trial work needs to be undertaken to test these products. It was too dry in 1997 to observe any significant differences in yield between products.

Contacts:

Product	Company contact	Phone
Mallee Mix 1 and MAP	your local Pivot dealer	
Trisert products	Multifert Agencies, Bruce Hudgson	03 9742 5888
Natrakelp	Organic Crop Supplies, Daryn Jones	03 5334 0381
Vermacast	Wormcast Organics. Craig Guy	03 5433 3014
Vitec	Growise, Hugo Disler	1 800 622345
Teprosyn	Phosyn, Leigh Wilson	03 5385 7650
SC27	Creative Land Management, Stuart King	03 5039 6234
Prosperthrive	Spraygro, Mike Bradley	08 8447 7266
RUM	Dawsons-Burns, Stephen Burns	03 5349 5541