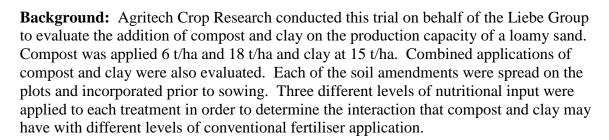
Compost Evaluation

Aim: To evaluate compost and clay for their ability to improve the production capacity of a loamy sand.

Research Officer: Darren Hughes **Company:** Agritech Crop Research

Farmer: Liam Carter

Location: Main Trial Site, West Buntine



2004 was the first year of this trial and the logistics involved with the spreading of treatments resulted in the trial not being sown until 17th June. With the effects of treatments anticipated to be long term it was however decided to proceed with the trial in order to generate data in a shorter period of time. Despite the late sowing the best plots still yielded up to 2.4 t/ha. Delays in sowing are, however, largely reflected in the lack of significant differences evident in terms of crop vigour, plant counts, head counts or yield.

The area will be resown in 2005 to determine the long-term effects of the different soil amendments.

Special thanks to the Liebe Group who conducted the gruelling task of spreading the clay and compost treatments in this trial.

Trial Details:

Plot size and replication	6.6m x 20m, 3 replications				
Soil type	Loamy sand				
Sowing date	17 th June 2004				
Conditions at sowing	Friable soil, moist				
Machinery	Knifepoint, minimum tillage				
Seeding rate	75 kg/ha				
Fertiliser	As per treatment list				
Herbicides and Insecticides	Trifluralin 1 L/ha, Triasulfuron 25 g/ha, Chlorpyrifos 1 L/ha				
Paddock History	2003 Lupins				

Results:



Table 1: Crop Vigour (1-9) 41 DAS, Crop Counts (/m row) 41 DAS, Ryegrass control (% of control) 102 DAS, Head Counts (/m row) 119 DAS and Yield (t/ha) 152 DAS Factorial Analysis.

Part Rated						ор	Crop Counts /m row	Head Counts /m row 119 DA-S	Wheat Yield t/ha 152 DA-S
Rating Data Type Rating Unit Trt-Eval Interval					Vigour 1-9 41 DAS				
							No.		
TAB	LE OF R MEANS								
Replicate 1					7.8		33.4	49.8	2.197
Replicate 2					7.9		32.8	53.6	2.181
Replicate 3							34.0	53.6	2.541
LSD (P=0.05)					NSD		NSD	NSD	0.304
TAB	LE OF A MEANS								
1	Nil Amendment				7.7		33.5	52.0	2.246
2	Compost 6 t/ha						33.4	48.6	2.260
3	Compost 18 t/ha						34.0	53.2	2.478
4	Compost 6 t/ha + Clay 15 t/ha						33.6	50.1	2.243
5	Compost 18 t/ha + Clay 15 t/ha						32.6	57.0	2.263
6	Clay 15 t/ha	8.1		33.2	53.0	2.349			
LSD (P=0.05)					NSD		NSD	NSD	NSD
TAB	LE OF B MEANS								
1	Low Fertiliser Regime	K Gold Urea	50 25	kg/ha kg/ha	7.6	b	32.7	53.7	2.316
2	District Practice Fertiliser Regime	K Gold Urea	100 50	kg/ha kg/ha	7.9	ab	33.8	49.6	2.234
3	High Fertiliser Regime	K Gold Urea	140 100	kg/ha kg/ha	8.1	а	33.7	53.7	2.370
LSD	LSD (P=0.05)					.3	NSD	NSD	NSD

Technically reviewed by: Ashley Bacon