

Organic material banding

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11WMG28

Purpose:	Deep placement of organic matter and impact on lupin establishment
Location:	North Badgingarra
Soil Type:	Light sand over clay
Rotation:	2010 Oats; 2009 Pasture; 2008 Pasture
GSR:	399 mm

BACKGROUND

Some farmers in the West Midlands region have expressed an interest in trialing alternative Fertiliser/ nutrition options. While some alternative nutrition options have been adopted by intensive industries this has not transposed to broadacre farming due to application inefficiencies and economics. This demonstration investigates the application of different rates of chicken manure and compost (Picken) through banding the products to a depth of approximately 200mm.

TRIAL DESIGN

Plot size: 5.4m centers (2 rips) x 20 m

Machinery: Custom compost demo banding machine on 5 May 2011

Repetitions: 3

Crop details: Lupins @ 90kg/ ha on 19 June 2011

Fertilisers: **At seeding:** MAP @ 50kg Ha MAP; Balance Pellets @ 50 kg/ha

Treatments:

Table 1: Alternative product treatments banded at depth of approx 200mm on 5 May 2011

No	Product	Rate (kg/ha)	Application/ machinery
1	Picken	270	banded to 200mm and 100 mm wide
2	Picken	135	banded to 200mm and 100 mm wide
3	Chook Manure	210	banded to 200 mm and 100mm wide
4	Chook Manure	105	Ha banded to 200 mm and 100mm wide
5	Control-NA	NA	NA
6	NA	NA	Rip only

MEASUREMENTS

- No formal measurements were made during the establishment phase of this demonstration during the 2011 growing season.
- Corners are permanently marked for future reference.

OBSERVATIONS & DISCUSSION

- Early observations during the 2011 growing indicated the plots treated with chicken manure were severely impacted (negatively) by the burning associated with the high ammonia content.
- There was some indication of a small increase in crop biomass on Picken treated plots.
- The high volumes of product applied do not flow through the banding unit and further work would need to be undertaken with the engineering design.
- Visual observations on this demonstration are to continue in 2012. At this stage pastures is likely to be established on the site in 2012
- We expect further breakdown of the banded products, especially the treatments using highly volatile chicken manure
- If there are visual indications of biomass differences appearing, appropriate measurements will be made during the 2012 growing season.

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