2006 WA Agribusiness Trial Extension Network

Ravensthorpe Agricultural Initiative Network
This project will focus on soil and crop health and include specifically:

- Fungicide trials, particularly in barley focusing on the blotches and powdery mildew
- Rotation trials, incorporating non-wetting. This will focus on the best rotational crop (lupins, prima gland, cadiz, canola and peas) that will most benefit the following years wheat crop. This will incorporate measurements of establishment, and yield in the first year. Second year results will include establishment, and harvest results of the wheat (protein, yield, screenings etc)
- Evaluation of Wetters for Improved Crop Establishment. A wet 2005 meant that results from this trial were compromised. This will be repeated in 2006 using lupins which are most difficult to establish on the Jerdacuttup sandplain.
- Calcium, Potash and Manganese Yield Response Trial,
- Potash & Copper trials.,
- Investigation of Lime and Potassium on Wheat and the effect on leaf diseases

PlanFarm
This project will be undertaken by Planfarm Pty Ltd and will be delivered through the Northern Agri-Group (NAG) and a group of Planfarm clients in the Eneabba / west Three Springs area.

This project proposes to look at

- management options of the worsening problem of non wetting sands whilst at the same time looking to ‘renovate’ poor topsoils;
- improving the performance of phase pastures by re-inoculating the soil with appropriate inoculum;
- phosphorous and lupins – is phosphorous holding back yield potential in good lupin growing areas?
- strategic nitrogen and sulphur applications as the season unfolds based on yield forecasts made through ‘Yield Prophet’, and
- foliar disease management through timely fungicide applications

Agrarian management
This project aims to further evaluate the concept of increased logistical and nutrient uptake efficiencies when nutrients are banded in the liquid form through an independent assessment of the efficacy of a range of trace element application methods and forms. It poses the question “Can trace element nutrient requirements for cereal crops be supplied in a more efficient manner if a grower is using a liquid fertiliser system”?

Ninghan Farm Focus Group
The project will focus on continuing its evaluation of 10 different seeding systems and their impact on establishment, yield and soil physical properties in low rainfall cropping zones of Western Australia. This research will be
undertaken in conjunction with local agribusiness agronomists from Elders Limited and Landmark who donate advisory services to the group and are now instrumental in extending the findings of the research to the wider community via their own company agronomy networks.

**Farm Focus Consultants**

The main objective of this project in 2006 is:

- To increase the reliability of determining which paddocks (and which parts of paddocks) will respond to an application of potassium.
- To establish the best-bet use of both fertiliser applied fungicides, and foliar applied Triazole fungicides, as a means of controlling leaf diseases, and ultimately increasing yield and quality, in barley.
- To determine the effects of manuring various plant species prior to sowing a cereal crop.

**Synergy Consulting**

This project will work with the Tammin North and Tammin South grower groups to evaluate the effect of stubble level, water rate and droplet size through nozzle selection on ryegrass control in cereals with the pre-emergent herbicide trifluralin.

**Facey Group**

This project will look to address production decline in canola by determining if growing newly released short and mid season canola varieties using different nitrogen packages can provide a profitable gross margin in the Wickepin and surrounding Shires as well as determining the optimal time of sowing of newly released canola varieties by comparing dry/opportunistic sowing with sowing at the district average break of season.

**SilverFox Solutions**

Initial work by Silverfox Solutions and Great Northern Rural with the Casuarinas Farm Improvement Group has indicated that the analysis of historical biomass imagery can identify areas of poor crop performance. There is an indication that this poor performance in the Casuarinas area is often associated with sub soil acidity.

This project seeks to

1. extend the historical biomass analysis across a core group of participants
2. verify the role of acidity via targeted soil sampling and analysis
3. where appropriate program a Variable Rate spreader to deliver lime to identified zones

A core group of participants volunteered to participate at the first meeting. They have submitted paddock records to facilitate the initial analysis which will identify the poor performing areas over the next 3 months.”