Presentation by
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Cost efficiencies in no-till cropping systems
Sponsored By:

Macquarie Agricultural Funds Management
“Dysart”
Tottenham
2000 hectares crop annually
Cost efficiencies in no-till cropping systems
A change of focus

• What was driving the levels of capitalization in machinery seen?
• Why hadn’t overseas farming systems altered to the same degree as in Australia?
• To assess load carrying tractor variants to see if there is the potential rationalize the system further.
• Search for anything else that could fit our system.
Efficient Crops

• Arabidopsis small weed

• Picture – BBSRC
Machinery Around the World

• Timeliness of application
• Labour market
• Crop rotations
• Soil constraints
• Marginal production
• Competition between growers
Timeliness of application

- Adverse climatic conditions.
- Effect on yield potential from missed opportunities is very dramatic.
Labour Market

- Low cost labour market reduces machinery efficiency
Crop Rotations

- Specialist machinery.
- Often dictated to by a small proportion of rotation.
Soil Constraints

- Compaction major issue
Marginal Production

- Areas of Marginal Production operate at a larger scale.
- Risk seems to be a key driver to efficiency.
Competition between Growers

- Expensive form of consumerism.
- Purchases often don’t have an efficiency gain attached to them.
Alternate Tractor designs
Claas Xerion Saddle Trac

Built in Harsewinkel, Germany by Claas.
Weather Derivatives

• Means of risk mitigation.
• Not insurance on production but due to direct correlation between rainfall deficiency and yield may have the same effect.
Recommendations to industry

• Research and Technology are the key to future productivity gains.
• No-till farmers need to engage more with the machinery manufacturing sector to get machinery that is built to our needs.
• The ability to increase economies of scale as new technology becomes available is as important as ever.
• Cost efficiency need not be the major means of risk mitigation available to Australian farmers.
Thank you
Global Focus Group
Meg, Robert, Caitlin and Bree.
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