Making Better Fertiliser Decisions for Cropping Systems in Australia

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Making Better Fertiliser Decisions

• Better fertiliser decisions:
  – Start with and rely on knowledge of the fertility status of cropping paddocks
  – Fertiliser costs comprise a large proportion of total production costs

• 3500–4000 soil test-crop response trials have been undertaken nationally since the 1960’s

• Never previously been collated and studied as a single dataset at the regional, state or national level
Making Better Fertiliser Decisions

• Objectives:
  – Work with national fertiliser industry, grains industry, state agencies and agribusiness to improve current fertiliser recommendations
  – **Collate** available and suitable *N, P, K and S crop response* data for cereal, pulse and oilseed crop species
  – Develop national and regional soil test-crop response calibrations for assessing the N, P, K and S status of soils

• Objectives (cont.):
  – Develop a searchable national database that is **accessible** through an **online repository**
  – Develop **national training resources** in conjunction to provide advisors with common tests and common interpretations
  – Identify knowledge gaps for future R&D
  – Provide **grain growers with certainty and confidence** in using N, P, K and S soil test interpretations
The BFDC Interrogator

- Users can develop unique soil test–crop response calibrations
- Calibrations can be tailored for individual nutrients (e.g. PBI and Colwell P), seasonal conditions and farming practices
- Can view the characteristics of individual trials
- Users can identify knowledge gaps and target future trials

Providing access to the BFDC Interrogator

- Maintaining the integrity of the database is a major priority.
- A training package will be developed to inform advisors and researchers seeking to use the BFDC Interrogator:
  - Understanding how responsiveness data can be used,
  - Developing abilities to use the data held in the database to develop useable knowledge, and
  - Understanding the science and processes used in soil test calibration.
- A train-the-trainer program will be run with project collaborators nationally
An accessible online database

The BFDC Interrogator
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![Diagram of BFDC Interrogator interface]

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Making Better Fertiliser Decisions

• Project products will be released during 2012:
  – A training manual for use by accredited trainers
  – Approved access to the BFDC Interrogator

• A BFDC Newsletter will be distributed throughout the project

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