



Activity Report

Plant Improvement Group

School of Land, Crop and Food Sciences

The University of Queensland

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ICIS 2007





- Database of Australian wheat pedigrees
- Updated 1500 Australian historical wheat pedigrees
- CIMMYT conversion to ICIS – IWIS3
 - Some issues with Australian pedigrees
 - Updates have to be redone
- Database of Australian Barley pedigrees



- Web interface for GWIS
- Public access and password protected
<http://gwis.lafs.uq.edu.au>
- Currently updating
 - server hardware
 - web interface
- New web interface
 - DArT data
 - Pedigree download tool (future)



CAGE – CIMMYT Australian Germplasm Evaluation

- Funded by GRDC
- Promote uptake of CIMMYT germplasm by Australian breeding programs
- Projects include:
 - Germplasm evaluation
 - Synthetics evaluation
 - International Adaptation Trials
 - International Rust Disease Resistance Nursery



CAGE – CIMMYT Australian Germplasm Evaluation

- UQ responsible for databasing project
- Collate data from all other projects and use ICIS for data management
- Spreadsheet templates for users
- Data available on a website
 - EXCEL files
 - Need data download facility on web interface



CAGE – CIMMYT Australian Germplasm Evaluation

- New project with Australia Wheat CRC
- Support further development and deployment of ICIS for the management and web querying of phenotypic, quarantine and high throughput genotypic data, particularly DArT® data, for wheat germplasm, and any other crop



ICIS in Australia

- UQ
- Leslie Research Centre
- CSIRO
- University of Adelaide
- University of Southern Queensland
- University of Sydney
- Murdoch University
- Western Australia Agriculture
- Victorian Institute for Dryland Agriculture





ICIS Mini workshop - Brisbane March 2007

- Participation of
 - UQ, IRRI, Wheat CRC, ACPFG, DArT Pty Ltd
- Topics covered
 - Visualisation tools for genotype and phenotype data.
 - Use of DArT data in selection and breeding
 - Storage of DArT data in ICIS
 - Data warehousing to increase performance on data querying
 - Query Design and User Interface Refinement



Future developments

- Website for CAGE suite of projects (new web interface)
- Develop web and stand alone versions of the ‘Pedigree Download Tool’