

FINAL PROGRAM

INTERNATIONAL PERENNIAL GRAIN CROPS WORKSHOP

Wagga Wagga; 20-24 September 2010; By Invitation

Background:

Perennials in mixed-farming systems have many benefits, including stabilized production, improved ground cover for reduced erosion and improved infiltration, and likely benefits to carbon sequestration and water, nutrient and salt balance. This is especially important in Australia, where fragile soils of low fertility include the threat of rising water tables and salinity. As wheat dominates the arable cropping zone, development of perennial wheat offers the prospect of economic advantages from grazing and grain, together with the system stabilization offered by perenniality. At the same time, the perennial may provide a green bridge for disease, and the genetics may prove complex. Nevertheless, interest is increasing worldwide in developing perennial grain crops. This by-invitation workshop is held to review progress in the Perennial Wheat Feasibility Study conducted by the Cooperative Research Centre for Future Farm Industries (CRC-FFI), in the context of related efforts in the USA and China with perennial wheat, rice and other crops. Numbers are limited to ensure focused discussion.

Program:

Mon 20 Sep: Welcome; Why perennial wheat; Reports on Progress & Next Steps by CRC-FFI
Tue 21 Sep: Why perennial crops; Reports on Progress & Next Steps by other delegates; Dinner
Wed 22 Sep: Field Trip to Cowra/Woodstock; Dinner at Japanese Gardens; Overnight Cowra
Thu 23 Sep: Visit to CSIRO-Plant Industry in Canberra; Return to Wagga Wagga
Fri 24 Sep: Inspect Research Facilities; Discussion; Initial Report by Review Team; Closing

Venue and Accommodation:

The workshop will be held at the Conference Rooms of the Wagga Wagga Agricultural Research Institute and the National Wine and Grape Improvement Centre, on the campus of Charles Sturt University in Wagga Wagga. An overnight Bus Trip will visit field plots at Woodstock and Cowra, followed by CSIRO-Plant Industry in Canberra. Visiting delegates will stay at the Country Comfort Motel in Wagga Wagga and the Countryman Motel in Cowra.

Financial Support for the workshop was generously provided by the following:

Charles Sturt University (CSU)
Cooperative Research Centre for Future Farm Industries (CRC-FFI)
CSIRO-Plant Industry (CSIRO-PI)
EH Graham Centre for Agricultural Innovation (Graham Centre)
Industry and Investment NSW (I&I-NSW)

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Monday 20 September: Venue – WWAI Conference Room

09.00-10.30: Opening Session: Chair – Professor Len Wade

09.00-09.10: Welcome and Opening Remarks by Chairman, Professor Len Wade

09.10-09.20: Introduction to the Workshop Objectives by Project Leader, Dr Phil Larkin

09.20-09.30: Official Opening by CRC-FFI ex Director of Research, Dr Mike Ewing

09.30-10.30: Brief self-introduction by delegates and their interests in perennial grains

10.30-11.00: Morning Tea

11.00-12.30: A Role for Perennial Grain Crops in Australia: Chair – Dr Phil Larkin

11.00-11.30: Introduction to Australian mixed farming systems - Dr Brian Dear

11.30-12.00: Preliminary whole farm economic assessment (Ag Systems) – Dr Mike Ewing

12.00-12.30: Review of prospects for perennial wheat in Australia (CPS) – Dr Lindsay Bell

12.30-13.30: Lunch

13.30-15.15: Perennial Wheat in the Field in Australia: Chair – Dr Ali Bowman

13.30-13.45: Origins of germplasm in Australian trials – Dr Phil Larkin

13.45-14.30: Overview and initial field results – Mr Richard Hayes

14.30-15.00: Argentine selections and quality in Australia – Mr Simon Crane

15.00-15.30: Afternoon Tea

15.30-17.00: Underpinning Studies in Australia: Chair – Dr John McGrath

15.30-16.00: Disease, cytogenetic & molecular marker screening – Dr Phil Larkin

16.00-16.30: Traits for perennial wheat adaptation – Professor Len Wade

16.30-17.00: Next steps with perennial grain crops in Australia – Dr Phil Larkin

Tuesday 21 September: Venue – WWAI Conference Room

09.00-10.30: Perennial Wheat Internationally: Chair – Dr Sergio Moroni

09.00-09.45: Dr Lee DeHaan, The Land Institute, Salina KS, USA

09.45-10.30: Ms Karen Hills, Washington State University, Mt Vernon WA, USA

10.30-11.00: Morning Tea

11.00-12.30: Perennial Grain Crops Internationally: Chair – Dr Gordon Murray

11.00-11.45: Prof Fengyi Hu, Food Crops Research Institute, YAAS Kunming, China

11.45-12.30: Dr David Van Tassel, The Land Institute, Salina KS, USA

12.30-13.30: Lunch

13.30-15.00: Other Perennial Grain Crops Internationally: Chair – Dr Lindsay Bell

13.30-14.15: Dr Rex Oram, CSIRO-PI, Canberra ACT, Australia

14.15-15.00: Discussion: Next challenges in developing perennial grain crops

15.00-15.30: Afternoon Tea

15.30-17.00: Discussion of Matters Arising: Chair – Dr Mike Ewing

15.30-16.30: Next challenges in developing and using perennial grain crops

16.30-17.00: Global alliance and support required in perennial grains

19.00: Conference Dinner: Venue – The Gallery Room, Country Comfort Motel

Wednesday 22 September: Field Trip to Cowra and Woodstock

07.00: Depart Wagga from Country Comfort Motel at 7.00 am SHARP

08.30 Arrive Trungully Hall - inspect perennial grass trial: Chair – Mr David Armitage

09.00 Depart Trungully Hall for Grenfell

10.00: Morning Tea at Grenfell

10.30 Depart Grenfell for Cowra: Chair – Mr David Armitage

11.30 Briefing on perennial wheat experiments at JJ Pridhan Centre by Mr Matt Newell

12.30: Lunch at JJ Prodhan Centre, Cowra ARAS; Chair – Mr Richard Hayes

13.00 Inspect perennial wheat and Elymus nurseries in the field at Cowra ARAS

14:30 Depart for Woodstock; Overview of crop research at CARAS (Ms Jan Edwards)

15.00: Afternoon tea; collect and move to field; Chair – Mr Matt Newell

15.00 Visit perennial wheat field trials at Woodstock

16.30: Return to Cowra; check in to Countryman Motel at 17.00

17.45 Visit Japanese Gardens; Stroll in Gardens; Dinner @ Japanese Gardens Restaurant

Thursday 23 September: Field Trip to CSIRO in Canberra; return to Wagga Wagga

07.00 - Depart Cowra from Countryman Motel at 7.00 am SHARP

10.30 Arrive CSIRO, morning tea; Chair – Dr Mark Norton

11.00 Welcome to CSIRO Plant Industry – Dr Mark Peoples (Deputy Chief)

11.15 Wheat improvement the approach and contribution of crop physiology – Dr John Passioura

11.45 Visit to High Resolution Plant Phenomics Centre – Dr Bob Furbank

12.15 Visit to dehydration tolerance studies in perennial wheat – Dr Mark Norton (I & I NSW)

12.30 Lunch

13.30 Research into long-season, dual-purpose annual wheat – Dr Richard Richards

14.00 Genetics of *Brachypodium distachyon*; implications for perennial wheat - Dr Iain Wilson

14.30 Afternoon tea; Depart for Wagga; check into Country Comfort Motel at 18.00

Friday 24 September: Venue – NWGIC Training Centre

09.00-10.45: Inspection of Key Facilities at Wagga Wagga: Chair – A/Prof Phil Eberbach

09.00-09.30: Rhizolysimeter facility – A/Prof Phil Eberbach (CSU)

09.30-10.00: Rainout shelter facility – Dr David Luckett and Mr Ray Cowley (I&I-NSW)

10.00-10.15: Climate change facility – A/Prof Phil Eberbach (CSU)

10.15-10.45: NaLSH – A/Prof John Kent (CSU)

10.45-11.15: Morning Tea

11.15-12.30: General Discussion: Chair – Dr Phil Larkin

11.15-11.20: Summary of Day 1 – Dr Lee DeHaan

11.20-11.25: Summary of Day 2 – Dr Mark Norton

11.25-11.30: Summary of Field Trip – Mr David Armitage

11.30-12.30: Discussion of Matters Arising and Future Directions

12.30-13.30: Lunch

13.30-15.00: Review and closing: Chair – Prof Len Wade

13.30-14.00: Initial feedback from the review panel

14.00-14.30: Proposed international conference in Salina Kansas in 2011

14.30-15.00: Closing remarks from CRC-FFI, Project Leader, Chairman

LIST OF DELEGATES:

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