

WGIN Management Meeting
27th October 2004
Rothamsted Research, Harpenden

Attendees

Donal O'Sullivan, Thomas Joliffe, John Snape, Keith Edwards, Mike Holdsworth, John McVitte, Neil Paveley, Peter Jack, Peter Shewry, Andy Phillips, Kim Hammond-Kosack, Nick Balaam, Mark Dodds, Bruno Viegas, Rosemary Bayles, John Flintham, John Foulkes, David Marshall, Robert Koebner, Sam Irving, Peter Barraclough

Apologies

Richard Jennaway, Steve Smith, Richard Summers, Peter Werner, Graham Jellis

PHS/HFN Meeting Summary

Mike Holdsworth/John Flintham

JF provided a summary of the scientific content of the meeting. Presentation available – (file name - John Flintham WGIN PHS-HFN 27-10-04)

MH- The fall in Hagberg is caused by inappropriate alpha-amylase expression; two main forms, pre-harvest sprouting and late maturity amylase.

These conditions lead to lower wheat grain quality. This is both a problem to end users who suffer a fall in quality and also to the breeders trying to control it, as not enough basic research has been done to find a realistic solution.

Research is required to understand and characterise the conditions that trigger PHS/PMA, and plant-based screening methods developed that are physiologically relevant and can be used to develop molecular markers.

PMS/PMA is a complex syndrome and will require multiple inputs to solve. A programme needs to be developed with funding from various sources, ie. LINK, BBSRC and Defra.

It was agreed that a draft proposal would be developed and presented at the WGIN Stakeholders Forum.

PS suggests this is a good chance to see how serious funding agencies take crop science.

DM enquired as to timescale for the project. It is agreed things should move as soon as possible, funding timetables allowing.

A separate meeting on this topic was held in the afternoon, involving MH, JF, JS, PS, PJ, AP, Peter Hedden.

Progress Reports

Kim Hammond-Kosack

Presentation available (file name- Kim HK WGIN-RRes 27-10-04)

RK asked if the single copy genes in the diploids are likely to be present in multiple copies in the hexaploids? We would expect only a single copy on each homoeologous chromosome. DNA gel blot experiments are in progress to obtain information on this.

PJ asked if MDR1 (highly resistant to multiple pathogens) and MDR7 (highly susceptible to multiple pathogens) are likely to be parents for future F₁s? Yes they are.

Andy Phillips

Presentation available (File name –Andy Phillips WGIN-RRes 27-10-04)

JS asks why the contamination of the seed is a problem as it is easy to solve with bagging – JIC may have clean samples available anyway. It isn't a problem, just a delay, and will look into obtaining JIC seed.

Robert Koebner

Presentation available (File name- Robert Koebner WGIN-JIC-27-10-04)

DM and PJ suggested that previously developed vocabularies that might be useful in scoring – will look into this.

John Snape

Presentation Available (File name – John Snape WGIN-JIC 27-10-04)

PJ asked what type of markers are used by Triticart? The technology is not “transportable”, but the map will still provide an excellent reference and the technology will probably become more commonly used over time.

MH asks if this is can be achieved by other methods? Probably not, no.

MTA Document –to cover all materials generated within the WGIN project **Neil Paveley**

In summary,

- Lines can't be sold directly without license/royalties
- Lines can be crossed
- No warranties
- Not to be given to 3rd parties without permission
- The origin needs to be acknowledged – a standard acknowledgement has been drawn up for this purpose
- There is no liability

PS suggests the document should be made available through WGIN via Sam.

2004 - 2005 Field Trials

Neil Paveley – 2nd Wheat Syndrome

A two paragraph summary of this project is currently in preparation (NP/RB) and will be placed on the WGIN website under Traits in Nov 2004.

TJ asks if researchers actually believe that the Syndrome exists? (with the exception of Takeall)

JMcV says that a trial is currently being scored.

KHK suggests autumn/winter may be the best time for gathering disease scores for Takeall. Also asks if a score for previous years can be obtained for the field.

Peter Barraclough – NUE

Presentation available on the initial results from the 2003-2004 WGIN trial conducted at Rothamsted and the planned trial for 2004-2005 (File name –Peter Barraclough WGIN-RRes NUE field trials 2003-5).

See John Foulkes' NUE desk study also – AR0704.

Stakeholder Forum

Introductory remarks from PS- Aim to attract a wider audience than last year, including distillers, feed producers, etc.

Should have a session for other wheat LINK projects, that have just been funded or are in the preparation stage, including PJ's Sprouting/HFN project and Roger Sylvester Bradley (ADAS) GreenGrain project.

Also decided to involve presenters to discuss priorities for specific industry/end-user groups. Names suggested include Sue Salmon, Simon Hook and Jim Shine.

Need to include information on future activities including NUE and 2nd wheat syndrome (RB, Bill Hollins).

Any Other Business

Copies of the first year WGIN progress report to Defra (CSG012) can be obtained from Sam Irving.

CIMMYT visit and joint workshop to go ahead in December- John Snape is the co-ordinator.

A new grant will be funded by BBSRC to support coordination of research in small grain cereals. It will provide support for annual workshops covering the costs for 40 UK participants (except travel) and 6 overseas ones. It will also organise exchanges

and have an associate website/coordination activity. The Steering Group would like two additional members, possibly from the breeding and end-user communities. It is anticipated that the first small grains workshop will take place in early March at SCRI.

The next WGIN management meeting will be the 26th January, at Nottingham.

Minutes checked so far by

Sam Irving

Kim Hammond-Kosack

Mike Holdsworth

Peter Barraclough

Bruno Viegas

Peter Shewry