

## 5 minutes with panel member Keith Harris

In July this year, the Grains Research and Development Corporation (GRDC) announced the composition of its new Northern Panel. Among the new panel members is Keith Harris from the Liverpool Plains.

Keith Harris brings more than 30 years' experience in farm management and involvement in farmer organisations to his first term on the northern panel.

Recently retired as the full-time property manager of Romani Pastoral Company's Windy Station, Keith has stayed with Romani as a consultant on their Liverpool Plains properties which regularly crop around 10,000 hectares and run more than 11,000 cattle.

Keith sees the next 20 years in agriculture as "more exciting than anything we've seen before" but also sees more pressure than ever on growers to make sound choices based on solid research and extension. Information from organisations like the GRDC will be critical to help them chart their course.

"Developments in precision agriculture such as the use of variable rate applications of seed and fertiliser within paddocks have the potential to increase productivity and reduce input costs and will become very valuable tools for farmers," Keith said.

Among other issues which Keith said warrant further research and development is the need to look at ways of minimising risk.

"For example in 2010, many wheat and cereal crops looked very good approaching harvest but heavy rain caused many to lodge, resulting in grain loss, downgrading and increased harvesting costs.

"There have been some massive improvements in farming in recent years, particularly with no-till farming systems, and there are more to come but we need to help farmers deal with what's happening beyond the farm gate to keep them viable," he said.

Keith was a director of AgVance Farming, a group established to provide agronomy, research and extension services to summer and winter croppers

on the Liverpool Plains. Through his GRDC role, Keith is looking forward to being involved in a similar consultative manner but across a much larger region. "I've always been interested in R&D - so this role with the GRDC panel is an opportunity for me to put something back into agriculture."

Keith began his corporate farming career in the Lachlan Valley on Jemalong Station before transferring to become property manager of Gundaline Station at Carrathool in 1981 and then to Cowl Cowl Station at Hillston before moving to Milchengowrie at Boggabri in 1991.

Keith has also been heavily involved in various grower committees representing farmers needs and opinions.

"I've never been frightened to stand up for what I believe, in terms of what needs to be said about agriculture. Farmers need to be prepared to work with the wider community to take farming in whatever direction it needs to go."

Whilst managing Milchengowrie Keith also worked with Cotton Australia and the Gunnedah Shire Council to develop community chemical spray guidelines and was heavily involved in the introduction of the initial Cotton Industry Best Management Practices Manual.

In 2004 Keith moved to Windy Station at Quirindi.

## High moisture grain, insect pests and safe storage

The GRDC supported grain storage extension team has recently finished 4 new publications comprising a booklet, two new Fact Sheets & an Insect ID poster:

- Aerating stored grain - Cooling or Drying for quality control
- Handling high moisture grain
- Safety around storage facilities
- Poster of storage Pests
- Stored Grain Pest Identification: The Back Pocket Guide

According to extension team leader Philip Burrill (DEEDI) the new booklet on Aerating Stored Grain contains new information and trial data about early harvest and handling high moisture grain with both aeration drying and hot air drying equipment. Copies are available free from Ground Cover Direct Freephone 1800 11 00 44 or email: [ground-cover-direct@canprint.com.au](mailto:ground-cover-direct@canprint.com.au) The publications can also be downloaded from: [www.storedgrain.com.au](http://www.storedgrain.com.au)

*Further information:*

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**GRDC codes:** DAQ00158 DAQ75

## Glyphosate resistant Johnson grass?

Back in the early 1980's Johnson grass (*Sorghum halepense*) was much more problematic throughout the northern grains region than it is today. The advent of no-tillage farming and regular applications of glyphosate have proven to be very effective tactics to greatly reduce plant numbers. However this will also have applied a fairly high selection pressure for resistance to glyphosate. While we have not as yet found resistant populations in Australia, we should be looking, as resistance has been found in this species overseas.

A paper just published in Pest Management Science 2011 by Australian Herbicide Resistance Initiative (AHRI) researcher Martin Vila-Aiub et al details the mechanisms of glyphosate resistance in four glyphosate resistance *Sorghum halepense* populations from Argentinian Roundup® Ready soybean fields.

In these four resistant populations, the glyphosate resistance is not due to a target site gene mutation. Rather, reduced rates of glyphosate translocation are evident in all four resistant biotypes. This trait of reduced translocation is a commonly identified glyphosate resistance mechanism in other weed species.

As always, any possible resistance mechanism can occur and in addition to reduced glyphosate translocation, one of the resistant *S. halepense* populations has reduced rates of glyphosate leaf uptake.

The bottom line? Be on the lookout and take immediate action to stop seed set if any Johnson grass fails to die after applying a robust rate of glyphosate.

*Further information:*

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## Changes to MRL's in stored grain

Grain Trade Australia recently advised members of changes to MRL's in stored grain – specifically that the Australian Grains Industry Post Harvest Chemical Usage Recommendations and Outturn Tolerances for 2011/2012, has been reviewed and updated with some amendments. The updated document and has been posted on the GTA website [http://www.graintrade.org.au/storage\\_and\\_handling](http://www.graintrade.org.au/storage_and_handling)

The document outlines permitted chemicals for use post-harvest and applicable Maximum Residue Limits (MRL) for grain outturned to the Australian domestic or export markets. The MRL's apply for grain outturned during the 2011/12 season

Changes applicable for 2011/12 include:

1. Removal of the requirement for Unity Value (see definitions for explanation)
2. Update to Taiwan and USA MRLs for various commodities
3. Approval for sulfuryl fluoride use on malting barley
4. Clarification of the use of various capping treatments depending on the commodity
5. Update to domestic carbaryl MRLs for various oilseeds
6. Various minor wording changes for clarity

Industry is encouraged to familiarise themselves with the changes, to ensure Australian grain continues to comply with market requirements for chemical residues.

*Further information:*

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## Want to learn about PA?

Starting January 2012, the University of New England will be offering Australia's only Graduate Certificate in Precision Agriculture.

The course is targeted to practicing advisers who hold a Bachelors Degree in Rural Science or non-graduates who can demonstrate relevant industry experience. It covers current and emerging precision agriculture technologies including; EM38 soil sensors; GNSS survey equipment; ground-based optical plant canopy sensors; airborne optical sensors; livestock tracking technologies; the 'Pastures from Space' program, and both farm-specific and generic geographical information systems.

The course involves four semester-long units. The two core units, 'Precision Agriculture' and 'Introduction to Geographical Information Systems', cover global navigation satellite systems (GNSS) and their application; handling spatial data and the practical use of geographic information systems (GIS); the application of remote sensing to agricultural landscapes; soil, vegetation and yield variability and the sensors used to measure it; livestock tracking and pasture management systems; the economics of precision agriculture; and issues associated with the adoption of new technologies.

It can be studied both on and off campus, and can be completed part-time over one or two years.

The university also has a Facebook page to help you keep abreast of the latest developments in R&D with the Precision Agriculture Research Group: [www.facebook.com/precision.agriculture](http://www.facebook.com/precision.agriculture)

*Further information:*

**[une.edu.au/precisionag](http://une.edu.au/precisionag) or contact  
Dr Mark Trotter ([mtrotter@une.edu.au](mailto:mtrotter@une.edu.au)) or  
Prof David Lamb ([dlamb@une.edu.au](mailto:dlamb@une.edu.au))**

## Dimethoate permit for mungbeans comes with conditions

Pulse Australia Northern Manager Gordon Cumming advises that a new APVMA permit no PER13155 enables legal use of dimethoate on mungbean as per the current label directions – but that there are some conditions that users need to be aware of and comply with.

While registrations for several crops and use patterns for dimethoate have recently been withdrawn, the APVMA has issued a permit 'PER13155' that enables for the use of dimethoate to continue in several broad acre crops.

The permit which applies from Oct 6th 2011 to Oct 5th 2012, allows for the use of dimethoate on pulse and grain legume crops including; mungbean, chickpea, cowpea, navy bean, pigeon pea, fieldpea and soybean. Use is for the currently registered use patterns and rates as they appear on the product label.

However, a new WHP (withholding period) of 14 days for harvest and/or grazing now applies to pulses / grain legume crops, rather than the period as specified on current labels.

A key condition of use under this permit is that;

**All suppliers must at the time of the supply of a product covered by this permit, provide**

**to the person taking responsibility for the supplied product:**

- **a copy of this permit in full setting out the conditions and instructions for use, and**
- **supply product with a copy of the instructions in Attachment 2 of this permit securely affixed to each container of product.**

Some manufacturers are providing hard copies of this permit to resellers for attachment to stock currently held.

Please take the time to familiarise yourself with the details contained within PER13155, follow the link below, paying particular attention to;

- Page 2 'Conditions of Possession, Supply and Use.'
- Page 3 'Attachment 1: Products'
- Page 6 'Crops that are subject to additional restrictions/variations to their existing approved use patterns.'
- o Second from the bottom 'Oilseeds, Pulses (grain legumes).'

<http://permits.apvma.gov.au/PER13155.PDF>

*Further information:*

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## Innovative collaboration means better research

Many grains advisers might not be aware, but there have been some big structural changes happening this year in Queensland with the formation of The Queensland Alliance for Agriculture & Food Innovation (QAAFI).

The new institute was formed through an alliance between the University of Queensland (UQ) and the Queensland Government's Department of Employment, Economic Development and Innovation (DEEDI).

QAAFI incorporates three research centres – Nutrition and Food Sciences, Plant Science, and Animal Science – plus 34 senior DEEDI researchers have transitioned to QAAFI.

According to Professor Graeme Hammer, director of the Centre for Plant Science, "QAAFI represents a \$6.5 million partnership between the Queensland Government and UQ.

"The intent is to better link fundamental research with more problem-driven research that is closer to industry needs.

“The integration will bring new capability and innovation potential to the grain industry,” he said.

“This is a significant collaboration between the state’s two major agricultural and food research and development providers. An important aspect of the collaboration is that QAAFI researchers will remain embedded with research teams at research centres

in DEEDI, providing vital links to the breadth of expertise available at both UQ and DEEDI,” Professor Hammer said.

*Further information:*

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## February/March Northern Grains Research Updates – Add them to your diary!

Dates are set for the February/March 2012 Grains Research Updates in the north. Add these details to your diary! More details soon.

Location	Venue	Date	Target audience*
Coolah	Coolah Sports Club	Monday 27th February 2012	Growers
Coonamble	Coonamble Bowling Club	Tuesday 28th February 2012	Growers
Nyngan	Nyngan RSL & Civic Club	Wednesday 29th February 2012	Growers
Dubbo	Dubbo RSL	Thursday 1st, March 2012	Advisers
Goondiwindi	Goondiwindi Community Centre	Tuesday 6th & Wednesday 7th March, 2012	Advisers
Surat	New Royal Hotel	Thursday 8th, March 2012	Growers

\* Note Growers welcome to attend Updates targeted to advisers and visa versa

*Further information:*

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**GRDC code: ICN00011**

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