

Cotton map planned again for this season

When it comes to managing the needs of cotton growers with those of their neighbouring properties, the issue of spray drift is often at the top of the list.

Industry is working hard with growers to develop practical and workable solutions that will help solve this perennial problem.

Last year saw the launch of the Cotton Field Awareness Map. This industry initiative brought together the resources of Cotton Australia, Cotton Research and Development Corporation, Grains Research and Development Corporation and Nufarm's Spraywise Decisions to try to eliminate the incidence of cotton crop damage caused by spray drift events.

Encompassing country around Moree, Mungindi and Goondiwindi, the region's cotton fields were clearly marked on the map. Available online, printed versions of the maps were also distributed to growers, agronomists and consultants in the region, providing critical information about where cotton was to be grown in the season.

Overall feedback was very positive throughout the community, providing all farmers in the region with a tangible reference that helped with decision making. Growers in other cotton areas have jumped on board, requesting a similar service for their regions this year.

An expanded map program is planned for the 2009/10 season, with a wider coverage area to include more regions. Development is underway in an attempt to make an interactive version of the map available online, which would allow cotton farmers, resellers or their consultants to add cotton fields themselves. More information will be available in the next couple of months.

The key to initiatives such as the Cotton Map are to ensure that some real and lasting solutions are developed to address the needs of all involved.

Further information:

Please contact your local Nufarm territory manager or visit www.nufarm.com.au. You can also sign up for a free seven day trial of Spraywise Decisions online service at www.spraywisedecisions.com.au

GOA is a goer!

The Grain Orana Alliance (GOA) is now up and running in central NSW after the appointment of agronomist Maurie Street as Research and Extension Manager.

Mr Street said "Research already underway in 2009 includes:

- Row-spacing in canola as a contributing factor to managing canola yield reliability
- Evaluation of new pre-emergent herbicides
- In-furrow treatments of fungicide as a component in a stripe rust management program
- Exploration of possible effects of fungicides on crown-rot (in collaboration with NSW DPI)
- Zinc responses with a range of soil and foliar applied fertilisers
- Evaluation of imidacloprid insecticide seed treatments in wheat

"While we are still in the process of working with growers and regional agronomists to define future research priorities, likely areas for future research include:

- The optimum timing of windrowing in canola vs. direct heading
- Aphid thresholds in canola
- Early sowing opportunities for grain sorghum and fallow recharge issues for the next winter crop
- Control options for difficult weeds in fallow – in particular windmill grass, milk thistle and fleabane.

Supported by the GRDC, initial funding for the Grain Orana Alliance will run to March 2011. GOA will draw together grower groups to facilitate the exchange of

information and uptake of cutting edge technologies in central NSW.

GOA is currently managed by a board comprised of industry advisors and farmers who collectively represent all corners of the central NSW grain growing region.

Ms Penny Heuston, GOA board member and GRDC Northern Panel Member said “GOA will work closely with the farming community to identify local research priorities. Having done this, GOA will provide a fast response local research service to address priority issues. With research identified and conducted locally and with the involvement of a cross section of regionally influential growers and advisers, the pathway to communicate research outcomes back to growers is also short and efficient. The aim is to give farmers answers to their questions/problems as fast as is possible.”

Further information:

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Early action on resistance protects farming system

Herbicide resistant weeds are on the increase in northern NSW and growers who take appropriate pre-emptive action will prolong the life of their farming system.

A series of integrated weed management (IWM) workshops to be held at Moree (Sept 1st), Narrabri (Sept 2nd) and Narromine (Sept 3rd) will help growers to better understand the problem of herbicide resistant weeds and changes they and their advisers must implement to profitably manage this issue.

Supported by the Grains Research and Development Corporation (GRDC) and run in collaboration with NSW DPI, the workshops will be led by independent consultant John Cameron and weeds researcher Tony Cook.

John Cameron says that: “while the incidence of herbicide resistant weeds is increasing rapidly, early intervention and the use of some alternate weed management strategies can help drive weed seedbanks down, and prolong the effective life of herbicides.

“Glyphosate is a key herbicide in northern no-till farming systems and is the backbone of modern conservation farming systems. With many growers in no-till systems that often rely exclusively on glyphosate for most weed management, it is critical that steps are taken to ensure that the effective life of glyphosate is protected.

“The farming systems that glyphosate enables, helps growers store more soil water and grow higher yielding crops.

“Importantly, it also keeps stubble cover in place - critical to minimise erosion of precious top-soil.”

Mr Cameron says many growers are simply unaware of how rapid and widespread the herbicide resistance problem has become, with Group A (fop) resistance in key grass weeds now the rule in many areas, rather than the exception.

To date, most resistance has occurred outside of northern NSW, but the experience gained in other regions provides a meaningful and relevant advanced warning of what the future holds for NNSW.

Outside northern NSW, extensive resistance over wide areas now exists to herbicides that were once regarded as slower to develop resistance. Some examples of this include ryegrass resistance to trifluralin, and wild radish resistance to Group B herbicides (SUs and Imis) as well as Group I herbicides such as MCPA and 2,4-D. Closer to home in northern NSW, our farming system has been able to select for glyphosate resistance in a number of grass weeds including annual ryegrass throughout much of the southern Liverpool Plains, and the summer annual grass weeds of liverseed and awnless barnyard grass at several sites. This confirms that when we apply almost any herbicide, we apply a selection pressure that moves the weed population closer to resistance.

We can learn from the mistakes of most growers in northern Western Australian who almost all have Group A and B resistant grass weeds, as well as wild radish that is resistant to Group B sulfonyl ureas and now is also resistant to phenoxy herbicides like 2,4-D. Many populations are also developing resistance to the Group F herbicide diflufenican.

“Nowhere is glyphosate resistance a more immediate issue than in northern NSW, where many moved to a no-till system earlier and where we use fewer alternate strategies for weed management than our southern counterparts. As there are no silver bullets on the horizon to take the role of glyphosate, pre-emptive steps to protect the efficacy of glyphosate are needed, as well as steps to prolong the effective life of other herbicides,” Mr Cameron says.

“Some growers feel they don’t need training in weed management, believing it is solely the domain of their consultants.

“Growers who understand the issue – and how and why change in weed management is needed, are far more likely to work with advisers to implement a long term plan to address the problem.”

Mr Cameron says that grain growers who adopt a range of more diverse weed control strategies can delay the onset of more severe resistance problems. Key strategies include:

- crop rotation programs that allow a more diverse range of weed management tactics to be used;
- soil seed bank management strategies that drive down the seed bank, and
- using multiple weed management tactics to stop survivors from setting seed.

The coming round of workshops will be in Moree (Sept 1st), Narrabri (Sept 2nd) and Narromine (Sept 3rd). More workshops are being planned for coming years and growers are encouraged to register their interest in participating as this will help decide where to run them.

Further information:

Bookings are needed. For details phone John Cameron on (02) 9482 4930 or go to www.icanrural.com.au for more details.

GRDC Project code: ICN00009

New guide to disease and crop canopy management

Management of crop canopy is about optimising crop yield and profit, by balancing crop inputs to match the soil water and climate for that season. Components include in-crop management of nitrogen, and management of crop leaf area in association with soil water reserves, sowing date, rate and cultivar.

According to researcher Nick Poole from New Zealand’s Foundation for Arable Research, key ingredients for success include knowledge of:

- Correct growth stage for input application;
- Soil water status;
- Soil N status (requires deep soil testing); and
- Cultivar disease resistance, planting date and rate.

These variables can be quantified using tools ranging from simple visual indicators to crop models.

A new GRDC publication titled ‘Disease management and crop canopies – what are the interactions?’ has just been released as a reference for both growers and their advisers. This booklet is a follow-up to the publication ‘Cereal growth stages – the link to crop management’.

The new booklet reports on the interaction between cultivar susceptibility and disease management and how the use of nitrogen influences the need for disease control. The booklet covers: growth stages, disease management, canopy management, and interactions between disease and canopy management, as well as the performance of newer fungicides in field trials.

While focused more on Mediterranean style systems, not all applications are applicable in northern farming systems. It is still however an excellent read and the concepts are relevant to us in the north. Highly recommended!

Further information:

Nick Poole poolen@far.org.nz

‘Disease management and crop canopies – what are the interactions?’ is available from Ground Cover Direct; free phone 1800 110 044, ground-cover-direct@canprint.com.au

Add your event details to GRDC Diary Dates on-line

To see what’s on in your region or if you are running a field day, workshop, seminar, farm walk or other event of interest to grain producers or advisers, log on to the GRDC’s website and add your event details to GRDC Diary Dates on-line.

To add new events, go to: <http://www.grdc.com.au/director/events/diarydates/Adddiarydate>

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Update Diary Dates

September 2009	
7-8	7th Australian Controlled Traffic Farming Conference , Canberra, ACT Contact: Sally Brown, 07 3201 2808, http://www.actfa.net
10-11	Precision Agriculture in Australasia , University of New England, Armidale, NSW Contact: David Lamb, 02 6773 3565, Mark Trottoer 02 6773 2465. parg@une.edu.au
13-16	Agricultural Technologies in a Changing Climate , Brisbane, Qld Contact: http://www.seag2009.com/
13-16	14th Australian Barley Technical Symposium (ABTS) , Sunshine Coast, QLD Contact: Kate abts09@yrd.com.au , http://www.abts.com.au/
16	New Advances in Herbicide Use , Narrabri Bowling Club, NSW Contact: Hanwen Wu 02 6938 1602, hanwen.wu@dpi.nsw.gov.au or Stephen Johnson 02 6391 3146, stephen.johnson@dpi.nsw.gov.au , http://www.nswweedsoc.org.au
17	2009 Conservation Agriculture Conference , Dubbo RSL, NSW Theme: Water Use efficiency: "more crop for your drop" Contact: Neville Gould, 0427 452 488, canfa@bigpond.com
30	University of Sydney, Plant Breeding Institute, Field Day , Narrabri, NSW Contact: Bill Wall, 02 6799 2230, p.wall@usyd.edu.au
October 2009	
1	McMaster Research Station Field Day - Cover cropping on sloping country Contact: Chris Guppy 02 6773 3567, cguppy@une.edu.au
20-22	Australian National Field Days , Orange, NSW Contact: http://www.anfd.com.au/
November 2009	
24	GRDC Grower Update, Northern Region - "Business management questions in grain production" , Biloela, Qld Contact: John Cameron (See below)
24-25	Agriculture Outlook Australia 2009 , Sydney NSW Contact: Chris Rath, 02 9021 8824, chris.rath@terrapinn.com , http://www.terrapinn.com/2009/ago/
25	GRDC Grower Update, Northern Region - "Business management questions in grain production" , Capella, NSW Contact: John Cameron (See below)
February 2010	
24	GRDC Adviser Update, Northern Region , Dubbo, NSW Contact: John Cameron (See below)
March 2010	
3-4	GRDC Adviser Update, Northern Region , Goondiwindi, Qld Contact: John Cameron (See below)
May 2010	
1-4	CICILS IPTIC International Pulse convention , Brisbane Qld Contact: Pulse Australia, http://www.pulseaus.com.au
June 2010	
21-24	Australian Summer Grains Conference (ASGC) Gold Coast, QLD Contact: Kate asgc10@yrd.com.au
July 2010	
26-28	Australian Grains Industry Conference , Melbourne, Vic Contact: Rosemary Richards 02 9427 6999
August 2010	
1-6	19th World Congress of Soil Science - Soil solutions for a changing world , Brisbane, Qld Further information: http://www.ccm.com.au/soil/

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