

New home, new feature, for NSW Update

The NSW Southern Advisers Update is moving to a new home.

The Update planning committee believes the shift will provide a more connected and compact atmosphere for presenting technical information.

This in turn will improve networking opportunities between advisers, researchers and the many companies and organisations that need a forum that will allow them to interact with different sectors of the grains industry.

The venue for the two-day Update, on Tuesday and Wednesday, February 15 and 16, will be the Young Services Club with the Tuesday evening dinner at the nearby Young Golf Club.

According to Update coordinator, Matt McCarthy, the move to Young will also improve accommodation options for advisers attending the event.

For more information:
Matt McCarthy, 03 5441 6176, matt@orm.com.au

Locust Alert

With locusts already hatching and the first predicted to be on the wing by early next month, time is running out for landholders to prepare their defences.

The GRDC has co-operated with the Australian Plague Locust Commission (APLC) to prepare a comprehensive eight-page fact sheet containing valuable information including predicted hatching and development schedules by region and the chemicals registered for use against the pests.

The fact sheet has been mailed to grain growers, agronomists, advisers and consultants and is available on the GRDC website at www.grdc.com.au/locust_factsheet

The APLC website - www.daff.gov.au/animal-plant-health/locusts - also contains a wealth of information and links to State-specific websites.

TeeJet's Agricultural Technical Specialist Jake Lanyon sees a need for specific information for advisers about how to set up spray equipment to maximise levels of control and minimise the risk of spray drift.

There is plenty of information about when to target the locusts, he said, but very little specific information on how to set up and operate spray units to achieve maximum control while minimising the risk of spray drift impacting sensitive areas such as rivers, watercourses and water storages, bee hives, feeding areas of native birds, aquaculture facilities, organic farms and occupied dwellings.

Spray applicators will need to undertake a spray drift risk assessment prior to spraying. If this indicates the drift risk is too great to use conventional insecticides, the biological insecticide *Metarhizium* (Green Guard) may be the only option.

Where spray drift risk is high, boom spray operators should use drift reduction nozzles that produce coarse droplets. Application volumes of 80-150L/ha may be needed to maintain efficacy with coarse droplets.

In areas where booms cannot be used, 'boomless' nozzles that produce coarse droplets and an even distribution across the sprayed swath can be used with application volumes of not less than 80L/ha.

Misters, if permitted by the authorities, allow large or inaccessible areas to be sprayed quickly but carry considerable spray drift risks.

Because of registrations and withholding periods, landholders with mixed farming enterprises may need to use two or three different chemicals in different circumstances to comply with label recommendations, Mr Lanyon said.

This highlights the need for applicators to read, understand and comply with the label specifications of each insecticide used and to be prepared to seek advice from the relevant authorities prior to spraying.

For more information:
Jake Lanyon, 03 5223 3020, Jake.Lanyon@teejet.com

November date for inaugural Farm Business Update

The first in a new series of GRDC Adviser Updates, focusing on farm business management, will be held in Bendigo on November 10th.

The Farm Business Management Updates are designed to not only meet the needs of consultants and agronomists, but also those of accountants with rural clients, bankers and farm financial consultants.

Advisers to grain growers are aware of the questions their clients often ask about management decisions that are important to their business. GRDC Southern Panel chair, David Shannon said.

“These issues are invariably complex, sometimes ill defined and often there are no straight forward solutions.

“To assist in this area, GRDC has initiated a series of dedicated Farm Business Management Updates specifically for advisers. The Updates are based on the successful Research Update format with a one day program aimed at tackling some of the common farm business questions often asked by farmers,” David said.

Topics include grain business challenges and trends, machinery decisions and costs, land leasing and share farming, grain marketing, cropping intensity and farming systems and communication/succession planning.

According to program coordinator, Matt McCarthy from ORM Communication, the target audience has been deliberately broadened to include accountants, bankers and farm financial consultants in addition to those who regularly attend Research Updates.

The aim is to provide tools, guidelines and checklists that will assist the adviser integrate what is learnt on the day into their discussions with clients.

Many advisers will receive invitations to this event in early October. Another Farm Business Management Update program will be held in Adelaide in May 2011.

For more information:
Matt McCarthy, 03 5441 6176, matt@orm.com.au

Aphid monitoring key to virus management

Rapid build-up of numbers in aphid colonies should be the trigger for spraying when developing a strategy for preventing virus in pulse crops, according to Jenny Davidson, SARDI Pulse Pathologist.

Initial crop monitoring should be focused on individual plants colonised with large numbers of aphids, Ms Davidson said. These colonies should be monitored closely and frequently and the development of the insects used as a guide to whether or not spraying is required.

“Locating colonies and closely monitoring their development is the best way of determining whether or not to spray.”

Kym Perry, a SARDI entomologist, said many aphid species build up in large numbers on individual plants before producing winged adults that can migrate to other plants.

“If spraying is needed, the ideal timing is before colonies start producing winged insects, which typically occurs when plants become too crowded.”

Surveys suggest about 80 percent of lentil crops in SA and a lesser number in Victoria are infected with cucumber mosaic virus (CMV), Ms Davidson said. This suggests lentil seed is carrying a high infection load but only a small percentage of plants grown from infected seed carry the virus.

“The disease is spread from those relatively few plants, which are widely distributed throughout lentil crops, to other lentil plants, and other crops such as chickpeas, during feeding or probing by winged aphids.”

Beet western yellows virus (BWYV), a serious disease of all pulses that especially damages chickpeas and can kill plants, is also spread by aphids. Unlike CMV, however, BWYV is not seed-borne but over-summers on green vegetation, often in residual aphid populations.

“Given the role of aphids in spreading these viruses, early detection of aphid population increases and timely control before the insects begin to migrate will limit the spread and impact of these diseases.”

If aphid numbers begin to build up rapidly and spraying becomes necessary, growers should consider using a specific aphicide registered for use in the target crop rather than a broad-spectrum insecticide that will kill beneficial insects, Mr Perry said. Beneficial insects include natural enemies that help keep aphid populations in check and bees that play a major role in crop pollination.

For more information:
Jenny Davidson, 08 8303, 9389, jenny.davidson@sa.gov.au,
Kym Perry, 08 8303 9370, kym.perry@sa.gov.au or access the
Aphids and Viruses in Pulse Crops fact sheet at
www.grdc.com.au/factsheet_pulse_aphid_virus. Copies also
available from ground-cover-direct@canprint.com.au

Fungicide challenges for pulse growers

Pulse fungicides, including carbendazim, normally widely used for botrytis control are in demand and growers and their advisers are having to consider alternative products, said Pulse Australia’s Wayne Hawthorne.

Procymidone is specifically used to control botrytis but not all products containing this active are registered for use in all crops.

Registration is also an issue. Only two chlorothalonil products are registered for control of ascochyta and botrytis in chickpea and lentil. Other chlorothalonil products are registered for use in beans but not for chickpea and lentil or both diseases. Grazing restrictions apply for crops sprayed with this chemical.

Alternatives for the control of ascochyta blight in chickpeas and lentils include mancozeb and metiram. However, these act only as protectants and may not be as effective in managing a significant infection.

This means growers and their advisers face a challenge to find a product that will be effective in their particular situation, Mr Hawthorne said.

A table of fungicide alternatives and their attributes titled “Pulse seed treatments and foliar fungicides version 7” is available at www.pulseaus.com.au

For more information:
Wayne Hawthorne, 0429 647 455, pulse.wayne@bigpond.com

Stem rust ‘concern’

The number and spread of stem rust samples and good winter rains in many regions is cause for concern, according to Robert Park.

Professor Park, Director of the Australian Cereal Rust Control Program (ACRCP) team based at the University

of Sydney's Cereal Rust Laboratory, says the conditions suggest growers would be well advised to prepare for fungicide applications to control stem and stripe rust in vulnerable varieties if the diseases build up in their local areas.

With stem rust, the number and spread of early samples received and the pathotypes identified by the laboratory indicate summer survival of the disease in two and possibly three regions.

The number of stem rust samples received early in the growing season is higher this year than at any time in the past decade other than 2006, when dry spring conditions limited development of the disease.

Professor Park believes there is a moderate risk of losses to stem rust in the Mallee this season, due in part to the widespread planting of the susceptible variety Yitpi, and potential for the disease to also cause problems in the Wimmera.

Colin Wellings reports that stripe rust is also active, with samples received from southern NSW in June and the disease now widely distributed from Queensland to South Australia. Most reports of stripe rust have come from central and southern NSW and Victoria, with many growers in those areas monitoring and applying fungicide to varieties known to be vulnerable.

The 'Jackie' and 'WA Yr17' pathotypes are equally represented in stripe rust samples received so far; a pattern different from that of last year, when the 'WA Yr17' pathotype appeared much later in the season. The higher incidence of this pathotype early in the current season suggests varieties susceptible to it will need fungicide support, Dr Wellings said. There will also be benefits from spraying moderately susceptible (MS) and MR-MS varieties if they are attacked early.

Several varieties likely to come under pressure from stripe rust are also vulnerable to yellow leaf spot, and with some fungicides providing control of stripe rust and yellow leaf spot, use of such products to protect the crop canopy may improve the ability of crops to capitalise on anticipated good spring conditions, he said.

Two new strains of wheat leaf rust are also present throughout Victoria, NSW, SA and Tasmania.

For more information:

Robert Park, 02 9351 8806, Robert.park@sydney.edu.au;

Colin Wellings, 02 9351 8826, colin.wellings@sydney.edu.au

Crop topping dos and don'ts

A new GRDC fact sheet clarifies what herbicides can and cannot be used for crop-topping of cereals.

Interest in this technique has grown with the recent increase in awareness of the benefits of late-season and summer weed control but there are few registered herbicide options for this use.

The opening statement of the fact sheet, developed by a GRDC working group specifically to address grower confusion around late-season in-crop herbicide use, addresses the issues head-on:

"The responsibility to avoid herbicide residues in delivered cereal, pulse and oilseed grains sits squarely with grain growers and their advisers."

Rohan Rainbow, GRDC Manager, Crop Protection, stressed the need for advisers to be fully aware of the regulatory and other issues and educate growers about the options that are available.

"Advisers can do their clients and the industry a great service by reinforcing the importance of using only registered products at the recommended rates and doing everything they can to see that message is taken to heart and acted on," Dr Rainbow said.

"Growers are producing food for a market that is increasingly sensitive about chemical residues and environmental issues, so it is vital they use only registered products, pay close attention to withholding periods and specific buyer requirements and take account of environmental issues. Anything else places markets – and grain prices – at risk."

The four-page fact sheet addresses correct use, residues, regulation, food safety and grower responsibility and clearly sets out what products are registered by product and by crop, including canola and pulses.

It also clearly identifies what products cannot be used for late-season in-crop weed control and offers several non-chemical control options.

Copies of the 'Late season herbicides use' fact sheet can be obtained from the 'fact sheets' section of www.grdc.com.au

For more information:

Rohan Rainbow, 02 6166 4500, r.rainbow@grdc.com.au

Basics key to glyphosate success

Using adequate rates on actively-growing weeds will go a long way towards ensuring the on-going effectiveness of glyphosate, according to Andrew Somervaille.

Mr Somervaille, of Jubilee Consulting, believes there is still much to learn about how to maximise the cost-effectiveness of glyphosate in cropping systems, even though the chemical has been in widespread use in Australia for much of the past 30 years.

Optimising application methods to improve effectiveness of glyphosate will also limit the likelihood of weed populations developing resistance to the chemical, he said.

He advocates that the optimisation process begins with the use of appropriate rates, which include optimal efficacy rates when the chemical is being used on high-density weed infestations, larger weeds and weeds in less than ideal growing conditions.

Using a water rate that will ensure adequate coverage using the droplet size (spray quality) required by the conditions and not tank-mixing glyphosate with other herbicides that could reduce glyphosate activity will also optimise results.

If tank-mixing with a product that might reduce the efficacy of the glyphosate is unavoidable, increase the glyphosate rate to compensate for the expected drop in efficacy, he said.

Avoid application when conditions are cold and overcast or in the late afternoon or evening when rain, heavy dew or frost is likely during the night or early the following morning.

During summer, glyphosate should be applied within seven days of a rain event of more than 10mm.

Spraying too early is more cost-effective in the long run than spraying too late, and it is important to look for opportunities to use alternative control methods to control key grass weeds.

For more information:

**Andrew Somerville, Ph (07) 4697 8132,
Andrew.Somerville@bigpond.com**

New project targets nutrient efficiency

Fertiliser price volatility and a good outlook for the current season mean the focus is again on fertilisers and crop nutrition.

Fertiliser costs currently account for up to 30 percent of total variable cropping costs but good nutrition is a key requirement for maximising profitable yields.

A national collaboration comprising the GRDC, the cropping industry, five of Australia's major fertiliser companies and State Departments is aiming to equip growers and their advisers to make better fertiliser management decisions.

The 'Making Better Fertiliser Decisions for Cropping Systems in Australia' (BFDC) project, which has attracted commitments valued at \$2.5 million, is designed to improve nutrient recommendations with the aim of increasing fertiliser use efficiency and potentially reducing production expenses.

The BFDC project, headed by Industry & Investment NSW researcher Dr Simon Speirs, will collate an estimated 4,000 sets of trial data from decades of crop nutrition research across Australia to develop national and regional soil test-crop response calibrations for nitrogen, phosphorus, potassium and sulphur.

This information will be developed into a readily accessible, searchable online database of crop nutrient response trials with an 'interrogation' capability that will allow advisers and researchers to obtain and refine relevant nutrient-related data by crop, region, soil type, season or year.

"This work has the potential to significantly improve the efficiency and profitability of Australian cropping through development of soil test-crop response calibrations and a clear series of soil test criteria," Dr Speirs said.

The BFDC outputs will underpin the assessment and auditing for the Fertcare Accredited Advisor program, ensuring the results are widely adopted. The soil test criteria will strengthen future fertiliser recommendations for grain growers across Australia.

An electronic newsletter containing the latest information about this innovative project can be accessed via the BFDC web site - www.dpi.nsw.gov.au/info/bfdc

For more information:

Simon Speirs, 02 6938 1999, simon.speirs@industry.nsw.gov.au

Fenceline control critical

Growers using glyphosate to control fence-line weeds need to ensure all sprayed weeds are killed, said Chris Preston.

Dr Preston, Associate Professor of Weed Management at the University of Adelaide, said total control is the only way of ensuring fence lines do not become a nursery for glyphosate-resistant weed populations.

"Glyphosate is the herbicide of choice for fence-line weed control, but repeated long-term use of the same herbicide is a recipe for herbicide resistance and there is a disproportionate level of glyphosate resistance in fence-line weed populations," Dr Preston said.

The risk of weeds surviving and resistance developing can be reduced by tank-mixing approved residual herbicides such as simazine, diuron, amitrole or Alliance, a mixture of amitrole and paraquat, he said.

Using an effective herbicide other than glyphosate would also help reduce the risk of weeds developing resistance to glyphosate.

For more information:

Chris Preston, 08 8303 7237, christopher.preston@adelaide.edu.au

**VISIT AUSTRALIA'S GRAINS
RESEARCH WEB PAGE
www.grdc.com.au**



Editor: COMMUNICATIONS

35 Wills Street, Bendigo VIC 3550

Ph: (03) 5441 6176 Email: admin@orm.com.au

Research Writers: Graeme Jennings Ph: (08) 8278 4225

Jon Lamb Ph: (08) 8362 5417

Design and layout - Lightning Designs

DISCLAIMER

The Grains Research and Development Corporation have prepared this publication, on the basis of information available at the time of publication without any independent verification. Neither the Corporation and its editors nor any contributor to this publication represent that the contents of this publication are accurate or complete; nor do we accept any omissions in the contents, however they may arise. Readers who act on the information in this publication do so at their risk. The Corporation and contributors may identify particular types of products. We do not endorse or recommend the products of any manufacturer referred to. Other products may perform as well or better than those specifically referred to.