

February 07	
5-9	Pioneer Technology Show, Toowoomba, Qld Contact: Craig Choice, 0418 717 448
13-14	Grains Research Update for Advisers (Southern Region), Wagga Wagga, NSW Contact: Jon Lamb, 08 8362 5417, jlcom@chariot.net.au
13	Central West Conservation Farming Association 2007 Conservation Agriculture Conference, Wellington, NSW Contact: Neville Gould, 02 6845 1044, cwca@bigpond.com.au
14	Central West Conservation Farming Association/ Stipa Native Grasses Association 2007 Conservation Agriculture Field Day, Wellington, NSW Contact: Neville Gould, 02 6845 1044, cwca@bigpond.com.au
19	Nyngan Grains Research Update, Nyngan RSL, NSW Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
20	Coolah Grains Research Update, Coolah Sporting Club, NSW Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
21-22	Dubbo Grains Research Update, Dubbo RSL, NSW Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
23	CWFS Farm Machinery Field Day, Condobolin Ag Station, NSW Contact: Debbie, 02 6895 1001, debbie.o'neill@dpi.nsw.gov.au
27	Dalby Grains Research Update, Dalby RSL, Qld Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
28 Feb - 1 Mar	Goondiwindi Grains Research Update, Goondiwindi Community Centre, Qld Contact: John Cameron or Erica McKay, 02 9482 4930, updaten@tpg.com.au, http://www.icanrural.com.au
March 07	
6-7	ABARE Outlook 2007 Conference Contact: Yvonne Kingsley, Ph: 02 6272 2265, ykingsley@abare.gov.au
27-28	The 14th Australian Soybean Industry Conference "Success with Soybean", Bundaberg, Qld Contact: Andrew Dougall, 07 4132 5539, andrew.dougall@dpi.qld.gov.au Further information: http://www.australianoilseeds.com/soybeans/australian_soybean_conference_2007
May 07	
24-25	Cotton Trade Show, Moree, NSW Contact: 07 4659 3555, tradeshow@greenmountpress.com.au Further information: http://www.cottontradeshow.com.au/
June 07	
5-7	Elders FarmFest Field days, Toowoomba, Qld Contact: Dianna Lockwood, 02 6762 2399, dianna.lockwood@ruralpress.com
14-16	Primex Agricultural Expo, Casino, NSW Contact: 07 5531 4600, exhibits@bigpond.net.au

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Grains Research
UPDATE
NORTHERN REGION



Double knockdown on fleabane

In recent years flaxleaf fleabane (*Conyza bonariensis*) has become one of the most persistent and difficult to control weeds in northern no-till fallow. With individual plants capable of producing over 100,000 seeds, stopping all weeds from setting seed is a very desirable objective.

However, fleabane has proven to be only moderately susceptible to glyphosate, with only the smallest plants killed with glyphosate alone. On more established plants, even the use of high rates of glyphosate in combination with Surpass®, often leaves some plants to survive and set seed.

To address this problem, QDPI&F researchers Jeff Werth and Steve Walker set up a trial to look at double knock-down strategies. In this trial, glyphosate (or a glyphosate + Surpass mix) was followed 7-21 days later by the bipyridyl herbicide Spray.Seed®.

In commenting on trial results, Jeff Werth said; "Roundup® CT followed by Spray.Seed provided good control - but as the interval between treatments increased, the level of control decreased. The addition of Surpass improved control, but again - the longer interval between sprays reduced control.

"The rate of Spray.Seed used was also a factor – with better results at the higher rate tested. For resistance reasons it will be important to use robust rates of Spray.Seed to minimise the likelihood of resistance developing," said Mr Werth.

This trial suggests that the double knock strategy may have a useful role in controlling fleabane in northern no-till fallows. Further work is planned to look at the impact of even shorter intervals between applications.

If using Spray.Seed in a double knockdown strategy, it is important that users make sure that the sprayer settings are appropriate to the task. Spray.Seed is only poorly translocated and requires excellent droplet coverage to work effectively – requiring much higher levels of droplet coverage than are needed for glyphosate. This would often mean carrier volumes in the range 75-100L/ha, boom speeds of 15kph or less, and usually, droplet sizes that are fine - medium rather than coarse.

FURTHER INFORMATION:
Jeff Werth 07 4639 8851 jeff.werth@dpi.qld.gov.au
This research is jointly funded by GRDC, CRDC, Weeds CRC and Cotton CRC

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Table 1: Double knockdown results on 6-10 leaf (7-8 cm wide) fleabane under good growing conditions

Initial treatment	Follow-up treatment	Days after initial treatment	% Control
Roundup CT 2 L/ha	na		55
Roundup CT 2 L/ha	Spray.Seed 1.6 L/ha	7	96
Roundup CT 2 L/ha	Spray.Seed 1.6 L/ha	14	96
Roundup CT 2 L/ha	Spray.Seed 1.6 L/ha	21	88
Roundup CT 2 L/ha + Surpass 1.5 L/ha	Spray.Seed 1.6 L/ha	7	100
Roundup CT 2 L/ha + Surpass 1.5 L/ha	Spray.Seed 1.6 L/ha	14	100
Roundup CT 2 L/ha + Surpass 1.5 L/ha	Spray.Seed 1.6 L/ha	21	96
Roundup CT 2 L/ha + Surpass 1.5 L/ha	Spray.Seed 2.4 L/ha	7	100
Roundup CT 2 L/ha + Surpass 1.5 L/ha	Spray.Seed 2.4 L/ha	14	100
Roundup CT 2 L/ha + Surpass 1.5 L/ha	Spray.Seed 2.4 L/ha	21	100

Phenoxy resistant brassicas

Much of the immediate problem with herbicide resistant weeds has been focussed on Group A resistant grasses like wild oats and annual ryegrass. There has also been widespread resistance in annual ryegrass to Group B herbicides, with several brassica and other broadleaved weeds also developing widespread resistance. While many other weeds have also developed resistance to a range of herbicide groups, recent developments with phenoxy resistant wild radish in the Northern Agricultural Region of WA has been of significant concern. This experience has highlighted the extent to which we in the eastern states could also be affected with resistance from broadleaved weeds in the future.

With almost all farms in Northern Ag Region of WA having had Group B resistant wild radish for several years, the reliance on other radish control agents like diflufenican, bromoxynil and phenoxy herbicides is critical. In alarming results from a 2003 random survey of weed resistance, WAHRI researchers found that over 60% of wild radish populations had, or were developing, resistance to phenoxy herbicides.

Now in 2006, Geraldton based Department of Agriculture and Food weeds specialist Peter Newman feels that phenoxy resistance is a problem for all growers in the north at some level. "The management response has included using up to double rates of phenoxy to maintain some level of useful kill. There has also been a switch to ester formulations that are more active than amines, as well as greatly increased use of late season, high rate phenoxy sprays to clean up survivors. We now focus very hard on weed seedbank management and try to stop all weeds from setting seed in every crop in every year. However, this represents an increase in cost whether it be through spraying to stop seed set or managing weed seeds at harvest" said Mr Newman.

Phenoxy resistant radish is usually rate responsive, with survivors often being less competitive as a result of being sprayed. The problem is weed seedbank management with spray survivors and subsequent germinations making it very very difficult to stop all weeds from setting seed.

To make matters worse, in the region where lupins are a key crop, resistance to diflufenican is estimated to exist in some 30% of radish populations. There are very few other herbicide options that will reliably control wild radish at a range of growth stages in wheat or lupins.

Key northern NSW agronomists were exposed to these and other weed management issues in a recent workshop for senior advisers in Adelaide. A key response was concern for the potential for resistance in charlock – a common and very competitive weed in crops in north western NSW.

Peter Newman will be one of three speakers at this years Dubbo and Goondiwindi Updates on weed management. Peter will speak about the very significant farming systems impacts that herbicide resistance has led to in his region. Steve Walker will look at weed seedbank dynamics of key northern weeds, while Andrew Storrie will focus on recent developments with herbicide resistance in our region.

FURTHER INFORMATION:

Peter Newman, 08 9956 8563

Andrew Storrie, 02 6763 1174

GRDC Project codes: ICN00003, DAW00123

Changes to Yorker ascochyta recommendations

In 2006, ascochyta blight became established in several Yorker crops in northern NSW.

Growers and agronomists were not detecting the disease early in its development, with the infection being difficult to find when the primary infection was often a single lesion on leaflets or petioles. Often these leaflets had dropped from the plant prior to initial inspection. This gave the pathogen the opportunity to go through another life cycle before the first fungicide was applied.

While the disease resistance rating of Yorker remains at 5 for ascochyta blight, greater attention to detail is recommended for disease management in 2007. The VMP (Variety Management Package) for Yorker has been updated to reflect this change.

- Yorker crops should be sprayed before ascochyta blight is detected.
- For all situations except Central Queensland, apply a fungicide prior to the first rain event after crop emergence, or three weeks after emergence or at the three branch stage of development (whichever occurs first).
- Use 1 kg/ha of a dry formulation product containing 750 g/kg mancozeb or 0.5L/ha of a product containing 720g/L chlorothalonil (registration / permit permitting).

- Monitor the crop 10-14 days after a rain event and if ascochyta is found, apply 2 kg/ha of a dry formulation product containing 750 g/kg mancozeb or 0.5L/ha of a product containing 720g/L chlorothalonil (registration / permit permitting) prior to the next rain event.
- Continue monitoring and spray again if weather and disease levels indicate ascochyta is spreading.

Prior to the use of any crop protection product, ensure that it is currently registered or that a current permit exists for its use in chickpeas. The **current permit for the use of chlorothalonil in chickpeas expires at the end of 2006**. While a renewal application is currently before the APVMA, until this permit is renewed, **chlorothalonil cannot be used** in chickpeas.

Agronomists and growers are encouraged to review the status of the permit on either the APVMA (www.apvma.gov.au) or Pulse Australia (www.pulseaus.com.au) web sites.

FURTHER INFORMATION:

Kevin Moore, 02 6763 1133,

kevin.moore@agric.nsw.gov.au

Gordon Cumming, 0408 923 474,

pulse.gordon@bigpond.com

Chickpea and mungbean accredited agronomy courses

These very successful "Accreditation Courses" targeted at agronomists, advisers and farmers are on again in 2007.

With commodity prices affected by the strong A\$ and tightening gross margins, yield is becoming paramount for sustainability. These courses arm participants with a full understanding of the needs of each crop and the reasons why correct management decisions are so critical to the final outcome.

Courses are scheduled for chickpeas in April and for mungbeans in August/September.

Expressions of interest are sought from all interested agronomists, advisers and growers.

The courses are supported by by GRDC and conducted by Pulse Australia with assistance from Queensland DPI&F, NSW DPI and the Australian Mungbean Association.

FURTHER INFORMATION:

Gordon Cumming, 0408 923 474,

pulse.gordon@bigpond.com

Millet cover crops - how early is too early?

Millet cover crops are being used by a number of Goondiwindi district growers as a means to protect soil and better conserve fallow rain after growing skip row sorghum. One question that has arisen is 'how early can millet be sown?'

Work conducted as part of the Eastern Farming Systems project addressed this issue using a growth cabinet, simulating temperatures typical for Goondiwindi in August / September. Results suggest that growers in Goondiwindi could consider planting White French millet or Foxtail millets after August 25th, but should wait until September before planting sorghum or Japanese millet.

FURTHER INFORMATION:

Lawrence Price, 07 4688 1454

GRDC Project code: DAQ00050

New site profiles sustainable farming in CQ

CQ producers and advisers can now access research information on profitable and sustainable farming at a new website launched by the GRDC supported 'CQ Sustainable Farming Systems project'.

The site has information on research priorities, trials, activities and events, publications, joining a grower group, and profiles of growers and project staff.

Visit: <http://www.cqsfs.org.au/>

New sunflower Crop Note

A new crop note is now available describing Tobacco Streak Virus (TSV) which affected sunflower crops in Central Queensland over the last two years.

To obtain your free copy, contact Anne Shepherd on 07 4983 7420 or e-mail: anne.shepherd@dpi.qld.gov.au.