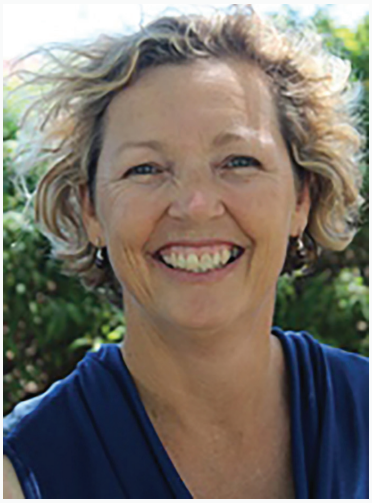
Edition #13: June 2017

Julianne Hill, RCSN western region coordinator



A new round of Regional Cropping Solutions Networks (RCSN) 'open' local forums kicks-off next month and I encourage all WA grain growers to attend. After one of the most difficult starts to a season in recent times, I hope that you can make it to one of these meetings to share a drink, a meal and talk with GRDC.

Each event will feature presentations about wide-ranging issues that affect productivity and profits in the grain receival port zones of Geraldton, Kwinana East, Kwinana West, Albany and Esperance.

Major topics include: nutrient planning; zoning farm/paddock areas for precision agriculture; replacing machinery; frost risk management; soil constraints; and managing weeds.

These have been identified as some of the top priority grains RD&E issues by RCSN groups in each port zone.

All growers can contribute to discussions about how to best address these challenges at the open meetings and feedback will go to the GRDC staff and Western Regional Panel for investment consideration.

The annual RCSN open meetings are an important part of GRDC's engagement with the wider grain growing community in the western region.

They are also a chance for WA grain growers to meet up with GRDC Western Regional Panel members and staff to talk about on-farm issues and hear about how GRDC invests levy payers' money.

Make sure you come along to one of these meetings - online registrations are open on the RCSN website, or call me. I look forward to sharing a plate of bacon and eggs (or a snag in a bun) with you at one of the following venues:

Kwinana West port zone
Monday 17th July 2017 at 9am: Cunderdin
Monday 17th July 2017 at 3pm: Wongan Hills
Tuesday 18th July 2017 at 8am: Dalwallinu

Esperance port zone
Tuesday 25th July 2017 at 3pm: Cascades
Wednesday 26th July 2017 at 7am: Salmon Gums
Thursday 27th July 2017 at 3pm: Hopetoun

Kwinana East port zone
Monday 7th August 2017 at 12 noon: Hyden
Tuesday 8th August 2017 at 9am: Narembeen
Tuesday 8th August 2017 at 3pm: Southern Cross
Wednesday 9th August 2017 at 9am: Nungarin

Albany port zone
Tuesday 15th August 2017 at 9am: Woodanilling
Tuesday 15th August 2017 at 3pm: Boyup Brook

Geraldton port zone
Thursday 24th August 2017 at 9am: Mullewa
Thursday 24th August 2017 at 2pm: Three Springs.

A range of RCSN-initiated RD&E projects, final reports and information about RCSN activities is summarised below, along with some links to timely agronomy and management information.

Further details can also be found on the RCSN's website and through the GRDC's Online Farm Trials (OFT) website.

This season is one of the most challenging seasons and I hope that you are all looking after yourselves. Take care. If you would like to contact me, please do - Julianne Hill: 0447 261 607, email, or Twitter.

News alert - GRDC seeking Western Regional Panel Members

Applications are being sought to join the GRDC's Western Regional Panel.

Terms are initially for two years and involve working closely with the GRDC National Panel, GRDC senior leadership group, GRDC's WA-based staff, RCSN groups, other grain growers and grains industry stakeholders to evaluate RD&E priorities across all investment portfolios.

More information about the application process can be found via this link, or contact Kevin Norman at GRDC on 02 6166 4500 or email panels@grdc.com.au.

The closing date for applications is July 4, 2017 and positions will start on September 1, 2017.

Around the RCSN Port Zones

Kwinana West and Albany port zone RCSNs - Study shines spotlight on silver grass resistance

ConsultAg agronomist Trent Butcher warns that triazine (Group C) resistant silver grass (*Vulpia* spp.) is a looming threat for mixed farming systems in medium and high rainfall parts of WA's western and southern grainbelt.

Silver grass is less competitive than other annual grasses, such as wild oats (*Avena fatua*) or annual ryegrass (*Lolium rigidum*), but at high densities can severely reduce crop yields and compete with pasture species. Its residue can also be allelopathic - reducing crop and pasture establishment and growth.

Last year, as part of a project initiated by the Kwinana West and Albany port zone RCSN groups, Trent sampled 42 paddocks in these regions identified as having silver grass problems.

Results indicated many crop and pasture rotations were heavily reliant on Group C chemistry for control.

Only two samples had resistance to both simazine and metribuzin and these belonged to the same grower who found WA's first resistant sample in 2014.

Trent says in many cases, sampled paddocks had been extensively manipulated in the pasture phase with simazine and atrazine - and simazine was used in the canola and lupin phases.

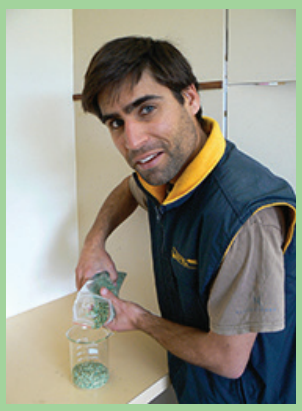
He says this creates high selection pressure on silver grass (and other weeds) and he advises growers to monitor all suspect weeds that survive herbicide application this year - not just the well-known problem species.

Trent recommends using herbicides with alternative modes of action, closely managing rates and timing of spray-top operations in crops and pastures and testing any suspect populations for resistance.

He says diuron, while also a Group C herbicide, is in a different sub-group (of urea) and was found to have efficacy against the triazine resistant population found in the survey.

Further results from this project are available via this link or contact Trent Butcher, ConsultAg, 0417 137 211, 08 9881 5551 tb@consultag.com.au.

CAPTION: Silver grass resistance to triazine (Group C) herbicides is a looming problem in parts of WA's western and southern grainbelt. PHOTO: GRDC



Esperance port zone RCSN - Be precise for on-farm trials

Growers with on-farm trials this season are encouraged to use precision agriculture (PA) tools to help analyse the economic returns from treatments being tested.

These offer a simple and effective way to improve the accuracy of trial design, site selection and assessment of results across a whole farm operation, according to the Esperance-based South East Premium Wheat Growers Association (SEPWA) group.

It has compiled a new manual called 'Calculating return on investment for on-farm trials'.

SEPWA project officer Nigel Metz says this resource will assist growers put a value on practice change for PA adoption.

The manual explains how to design and set up a trial using PA tools and mapping layers such as GPS technology, soil data, electromagnetic induction (EMI) or Gamma radiometric soil surveys, biomass imagery and yield maps.

It explains the importance of using strip trial or trial window configurations, including controls with zero rates of treatment for comparison, and locating the trial with GPS.

Nigel says when it comes to trial analysis, it is important to remember there will be variation from run to run in the same treatment and the differences between treatments need to be greater than the variations to show convincing results.

The SEPWA 'Calculating return on investment for on farm trials' manual can be found via this link or on the RCSN website.

CAPTION: South East Premium Wheat Growers Association project manager Nigel Metz encourages growers with on-farm trials this year to use the group's new manual called 'Calculating return on investment for on farm trials'. *PHOTO: GRDC*

Kwinana East port zone RCSN - Casing out soil acidity and herbicide resistance management

Continuing on the themes of lime use and herbicide resistance, the Kwinana East RCSN group is behind a new GRDC publication highlighting how growers in the northern agricultural region are dealing with these priority RD&E issues that have a big impact on profitability.

The case study booklet 'Investigating options for herbicide resistance management and lime incorporation in Western Australia's northern wheatbelt' was prepared by the Grain Industry Association of Western Australia (GIWA) and can be found via this link.

It features tactics seen by Kwinana East port zone members during a three-day bus tour to visit a series of northern grainbelt properties in 2016. This was designed to glean ideas from proactive growers in that region to potentially use in their local area.

Strategies assessed included: mouldboard ploughing or rotary spading to incorporate lime; using high rates of lime to hasten pH change; and managing herbicide resistance using chaff carts, windrow burning, mouldboard ploughing, chemical fallow, tactical grazing or other innovative methods.

The RCSN case study booklet also contains references to key resources for managing subsoil acidity and herbicide resistance across WA.

CAPTION: One strategy to manage subsoil constraints in WA is lime incorporation with a mouldboard plough. *PHOTO: Evan Collis Photography*

Geraldton port zone RCSN - Weighing up the effects of rotation choices

Farmanco farm management consultants Rob Sands and Ben Curtis ran a series of WA Crop Sequence Calculator Workshops in 2016 that were supported by the RCSN Geraldton RCSN group.

These were well received by participants, who used their own cropping results to benchmark against others in the region and assess the impact of their rotational choices on productivity and cost structures.

Rob also presented results from a Farmanco analysis of the impact of break crops on the average profitability of a rotation over a six year period in the northern grainbelt. The Geraldton port zone RCSN was an instigator of this research.

The analysis, which used data from the 2016 Farmanco Profit Series, has shed new light on farm productivity performance and the significant influence of using the most profitable crop sequence for different soil types.

Rob was also asked to provide a snapshot of the 2016 frost effects. Using data from business reviews carried out in January and February of this year, he showed while there was a 19 per cent increase in wheat grain yields above the five year average from 2011 to 2015, water use efficiency (WUE) was down by 8 per cent.

He says, typically, WUE would be higher with a soft finish and many clients would average 15 kilograms of grain per millimetre of water or more. But, the drop in WUE supports the in-field estimates of an unusually high degree of frost damage (10 to 30 per cent depending on soil type and topography) in the region.

The 2016 barley yields were 12 per cent higher than the five-year average, but WUE was down 2 per cent. This also supports the in-field observations of barley on average being less affected by the frost events than the wheat crops in the north.

Rob says early sowing opportunities last season saw a 64 per cent improvement in canola yields in the northern grainbelt, compared to the previous five year average, and WUE was 40 per cent above the five year average. He says the majority of the profit of the cropping enterprise from the business reviews in 2016 was driven by canola.

CAPTION: Farmanco farm management consultant Rob Sands has been assessing the impact of break crops, such as canola, on the average profitability of a rotation across a six-year period in the northern grainbelt. *PHOTO: GRDC*

Hot topics for June

Tips for weed control this winter

Late sowing of crops in many parts of the grainbelt this year may lead to issues when controlling later-emerging grass weeds, especially annual ryegrass.

Industry experts are advising growers to ensure judicial use of pre and post-emergent herbicides to prolong their efficacy in the face of increasing weed resistance and stacked-resistance to commonly-used products in WA.

Australian Glyphosate Sustainability Working Group (AGSWG) executive officer Andrew Storrie says best practices for post-emergence weed control with herbicides include:

- Applying full rates under the best conditions possible
- Killing any survivors of the first application
- Using herbicide resistance tests as part of ongoing weed management
- Mixing and rotating herbicide modes of action (including on fence lines)
- Using harvest weed seed control (HWSC) tactics later in the year.

Peter Newman, of the Australian Herbicide Resistance Initiative (AHRI) and WeedSmart project, says some growers may need to follow-up post-emergent herbicide applications with a crop-topping (according to label requirements), hay/brown/green manuring or HWSC tactic to stop weed seed set later in the season.

For more information, go to the WeedSmart website or AGSWG website.

CAPTION: Use of post-emergent selective herbicides for annual ryegrass control this season should be targeted and part of an integrated weed management plan. PHOTO: GRDC

Warning to be alert for Russian Wheat aphid

Cereal growers and agronomists are urged to remain vigilant for signs of the Russian wheat aphid (Diuraphis noxia) and report any aphid activity during the 2017 growing season.

This pest has not been detected in WA but was confirmed in South Australia, Victoria, New South Wales in 2016 and been found more recently in Tasmania.

DAFWA GrainGuard coordinator Jeff Russell says Russian wheat aphids can easily be confused with oat and corn aphids.

He says this means it is crucial to report any aphid observations in cereals, volunteer crops or weeds through the free MyPestguide or PestFax reporter apps.

Wheat and barley crop symptoms include streaking, leaf curling and redness and DAFWA has advised that conditions for aphids could be ideal this growing season - with climate models forecasting below average rainfall and warmer daytime temperatures.

Unlike common aphids, Russian wheat aphid can be more damaging, as it injects a toxin into the plant causing potential yield losses of up to 80 per cent.

But interstate experience in 2016 showed that if action is taken promptly, Russian wheat aphid can be effectively controlled.

DAFWA strengthened WA border protocols in 2016 and expanded its surveillance activities to routinely monitor trial and research sites.

CAPTION: Growers and advisers have been asked to report aphid observations to DAFWA's PestFax service to aid surveillance for the exotic pest Russian wheat aphid. *PHOTO: DAFWA*

Keep an eye out for...

To visit the GRDC **Facebook page,** click here.
For a list of all **western events** click here.

For more information about the RCSNs in the Western region, contact
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