

cultivate

FARMING INSIGHTS, REAL RESULTS



Growers urged to protect their investment in the silo

Crop Camp offers grassroots learning to WA students

PodGuard® technology proves itself in the Riverina

Vigilant weed control maximises profit



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Welcome

Working closely with broadacre farmers to get the most out of every opportunity, despite the conditions, is one of the main aims of the team at Bayer. This has been reinforced this year by the indifferent cropping seasons playing out across the country.

As we head towards harvest, which is when some of the planning starts for next year and beyond, this edition of Cultivate takes a look at some of the decision-making around grain protection and early season crop protection strategies.

Farmers have been making greater investments into protecting their crops upfront and Bayer is excited to offer a new solution that will help take crop protection to a new level.

Building on the success of EverGol® Prime, our new broad-spectrum fungicide, EverGol Energy* seed treatment and in-furrow fungicide, is expected to be registered early in 2018 for use in wheat, barley, oats and triticale. EverGol Energy is expected to extend on the proven rhizoctonia, smut and bunt control of EverGol Prime, to also offer systemic activity against pythium, crown rot and white grain disorder.

We value working alongside seed graders to establish the quality of new products and a number of operators across Australia have already given EverGol Energy the thumbs up. Trials and demonstrations on growers' properties are also looking very good, so we will be pleased to deliver another positive innovation to the broadacre industry from next year.

Meanwhile, at the other end of the season, when grain is put into storage, sometimes there is not always the same focus on protection. This is surprising considering the investment made over the life cycle of a crop and the fact it is very economical to do so. Cultivate discusses protection of stored grain with K-Obiol®, whether it may be heading for consumption or into next year's paddocks, and highlights a couple of options for market grain and farmer-retained seed.

Collaborating across industry is another vital initiative for Bayer and this edition highlights our successful long-term relationship with the Mingenew Irwin Group, one of the leading grower groups in Australia. Working with our future generations in agriculture is also important and we have been pleased to be involved with the Crop Camp initiative run for university students in Western Australia by consultancy group, agVivo Events.

The team at Bayer is hoping all farmers can experience a kind finish to the 2017 season.

Tobias Marchand,
Managing Director

COVER: Bayer Commercial Sales Representative in South Australia, Graham Hatcher, and Farm Manager Rob Purvis discussing the changing weed management focus at South Gum Creek.

See story page 5



About Bayer

Bayer is an international life science company offering innovative products that serve the health of humans, plants and animals. With core competencies in the areas of healthcare and agriculture, we take on two of the greatest challenges of the 21st century: The health and the nutrition of the growing population.

Fulfilling the demand for quality, nutritious food for all depends on visionary thinking, courage and creativity. At Bayer, our spirit of innovation and curiosity means we are always looking to develop more advanced solutions to meet these future challenges.

On and off the farm, we work closely with our customers, our business and research partners and the wider community to improve the security of our food and fibre supplies and our overall quality of life. This great tradition is also our commitment to the future – entirely in line with our mission: Science For A Better Life.

We have been investing in Australian agriculture for almost 100 years, supplying leading brands backed by expert advice in the areas of seeds and plant biotechnology, crop protection and non-agricultural pest control. For every \$10 spent on our products, more than \$1 goes towards creating even better products for our customers.

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*An application for registration of EverGol Energy has been made. At the time of publication, this product is not registered.

PodGuard[®] technology proves itself in the Riverina

WITH THE THIRD GENERATION OF THE DAY FAMILY NOW RUNNING THE 'QUAMBY AG' OPERATION IN THE NSW RIVERINA, MUCH HAS CHANGED FROM WHEN THE PROPERTY WAS ESTABLISHED IN 1928.

Based just north of Lockhart, Sandy Day heads the modern day 'Quamby Ag', which is now 100 per cent cropping, consisting mainly of cereals, canola and some pulses.

Sandy says the biggest challenge he faces is dealing with rainfall variation, which on average totals 450mm a year.

"In 2016 it was a challenge because we had so much of it – we're just not used to having 800mm of rainfall in the growing season," he explains.

"Rainfall is generally always the toughest thing to nail down and then we base everything else off that, such as seed varieties, fertiliser and chemical decisions."

The Day's 100 per cent cropping rotation means their other key challenge is controlling weeds effectively.

As an early adopter of Roundup Ready[®] canola, having grown it since it was introduced in NSW, it's obvious Sandy has embraced the search for new technology to meet these challenges.

In both 2015 and 2016 he's hosted trials of IH 51 (RR), a new hybrid canola variety from Bayer with unique PodGuard[®] pod shatter tolerance technology.

"IH 51 (RR) is a typical hybrid-looking plant—it's a big seed, is pretty aggressive out of the ground and gets good ground cover straight away, which are all the traits we were looking for early on in the season," Sandy explains.

"Then it branches out unbelievably, as good if not better than some of the best Roundup Ready varieties we've been growing over the last five or six years.

"IH 51 (RR) has been up there if not, in some instances, a little bit ahead in the trials, plus it's got the other traits in there that we've all been waiting for."

Those 'other traits' Sandy refers to is Bayer's PodGuard technology, which strengthens canola pods, meaning a reduced shatter risk – characteristics he has enthusiastically welcomed.

"We've been naturally selecting for shatter tolerance over many years and now we've got this variety, IH 51 (RR), that it's bred into and it's just giving us options," he says.

"It gives us the flexibility to windrow or direct head very late in the season, and by pushing that boundary right out we can try to get as much yield as possible without it shattering like most other commercial varieties do.

"If we've got other crops, wheat included, we can also harvest what we deem as our most profitable crops first, if they're ripe, and the canola will be ready when we are."

Alongside the extra flexibility the variety brings to his operation, Sandy also believes IH 51 (RR)'s PodGuard technology is helping him capture more grain in the paddock.

"There's losses of up to 15% that industry has found when windrowing other varieties, leaving them for a week or two and coming back with a harvester," he says.

"You can definitely be picking up some of those losses, as well as the obvious cost of running a windrower through the paddock first, which is another pretty big overhead for the business."

After trialling the variety for two seasons, Sandy believes IH 51 (RR) stands up to sclerotinia as well as any other variety grown by Quamby Ag. However, late rains in the 2015 and 2016 seasons prompted Sandy to also apply Prosaro[®] 420 SC foliar fungicide from Bayer to help protect his canola.

"Last year and this year when we got late rains and we had fairly big crops and financially a lot to protect, the Prosaro definitely went on," he says.

"Prosaro seems to, especially in a year like 2016, have paid for itself because crops around that haven't been sprayed for it saw an awful lot of disease that's carried through into seed production."

Looking to the future, Sandy is excited about the benefits PodGuard technology will bring to his operation, and believes IH 51 (RR) is proving its worth.





QUAMBY
AGRICULTURE



Quamby Ag grower, Sandy Day.

“I think IH 51 (RR)’s probably stacking up to be somewhere up the top, if not one of the top varieties, with all the others that have been around for a few years in the Roundup Ready or GM system.”

“I can see us definitely at least putting it on the table against one or two other varieties and seeing how it stacks up with all its other features. IH 51 (RR) is a great starting point and I can’t see why we won’t keep on growing it.”

More generally, Mr Day is enthusiastic about the future of GM canola, observing an increasing market share and a slight close in the pricing gap to non-GM varieties.

“We are finding that we’re now not worried about marketing it towards the end of the season like we were before,” he says.

“We were trying to minimise the amount of GM canola we were growing, but now if we deem a paddock needs GM technology, we’re just happy to grow it because we know we can.

“At the end of the day, there are a number of avenues now available to market GM grain to, so it’s making it easier as we progress year to year.”

When coupling the improving market conditions with a helpful supply of information from Bayer early in the season, Sandy believes he now has the tools to succeed with GM canola.

“I think Bayer is the only one I know of that’s relaying information around seed prices and varieties in November that farmers don’t otherwise get until about February or even later, when seed is already in the retail shops.

“Because a lot of guys are planning in November/December for the following crop, it’s fantastic to have all that information available ready to go for next season—Bayer seems to be on the front foot in the industry,” he says.

New canola varieties topping trials.

There have been some exciting developments in the Bayer canola line-up in recent seasons, including the launch of InVigor® T 4510 for 2017.

Bayer Seeds Agronomic Services Agronomist for eastern Australia, Jeremy White, says InVigor T 4510 has created excitement in the market following strong results in both internal trials and the 2016 National Variety Trials (NVT).

“InVigor T 4510 is an early-mid triazine tolerant hybrid, showing exceptional adaptability across rainfall zones and in both dry and wet seasons,” Jeremy explains.

“It’s demonstrating very good vigour, but the real excitement is around how T 4510 finishes – it was 113% of the trial site mean across all the NVTs where it was grown in 2016, so significantly better than its key competitors.”

InVigor R 5520P, the second PodGuard variety from Bayer, is suited to medium-high rainfall zones, complementing IH 51 RR, which is more suited to medium-low rainfall zones.

Jeremy says the unique pod shatter reduction trait allows growers to keep InVigor R 5520P standing in the paddock for longer before windrowing or direct heading, meaning more time for the variety to add yield.

When it comes time to harvest, whether it’s in windrows or standing, PodGuard also adds yield by minimising harvesting losses through reduced pod shatter. We call that the PodGuard Paddock Advantage.

“It’s exciting to see InVigor R 5520P topping internal trials and NVTs without fully demonstrating the benefits of PodGuard, as varieties are desiccated at a standard timing,” Jeremy explains.

“We are really pleased to be offering more varieties for Australian canola growers, giving them flexibility to make the most of their local conditions over a range of seasons.”



Risk management focus changes approach to weed management

Bayer Commercial Sales Representative in South Australia, Graham Hatcher, and Farm Manager Rob Purvis pictured discussing the changing weed management focus at South Gum Creek.

ROB PURVIS IS INCREASINGLY FOCUSING ON RISK MANAGEMENT WITHIN THE MIXED FARMING ENTERPRISE HE MANAGES IN SOUTH AUSTRALIA AND THIS IS CHANGING HIS APPROACH TO WEED MANAGEMENT.

After adopting the typical reactions to escalating herbicide resistant weeds, including a range of herbicide and weed seed management strategies, Rob is now looking to farm smarter and return to a strong focus on sheep in the program, especially with the improved returns for livestock commodities.

Rob manages the 5000 ha 'South Gum Creek' property near Farrell Flat, east of Clare in the Mid North, cropping 2830 ha to wheat, barley, export oaten hay and for sheep feed, and mating 5500 ewes to Merino and Suffolk sires.

The farm is in a 400mm rainfall zone, but received around 600mm last year, helping to produce some of its best ever crop yields.

In recent years, typical rotations on the mostly heavy red clay soils have included wheat-barley-canola-export hay and wheat-barley-export hay-sheep feed.

"Chemical resistance has been our biggest issue. We were continuously cropping, but we are not doing that anymore. It got to the point where we were not beating weeds. Now with higher numbers of livestock in the rotation, I can drive past a dirty paddock and say: 'that will be sheep feed next year'," Rob said.

"We were managing it over the years, but it was getting worse. We were doing double knocks and we used to burn canola rows.

"We have spraytopped canola and we spraytopped some barley last year. We have also spraytopped wheat, but I don't think this works well and I am also concerned about the overuse of glyphosate.

"We were spending a lot of money and not really getting in front of our weed control.

"We are now looking at the weeds another way and we keep coming back to the sheep. The livestock returns are good and give us another option for our weed management.

"We are trying to take the risk out of things with livestock. With cropping, you need to get bang for your buck the with high cost of machinery, fertilisers and chemicals."

He said export hay, which they produced on 500 ha in 2015, was hard work, but it was the most important tool for weed seed management.

They also now apply one knockdown of Roundup® with a spike of Goal® or Striker and have been using the Group K pre-emergent herbicide, Sakura® 850 WG from Bayer, since it became available.

Comprising the active ingredient, pyroxasulfone, Sakura controls annual ryegrass, barley grass, silver grass, annual phalaris and toad rush and also suppresses wild oats (black oats) and brome grass in wheat (not durum wheat), triticale, chickpeas, field peas, lentils and lupins.

"We use it everywhere with our first wheat crops in the rotation," Rob said.



Rob and Graham take a closer look at the Bourgault Paralink drill.

"We were using Treflan®/Avadex® (Xtra) and Boxer Gold®, but Sakura is working for us right now as a tool to limit our ryegrass. It's about population management and Sakura is now managing it.

"In the second year we could go to hay and then back to wheat with Sakura in year three. We can get the population down quite low and then we are getting great control with Sakura – it could be 90-95% control.

"If we go with wheat again in the second year, we will apply Boxer Gold, and if it's barley, it might be metribuzin.

"Sakura picks up a bit of brome grass as well and if I've done a paddock with Sakura, I don't have to go back into it again, except for 'broadies' (broadleaf weed control). In Boxer Gold paddocks, we have to go back in again with another grass spray, so we have significant extra cost in Boxer Gold paddocks where we are doing that."

Sakura is incorporated by the farm's 16.5 metre (55 foot) Bourgault Paralink seeder featuring a single chute system with knife points and press wheels.

"We quite often start with putting in the sheep feed in mid-April and last year we dry-sowed our wheat with Sakura, then we had rainfall and it worked well," Rob said.

"We have had following rains with the Sakura most of the time and it has worked well – the paddocks have generally come off two years of a break crop, which is export hay or sheep."

Rob coordinated a trial on the property in conjunction with Bayer last season to investigate pre-emergent grass control treatments in wheat.

The replicated plot trial compared Sakura with prosulfocarb and in mixtures with triallate in a high grass weed population section of a paddock that had previously produced two export hay crops.

Rob said they compared the plots visually during the season and while grass numbers in the Sakura treatments were largely non-existent, numbers then increased in the other plots and were high in the untreated plots.

In Focus. The Mingenew Irwin Group.



Bayer National Customer Advisory Manager Rick Horbury (far right) with Customer Advisory Representative for Northern WA, Matt Willis, presenting trial information during a recent Mingenew Irwin Group (MIG) field walk.

THE MINGENEW IRWIN GROUP (MIG) OFFICIALLY FORMED IN 1997 BY LOCAL FARMERS, WHEN TWO GROUPS, THE MINGENEW AND IRWIN VALLEY LAND CONSERVATION DISTRICT COMMITTEES JOINED FORCES.

Celebrating its 20th year, Mingenew Irwin Group focuses on the promotion and development of economically and environmentally sustainable agriculture through research, planning, monitoring and demonstration.

A key value of the group is to maintain profitability and sustainability for family farming enterprises and for the older generation to formally share their knowledge with younger farmers.

The current MIG membership base is almost 200 families, which is about 95% of farm businesses within the Mingenew area.

Members are predominately large broadacre, multi-generational farming families, with 60% from total cropping enterprises and 40% running mixed cropping and livestock enterprises.

MIG members are said to be early adopters and progressive farmers, who are happy to share information with others.

Each year the group runs an extensive trial program, with around 65 trials conducted at a main trial site and a secondary, heavy soil-type trial site.

The group employs six people, which includes three full-time and three part-time employees.

There are four main MIG events annually, including:

- A Trials Review for members is held in February and is a breakdown of trial results from the previous season.
- A Research Update follows the WA Agribusiness Crop Updates, providing research information relevant to the local area and giving farmers access to those undertaking the research.
- A Spring Field Day is held each September and is MIG's flagship event, drawing a crowd of around 250 people to the main trial site, where research is presented and topical in-season issues are discussed.
- A Biennial Members Dinner is a social event for MIG members.

Celebrating its 20th year since inception, the Mingenew Irwin Group (MIG) continues to play an integral role in helping local growers be at the top of their game.

Over the years, MIG has maintained a focus on economically and environmentally sustainable agriculture, assisted by an extensive research and development program to demonstrate best practice techniques to its members.

This has been made possible through the development of relationships within the agricultural industry and the result, according to MIG Acting Chief Executive Officer (CEO) and Research and Development Manager, Debbie Gillam, is that MIG members are early adopters, running successful businesses.

"I think that's because MIG has been here trialling new practices and varieties, so they get to see them first-hand in a localised environment," Debbie said.

“Maintaining key relationships with our researchers and industry groups is really important to us and we have a lot of great sponsors who support and work with our group.

“The links they provide really helps with our direction and our ability to achieve for our members.”

Recognised as one of the leading farmer groups in the country, MIG has delivered significant research outcomes, technologies, techniques and crop varieties to its members through an extensive trial program.

Debbie said there were numerous examples of how members had embraced those outcomes, such as the newer canola varieties currently being grown in the area, adopted by growers after showing potential in previous MIG trials.

She said members had also been progressive in managing herbicide resistance, with resistance rates remaining relatively low in the area.

“I think this is because local growers are actively managing the issue through research and management techniques they have learned about from their involvement with MIG.

“Grain aeration has also been an area of focus for the group, and managing pest resistance and insecticides for more effective grain storage.

“That’s where next year’s crop will come from, so ensuring growers are using best practices to manage grain storage is really important.”

Debbie said one of the group’s most important relationships had been with one of its sponsors, Bayer.

She said Rick Horbury, who was the Bayer Customer Advisory Representative for Northern WA before being elevated to a national role with the company, had been a fantastic asset to MIG and was always generous with his time and offering technical advice, providing valuable assistance to the MIG research and development team.

Bayer also hosted a group of seven MIG growers during a tour to Germany last year, accompanied by Rick.

With Rick now having stepped up as the National Customer Advisory Manager for Bayer, Matt Willis has taken on the role of Customer Advisory Representative for Northern WA.

Debbie said with Matt’s industry experience and enthusiasm, the strong relationship between MIG and Bayer looked set to continue and Matt had already spent considerable time at the trial sites and assisting MIG staff.

Matt brings significant broadacre agronomy and trial experience to the role, having worked in the industry for 12 years.

This year, Bayer is involved in two MIG trials and Matt said both were industry collaborative trials.

He said the industry collaborative approach was the outcome of MIG member feedback, which suggested they often received mixed messages from individual company trials.

“Bayer has been happy to take the lead with the collaborative trials and design the trials,” Matt said.

“The canola systems trial is a collaborative trial with Nufarm looking to compare the level of annual ryegrass control

achieved when using some of the currently available technologies, whether it be hybrid or open-pollinated varieties with differing herbicide tolerance traits.

“This trial is basically showing the advantages of using a Roundup Ready system or using a dual stack system with Roundup Ready and triazines for residual weed control.”

He said the second trial was a collaborative effort with Syngenta examining pre-emergent grass control in wheat, comparing a range of some of the current industry standards.

Although relatively new to the role, Matt has also been providing technical advice to some newer MIG staff members, who had limited experience in trial work.

He said he enjoyed this aspect of the relationship with MIG, especially considering the overall benefit to the industry.

The results of all MIG trials are presented at the group’s annual Spring Field Day, held each September.

It’s one of a number of key events held by the group during the season, which this year also included a ‘Talking Tactics’ function in June to help members put strategies in place to tackle the tough season.

“Unfortunately, it was a very dry start to the season for many of our members,” Debbie said.

“We were prompted to hold the Talking Tactics event this year due to the dry start and it was really well received.

“We actually think it may become a regular MIG event because, in any year, it’s good to discuss strategies of how best to tackle the season ahead.”

Debbie said the group aimed to create a whole-family environment, with certain events during the year aimed to cater for all members of the family rather than one or two members of the farming business.

She said one aspect the group was particularly proud of was the open communication between its members when it came to sharing information and advice.

“Our members talk to each other and are happy to share, with MIG events bringing them together to provide that opportunity.

“If a member is doing something innovative, then it’s not unusual that during one of our field walks, we will take the group and go and visit their farm, so they can explain to everyone what they’re up to, how it works and why it’s beneficial to them.

“The flexibility of the group is certainly one of its strengths.”

MIG’s new CEO, Kathryn Fleay, began her role on August 28 this year.



Seed graders pictured looking over the wheat and barley plants showing the impact of different seed treatments against disease during the Independent Associated Seed Graders annual conference in Margaret River, Western Australia.

Special insight for seed graders at annual conference

MEMBERS OF INDEPENDENT ASSOCIATED SEED GRADERS GOT A FIRST-HAND LOOK AT THE FINAL RESULTS OF THEIR WORK AT THE ASSOCIATION'S ANNUAL CONFERENCE HELD AT MARGARET RIVER IN WESTERN AUSTRALIA IN EARLY SEPTEMBER.

Craig White, Customer Advisory Representative with Bayer, which was a major sponsor of the event, showed the conference the impact of different seed treatments against disease in a live pot trial display featuring wheat and barley plants.

Bayer Broadacre and SeedGrowth Brand Manager Nick Moses said seed graders played a critical role in the effectiveness of seed treatments, but they didn't often get to view the results of products in the field.

"Agronomists and advisers get to see the results, but seed graders don't, so we have wanted to involve them in the process more," Nick said.

"They treat seed and know products might go through their equipment well, but they don't often see where they may have worked well. Having a greater understanding can help them when they are talking with growers.

"Applying treatments to seed is a very critical step in overall disease management programs for a wide range of diseases, including smuts and bunt."

Bayer inoculated a number of diseases into the different pots, including rhizoctonia, crown rot and pythium, and showed the effect of a range of seed treatments against the diseases, when treated wheat and barley seeds were grown in the pots.



Taking a closer inspection of fungicide-treated seed.

The treatments included the company's newest seed treatment fungicide, EverGol Energy, which is expected to be registered early in 2018, and were compared with untreated wheat and barley plants.

Plants treated with EverGol Energy were showing the benefits, similar to other standard seed treatments, especially when compared with the untreated plants.

Meanwhile, Bayer has also been working closely with seed graders in eastern Australia, where paddock inspections of crops grown from seed treated with different disease-controlling seed treatment products have been held.

The new EverGol Energy seed treatment combines the proven disease control of penflufen with the systemic activity of prothioconazole and metalaxyl. It is set to offer control or suppression of a range of diseases in wheat, barley, oats and triticale, including flag smut (seed and soil borne), loose smut, covered smut, common bunt, rhizoctonia, pythium, crown rot, fusarium head blight and white grain disorder. Anticipated registration for in-furrow application will add crown rot and pythium suppression in wheat, triticale, barley and oats.

An application for registration of EverGol Energy has been made. At the time of publication, this product is not registered.



Rob Bell, Bell Pasture Seeds, shows the good response of Rosalind barley to an application of the new seed treatment, EverGol Energy, on the family's property between Boyanup and Capel in Western Australia.

Strong crop response to new seed treatment

YOU KNOW A VISUAL DIFFERENCE WITHIN A CROP IS STRONG WHEN ON AN INSPECTION RUN WITH YOUR AGRONOMIST, THEY ASK YOU TO STOP AND ENQUIRE: **“WHAT HAVE YOU DONE HERE?”**

This was the case for Rob Bell, Bell Pasture Seeds, on the family's property between Boyanup and Capel in Western Australia's South West, where a demonstration of the new EverGol Energy broad spectrum fungicidal seed treatment is being compared alongside EverGol Prime in Rosalind barley.

Rob successfully trialled EverGol Energy, which is expected to be registered early in 2018, through the family business' Noroguard seed treater on barley and oats prior to planting.

EverGol Energy utilises three different fungicide groups (3, 4 and 7), combining the proven disease control of penflufen with the systemic activity of prothioconazole and metalaxyl. It is set to offer control or suppression of a range of diseases in wheat, barley, oats and triticale, including flag smut (seed and soil borne),

loose smut, covered smut, common bunt, rhizoctonia, pythium, crown rot, fusarium head blight and white grain disorder. Anticipated registration for in-furrow application will add crown rot and pythium suppression in wheat, triticale, barley and oats.

Rob said, when you recognise that EverGol Energy builds on the proven performance of penflufen in EverGol Prime, and also contains an active ingredient in the popular Prosaro fungicide, prothioconazole, plus metalaxyl, you know it is going to be promising.

“It's good stuff – it's very impressive,” he said.

“We are in a high rainfall area, receiving 800mm over the growing season, and with warm temperatures as well, we get everything (in terms of crop diseases). We put two fungicides on during the season.

“You can see the physical difference in the plants with EverGol Energy, up against the EverGol Prime. They look stronger, thicker, healthier and they are a darker green.”

Rob said the agronomist, local agVivo consultant Sam Taylor, said if a visual difference was clear, it could represent about a 15% increase in crop production. Rob said he aimed for feed crops of about 4.5 tonnes per hectare.

Servicing a region from Pinjarra down to Manjimup and across to Augusta, as well as up in the Pilbara, Sam said the difference between the EverGol Energy and EverGol Prime in the barley crop was definitely noticeable.

“The three actives in the product are having an effect. If you can see a difference like that, it’s having an impact,” Sam said.

He said it was an interesting site that had been rehabilitated after mining previously.

“It’s grown two to three years of oats and triticale before that. So there’s been lots of cereal and no real rotation, so disease could sneak in.”

“I don’t think we really understand everything about soil diseases. We know a bit about rhizoctonia and it’s been quantified, but with diseases like fusarium and pythium, we don’t understand the prevalence or impact of them.

Meanwhile, EverGol Energy is also being compared with other seed treatments at the Rylington Park property near Boyup

Brook, one of the traditional homes for agricultural research and training in WA.

The new seed treatment was applied to Rosalind barley at 260mL per 100 kilograms of seed and is being compared with other treatments on a range of barley varieties.

Bayer Customer Advisory Representative Craig White said the early signs from EverGol Energy were good considering the dry early start to the season in the area and the slow build up of diseases.

Craig said the new foliar fungicide, Aviator® Xpro®, and Prosaro fungicide were also being applied across the barley varieties at the site and compared with a standard triazole treatment.

Aviator Xpro is currently registered for blackleg and sclerotinia control in canola, as well as ascochyta blight control in chickpeas, with registration in other crops anticipated in time for the 2018 season. Bayer recommends that Aviator Xpro is always used according to the most recently registered label.

The new foliar fungicide contains bixafen, a new member of the Group 7 (SDHI) fungicides, which offers a new mode of action for disease resistance management, as well as the proven performance of prothioconazole.

An application for registration of EverGol Energy has been made. At the time of publication, this product is not registered.



Bayer Customer Advisory Representative Craig White and Ben Creek, AGRilvise Agronomy, pictured measuring out a fungicide trial at the Rylington Park training and research facility near Boyup Brook in Western Australia. Rosalind barley in the trial received the new EverGol Energy seed treatment and is being compared with other treatments on a range of barley varieties. The new foliar fungicide, Aviator Xpro, and Prosaro fungicide have also been applied across the barley varieties and compared with a standard triazole treatment.



New seed treatment benefits 'obvious' in south-east WA trial

GROWERS CHALLENGED BY DISEASES, SUCH AS RHIZOCTONIA AND CROWN ROT, MAY BE IN FOR A REPRIEVE, ALONG WITH A GENERAL BOOST IN CROP HEALTH, IF EARLY RESULTS WITH A NEW SEED TREATMENT PRODUCT NEAR ESPERANCE IN WESTERN AUSTRALIA ARE ANYTHING TO GO BY.

South East Agronomy Services Consultant, Luke Marquis, is conducting a seed treatment trial at Cascade in the region in conjunction with his colleague, Research Manager with South East Agronomy Research, Sarah Belli.

Luke said the results so far had shown stark differences between treated and untreated plots, with a new seed treatment product impacting crop bulk, vigour and colour.

The trial is located on Simon and Jon Stead's property in a paddock with gravel loam over clay soils. It was sown to Mace wheat on May 8, also following Mace wheat last season.

It received a pre-emergent herbicide application of 2 L/ha of paraquat, 2 L/ha of Treflan® and 118 g/ha of Sakura.

The main seed treatment product being tested is EverGol Energy from Bayer, a new broad-spectrum fungicidal seed treatment using penflufen and the systemic activity of prothioconazole and metalaxyl. It is expected to be registered early in 2018.

The trial plots included untreated; no seed treatment with two Aviator Xpro foliar applications at 300 mL/ha; EverGol Energy as a seed treatment at 260 mL/100 kg of seed (with and without Aviator Xpro foliar treatments at 300 mL/ha and/or 500 mL/ha); and EverGol Energy as a seed treatment at 130 mL/100 kg of seed with 200 mL/ha of EverGol Energy banded in-furrow (with and without Aviator Xpro foliar treatments at 300 mL/ha and/or 500 mL/ha).

"Four weeks after sowing, we struggled to see any differences between treatments, but at six to eight weeks after sowing, you could see a distinct increase in biomass compared to the untreated," Luke said.

"There was almost a uniform step-up from untreated to the seed treatment plot at 260 mL/100 kg, then it went up again in biomass, overall health and vigour of the crop to the 130 mL/100 kg treatment plus the 200 mL/ha in-furrow."

Previous trials have also demonstrated EverGol Energy's ability for broad-spectrum control of a range of diseases in wheat, barley, oats and triticale, including flag smut (seed and soil borne), loose smut, covered smut, common bunt, rhizoctonia, pythium, crown rot, fusarium head blight and white grain disorder.



He said this was significant, especially considering the paddock was wheat-on-wheat, which was usually a precursor for yellow spot.

The registration of Aviator Xpro for control of yellow leaf spot in wheat is expected in June 2018. Always use Aviator Xpro according to the most recent registered label.

“Compared with the farmer-sown crop in the paddock, which didn't use any seed treatment, there was a distinct difference to the trial plots,” Luke said.

“I took Jon and Simon Stead down to show them and they were quite impressed at the results – and that's just the visual impact, without showing them any other assessments.

“Often with seed treatment trials, you can struggle to extract much out of them initially, visually-speaking, but that's why this one was quite exciting, because the differences were so obvious.

“The crop bulk, vigour, colour and evenness were all markedly improved in the EverGol Energy-treated plots.”

An application for registration of EverGol Energy has been made. At the time of publication, this product is not registered.

Left: An aerial view of the seed treatment trial at Cascade.

Below: South East Agronomy Research (SEAR) Research Manager Sarah Belli in a seed treatment trial at Cascade in Western Australia being run in conjunction with South East Agronomy Services Consultant Luke Marquis. The new EverGol Energy seed treatment fungicide from Bayer has shown outstanding results in the trial.

It has also shown good suppression of other diseases including rhizoctonia, pythium, fusarium head blight and crown rot. Anticipated registration for in-furrow application will add crown rot and pythium suppression in wheat, triticale, barley and oats.

The recommended rate range for EverGol Energy is 65-260 mL/100 kg of seed.

Luke said rhizoctonia was a common burden for growers in the area and he recognised the potential of EverGol Energy to help manage the fungal disease.

He said he selected the trial site due to its soil type and crop history, knowing it would be more susceptible to rhizoctonia.

“You can certainly see with the evenness of the Evergol Energy-treated plots, that there's been a response to the suppression of rhizoctonia. There was quite a marked difference in the evenness of the crops.

“Especially going wheat-on-wheat and on these soils, the conditions all point towards rhizoctonia, so to not have seen it so far has been very surprising.”

Luke said application of Aviator Xpro, which uses bixafen and prothioconazole as its active ingredients, at very early tillering also prevented yellow spot from developing.



Crop Camp offers grassroots learning to WA students

A GROUP OF WESTERN AUSTRALIAN UNIVERSITY STUDENTS RELISHED THE OPPORTUNITY TO PUT THE BOOKS DOWN AND GET THEIR HANDS DIRTY AT THE RECENT AGVIVO CROP CAMP AT BOYUP BROOK.

According to agVivo Events Coordinator Erin Gorter, Crop Camp is designed to bridge the gap between theory learned at university and the practical, on-farm production side of the industry.

"A lot of these students don't come from rural backgrounds and they haven't been exposed to this sort of practical experience before," Erin said.

Held at Rylington Park, near Boyup Brook in WA's South West, the camp took place over August 12-13, with a total of eight agricultural students attending from Curtin University, the University of WA and the Muresk Institute.

Crop Camp is underpinned by three-year funding provided by the Grain Industry Association of Western Australia (GIWA).

Sponsored by Bayer and CSBP, Erin said the course content was designed to be hands-on and the students were all enthusiastic to be involved, soaking up everything industry speakers had to say.

"We keep it as practical and production focused as possible, because they can learn the theory at uni, but this gives them an introduction to what a grower or agronomist might be looking for in a crop, or from an industry perspective," Erin said.

"We covered grain seed identification to start – and some of the students had never actually held a grain of wheat in their hands.

"So they got a lot out of being able to see and feel the differences between the grains."

Speakers during the course included Grains Research and Development Corporation (GRDC) Regional Cropping Solutions

Network Coordinator Julianne Hill, who took a session on technology in the grains industry, and Stewart Learmonth from the Department of Primary Industries and Regional Development, who took students into the field to discuss pest identification in crops.

"Livestock Consultant Georgia Reid joined Stewart for a session on red-legged earth mites and they sucked up a sample of mites from the crop," Erin said.

"Students were able to see them closely using the hand lenses provided to them by Bayer, before being shown monitoring techniques."

CSBP Area Manager, Dan Glover, gave demonstrations of soil and plant testing, before talking the students through a set of soil test results and how a grower might make decisions based on those results.

The group visited Peter and Carolyn Reid's farm nearby, where they were shown the typical machinery required in a cropping enterprise.

"This was an eye-opener for most students, who had never seen a spreader, a seeding bar, harvester, sprayer or swather," Erin said.

"Exposing them to that baseline knowledge will be so beneficial to them down the track when they're talking to a grower or someone within the industry, as they will be able to follow the conversation and engage."

Bayer Customer Advisory Representative, Craig White, spoke with the group about plant disease and fungal issues, highlighting the importance and relevance of knowing the crop stages and paddock history when assessing the crop for disease.

"This event wouldn't be possible without the industry support we receive and it goes well beyond the financial support, it's the feet on the ground," Erin said.

"When you have such effective communicators like Craig, it makes such a difference. They are the strength in these events."



The Crop Camp students with some of the industry representatives who presented during the course, including Bayer Customer Advisory Representative Craig White (left), and Boyup Brook farmer Peter Reid.

What the students had to say

For Craig, being able to support the next generation entering the agricultural industry is a passion of his, so he said being involved in Crop Camp was a privilege.

"I'm very pleased to support and be part of Crop Camp, as I think it's so important to provide students with a learning opportunity in a practical setting," Craig said.

"We're helping them create good strong networks, which then act as a springboard for them as they progress in their careers.

"We all have to start somewhere."

There were plenty of networking opportunities for the students, including a dinner attended by industry, local farmers and members of the Rylington Park committee.

On the Sunday, the students were taken on a farm tour of Rylington Park, looking at the extensive crop variety trials being done at the site.

Local farmer, Digby Stretch, spoke to the group about finance and business management, explaining the decision-making tools available to growers.

GrainGrowers WA Regional Coordinator, Alan Meldrum, explained the supply chain and grain markets, before the students went back into the field for a chat about crop growth stages and agronomic assessment.

"We ended on a high, with recent Curtin graduate and Crop Camp and Sheep Camp alumni James Macfarlane, Farmanco Livestock Consultant, speaking about his career pathway and the challenges he faced along the way," Erin said.

"Georgia Reid, a recent UWA graduate, also gave her experience and some advice – and the students were hanging off their every word."

With the success of Crop Camp and such positive feedback from students and industry involved, Erin said further Crop Camps were being planned, with details available through the agVivo Events Facebook page.

BENJAMIN TAYLOR, CURTIN UNIVERSITY, SECOND YEAR AGRIBUSINESS DEGREE

"Crop Camp provided a great opportunity to gain some practical experience and interact with industry and farmers.

"I had no hands-on experience until this camp, so I found it all really valuable.

"The content was applicable to what I'm studying at the moment, so to be able to put the practical experience with the course theory was really interesting."

GRACE LAMONT, CURTIN UNIVERSITY, SECOND YEAR AGRIBUSINESS DEGREE

Crop Camp was Grace's second agVivo Events course, after she completed the Sheep Camp earlier in the year. Having enjoyed that and Crop Camp being highly recommended to her, she grabbed the opportunity to attend.

"It was all really helpful and positive, but I particularly enjoyed going out to Peter Reid's farm and learning about all the equipment he uses to put a crop in."

"I had a great discussion with Alan Meldrum about what career options are out there, as I am leaning more towards a career in the research and development side of the industry.

"It was so valuable to get that advice and feedback.

"We have a 12-week work experience component in our course and Crop Camp actually counts towards that, and I made some really good contacts for possible placements for the remainder of my prac.

"I'm just so grateful that different segments of the industry turn up to support such events because, as a student, we do find them really valuable."

Farming for the future in central NSW

As a young farmer, Luke Haling hopes to be growing crops on his property 'Khan Yunis' for the next 40 years.

Based at Armatree, north of Dubbo in New South Wales, Luke knows for that to happen however, careful management is required.



Grower Luke Haling with Bayer's Jon Bennett

"Farming in a drier climate, we need to make every post a winner. If we're not on the top of our game in every aspect of farming then we open ourselves up to lose money, which we can't afford these days with land prices going up and fuel, chemical and commodity prices the way they are," he explains.

With a 3600 hectare cropping program consisting of wheat, barley, chickpeas, faba beans and lupins, Luke underpins his management with a strong focus on sustainability.

"I'm a big believer that everything has to be sustainable, and that you have to use the right tool for the right job.

"For example, chemicals can be a great tool, but they've got to be used correctly. If they're abused, then we're going to dig ourselves into a hole and farming's going to become really, really hard," he says.

Luke believes all farmers need to be diligent about weed resistance, which is becoming a major factor in Australian farming systems, particularly with no-till practices being common place.

"Here on Khan Yunis we've got minimal resistance at the moment, but we do have some problem ryegrass areas that are being addressed with my agronomist," he says.

"We're making up a plan to combat resistance and how we're going to approach it so we don't get fully fledged resistance. Overall we've been pretty lucky because I've been pretty diligent."

Luke's approach to weed control depends on the paddock and the crops grown, but is underpinned by good rotation practices, such as growing a legume after two cereal crops.

"After the legume we put Sakura out on our wheat, and the next year we find very minimal ryegrass, to the extent we haven't even had to apply a grass spray, which has been really good."

Luke has been using Sakura 850 WG, a Group K herbicide from Bayer, since its release in 2012, but with careful management.



Luke Haling at his Armatree property.

“We only use it every three years so the weeds can’t build up resistance to it. We’ve been having great results with Sakura, and I do believe there is a future in the product if we use it right for many years to come,” he says.

A combination of a wet season and a planned holiday meant Luke relied heavily on Sakura in 2016.

“We put in 1500 hectares of wheat and we probably applied Sakura to 1200 of it this year. It was a wet year, I was away and I didn’t want ryegrass to get out of control,” he says.

“It’s been a terrific product to use. This year we nearly had 30 inches of rain in the growing season and we’ve had very minimal ryegrass populations in all our wheat paddocks.

“It’s been a very hard test for any product this year, for Sakura to withstand what we’ve had, it’s got a bit of legs about it I’d say.”

Luke says 2016 was a perfect example of how the cost of Sakura can be easily covered by the in-paddock performance.

“If we didn’t put it out this year and ryegrass got a hold of the wheat, our yields could have dropped by maybe a tonne to a hectare.

“If wheat’s worth \$200 a tonne and you put out \$40 a hectare of Sakura, you’re gaining \$160 a hectare.

“You look at the figures, and while Sakura appears a very expensive tool, if you work it back, you’ll gain on that and it doesn’t seem that expensive.”

Another benefit Luke has found from the excellent control Sakura provides is its ability to reduce his post-emergent spraying program. In 2016, he didn’t need to apply grass sprays on wheat paddocks treated with Sakura.

The performance of Sakura on Khan Yunis means it holds an important position in Luke Haling’s chemical rotation, but it will be used sparingly.

“We won’t overuse it – I believe if people do that they’re going to run themselves into a problem. It’s going to lose its sting,” he says.

“I don’t know how long before we get another chemical like Sakura. It could be another 20 years or could be another 40, so we’ve got to use it in the right way.”

New Bayer broadacre role fills critical need

While Bayer staff are dotted around the countryside on any given day of the week, providing advice and engaging with customers, for broadacre Business Development Manager (BDM) Matt Westgarth, his day is a little different.

The reason is the BDM role is a new one for the broadacre part of the business, having been introduced recently to provide services specifically for corporate farms in eastern Australia.

It's been a long journey to this role for Matt, who was born and bred in Warren, central west NSW, and is currently living in Dubbo.

However, his career actually started on a station at Uralla near Armidale in northern NSW, where he worked for about eight years, including some time as manager.

Matt was always destined for a career in agriculture, with his early career experiences confirming he had made the right choices.

"There's a lot of like-minded people in agriculture that are all striving for the same goals, being profitability and sustainability," he explains.

"The industry has a very relaxed environment most of the time when there is rain about, and I feel like I relate well with people off the land because I have similar ideals."

Eventually Matt moved back to Warren, working for Cotton Grower Services (CGS) as an Agronomist for two years, before taking up the Hillston CGS Branch Manager role, and then transitioning into a more senior regional role with the company a couple of years later.

The opportunity with Bayer then presented itself, as a business development role working on key accounts with growers and also corporate farms.

Bayer has had horticultural BDMs for a number of years, and their success has prompted the company to introduce the position into broadacre, an opportunity which Matt jumped at.

"The BDM position is all about engaging with corporate farms at a head office level as well as at farm level, getting information to their procurement teams, which stems down to their farm managers and key advisors, and speaking with their key advisors about any product and technical updates," he says.

"It's also information transfer at a level which can be communicated across their farms quickly and effectively, to ensure that they're aware of our products that are available in the respective areas of their needs.

"For example, I'm talking to businesses in the north about fungicide requirements in big chickpea areas, while in the south about Sakura where we have ryegrass problems, but need fungicides as well."



Enjoying his new role, Bayer Business Development Manager Matt Westgarth.

“Basically, the BDM role gives Bayer an advantage, ensuring our key products and information gets to growers as quickly as possible to ensure they get best returns on their inputs.”

The emphasis on information transfer is a critical aspect of the BDM role, when you consider the size of many corporate businesses, some of which are in the hundreds of thousands of hectares.

“They’re usually very well run and have to be very structured, meaning farm managers are very strong in logistics, organisation and planning,” he says.

“I like the challenge of working with corporate farms due to their scale and capacity for productivity. There are some pretty amazing operations out there, which when in full production turn out some big numbers, creating a lot of food and fibre.”

While it’s a new role in the broadacre business, Matt is not alone in the company, with another broadacre BDM also starting in Western Australia.

“I cover two regions within Bayer, being northern and eastern broadacre regions, including Queensland, New South Wales and Victoria, so it keeps me out and about,” he says.

“The western BDM and I actually cross paths a lot because some of the organisations we deal with are national, so even though we’re in different parts of the country, we work quite closely to make sure we’ve covered all bases and don’t double up.”

After years spent working in the cotton industry from the farm level through to regional management, Matt is clearly embracing this new opportunity with Bayer, which he believes brings a new offering to the marketplace.

“I’m absolutely excited to be in this new role and getting out and about. Coming from cotton, which is a very involved and concentrated industry, and going into the broadacre industry there’s some significant players, but it’s definitely exciting and something that I’ve been working towards for quite a while,” he says.

“I covered a large client base in my previous roles across a large geographical area, being exposed to a lot of situations across different enterprises, including those who have hugely successful business and others who weren’t so successful.

“It gave me scope to understand what the client’s needs and goals are, which I think is important for me to understand when I’m going to deal with any particular person.”

And when he’s not on the road across eastern Australia, it’s safe to say you’ll still find Matt involved in agriculture at home in Dubbo.

“We’ve got 80 hectares with some cattle and we also grow some fodder crops,” he says.

“Apart from that, it’s all generally busy with family and friends – and I don’t mind going to the rugby either!”

Growers urged to protect their investment in the silo



Australia's winter grain crop is stored at a time when conditions are generally ideal for insect infestations. At 35 degrees Celsius, the lesser grain borer life cycle is completed in four weeks. At 22 degrees Celsius, it is completed in seven weeks.

WITH THE AMOUNT THAT CAN BE SPENT JUST GETTING A GRAIN CROP INTO THE BIN, WHETHER IT IS BEING EARMARKED FOR A TARGET MARKET OR FOR NEXT YEAR'S PLANTING, GROWERS AND GRAIN ACCUMULATORS HAVE BEEN URGED TO ALSO PROTECT THEIR INVESTMENT WHILE IT IS SITTING IN THE SILO.

On-farm grain storage has increased considerably in recent years, enhanced since the deregulation of the export wheat market, while farmer-retained seed also remains significant.

Bayer Product Manager, Rod McLean, said when you add up seed, fertilisers, chemicals and operating costs, growers were probably spending upwards of \$300 per hectare to grow their crops, equating to about \$120 per tonne of grain if they were

achieving a yield of 2.5 t/ha. At a grain price of \$250/t, that's a gross margin of \$130/t or \$325/ha.

Rod said protecting stored grain well against insects could cost just \$2.50-\$2.80/t, or \$6.25-\$7/ha, however growers did not always apply the same approach to storing grain as they did to growing it.

"When you are spending \$120/t to get the grain into the bin, why skimp on another dollar or so, instead of maybe just a few cents, and risk insect infestations," Rod said.

"If an infestation occurs, the grain would have to be shifted into a sealed silo and fumigated, which, with the handling and messing around, could cost \$10/t.

"On the other hand, if it is sent off in the truck and rejected upon inspection, that could cost \$30/t. And when there is plenty of grain about, customers can be choosy."



He said Australia's winter grain crop was stored at a time when conditions were generally ideal for insect infestations.

"Insects can be found in paddocks and if they go into a silo, they will multiply," Rod said.

"In the case of the lesser grain borer, at 35 degrees Celsius, the life cycle is completed in four weeks. At 22 degrees Celsius, it is completed in seven weeks."

He said in relation to fumigation, the industry was concerned with poor practices, especially with phosphine.

"This has been showing up as increasing resistance by lesser grain borer and other beetles to phosphine.

"In other areas of the world, there are already high levels of resistance to this fumigant. It would be a big problem for the Australian grain industry if the same levels were to eventuate here.

"The main focus is to ensure phosphine is used in gas-tight, sealed silos, so minimum levels of the gas can be maintained over the required periods, which are measured in days – not hours.

"Bombing with phosphine tablets just to kill adult insects as the grain is due to be sold is not good if the industry is going to have this as an effective product for the long term."

For market grain, Bayer recommends the use of its liquid grain protectant, K-Obiol® EC, in combination with an organophosphate product like fenitrothion or chlorpyrifos-methyl.

"Fenitrothion and chlorpyrifos-methyl are very cost-effective at around 50 cents/tonne and 80 c/t respectively, but these products on their own have problems with lesser grain borer resistance and other insect resistance," Rod said.

"K-Obiol, compared with other similar treatments, is more cost-effective at about \$2/t, so why take a risk saving this when you could end up having to retreat grain or have a truck load rejected."

In combination, K-Obiol controls the lesser grain borer, while the organophosphate product better targets rice and granary weevils, which have shown some tolerance of K-Obiol.

"Used in combination, fenitrothion and K-Obiol provide the best protection against insect attack," Rod said.

Containing deltamethrin, K-Obiol can be used on all, uninfested cereal grains, including malting barley, sorghum, rice and maize, in sealed and unsealed storage, and it is active for up to nine months.

Rod said with the combination using two insecticide modes of action, resistance was less likely to develop.

"We also recommend rotating K-Obiol with a Group 5 (spinosyn) insecticide on an annual basis to further reduce the likelihood of resistance."

It is available to approved bulk handlers only in Western Australia. In other States, K-Obiol users complete a simple online training program prior to use of the product and retail distributors are also audited as part of the product stewardship program.

"The training helps to ensure there is never the risk of over-treating and exceeding acceptable grain residue levels," Rod said.

He said another good practice to ensure grain was sold in the best possible condition was to clean out silos, headers, augers and grain handling equipment, removing pockets of grain where insects could be harboured.

For farmer-retained cereal seed, Bayer's popular and economical seed treatment insecticide, Gaucho® 600, provides protection against a range of stored grain insect pests.

Containing 600 g/L of imidacloprid, it protects against granary weevil, Indian meal moth, lesser grain borer, rice weevil, rust-red flour beetle, sawtoothed grain beetle and tropical warehouse moth.

Plus growers also get the benefit of effective protection from damage caused by a range of aphids, and barley yellow dwarf virus by preventing the spread of aphids during early crop establishment.

Bayer Broadacre and SeedGrowth Brand Manager, Nick Moses, said an application of Gaucho 600 at 120 mL/100 kg of seed would provide good protection against stored grain insect pests, while a rate of 120-240 mL/100 kg of seed would provide control of aphids early the next season in cereal crops.

Vigilant weed control maximises profit



BATTLING ANNUAL RYEGRASS IS AN EVER-EVOLVING PROCESS FOR WESTERN AUSTRALIAN FARMER MICK CALLAGHAN.

Herbicides that were once effective in controlling weeds on the family's Marchagee farm for Mick's parents, Molly and Bevan, have become futile over time due to resistance.

It's meant Mick has had to become more vigilant when it comes to rotating chemicals and fighting resistance, as effective weed control is essential to maximising profit.

The property is farmed by Mick and his wife, Julia, as a total cropping enterprise using a minimum tillage system on predominately sandy soils.

The farm is situated near Coorow and receives an annual average rainfall of 350 mm, including 250-280 mm during the growing season.

Last year they cropped 7300 hectares and the program typically comprises 40% wheat, 20% canola, 20% barley and 20% lupins.

Mick has been farming full-time since 1992 after a near 10-year stint working fly-in, fly-out at Argyle diamond mine and working on the farm during his rostered weeks off.

He said wild radish and annual ryegrass remained their biggest weed burdens, followed by brome grass, and over the years resistance to traditionally effective chemicals had become extremely obvious.

"As little as 10 years ago, we were using clethodim at what was considered a high rate of 200 mL/ha and now, 1 L/ha of the same product has no effect," Mick said.

"We've got to do anything we can to protect new chemicals that effectively control weeds like ryegrass and radish."

Mick takes a keen interest in any trial work on resistance and new herbicides, particularly those done by independent farm groups such as the Liebe Group and West Midlands Group.

It was a trial that first introduced Mick to the pre-emergent herbicide, Sakura 850 WG from Bayer, when he visited a small trial on a privately-owned farm north of Coorow facilitated by the company's Customer Advisory Manager, Rick Horbury.

The same herbicide was also recommended by Mick's agronomist, Craig Topham from Agrarian Management in Geraldton.

"I went and had a look and spoke to the farmer who ran the trial. It was good to hear his feedback and he swore by it and that it effectively controlled annual ryegrass," Mick said.

"I'm someone that has to see a product in action before I believe it works, rather than just reading literature, which is why I like to look at independent trials.

"The main thing that stood out with Sakura was its flexibility.

"Alternative herbicides are applied pre-seeding and then they become active and attack germinating ryegrass, but they would stick to stubble and really need that soil contact.

"Sakura can wash off the straw and into the soil, which is a big advantage."

Containing the active ingredient, pyroxasulfone, Sakura controls annual ryegrass, barley grass, silver grass, annual phalaris and toad rush, and also suppresses wild oats (black oats) and brome grass in wheat (not durum wheat), triticale, chickpeas, field peas, lentils and lupins.

Mick said they never waited for rain to begin seeding, although last year (2016) was their earliest start on record, kicking off on March 28 with plenty of soil moisture.

He said generally they would start around April 10, season dependent.

They began using Sakura when it became commercially available in 2012 and have been achieving a control rate of about 80% of annual ryegrass and brome grass in wheat crops.

"Sakura has its place here and seems to be working," he said.

"We use it to cover 1000 ha each year, which is one third of our wheat program and that is generally due to the cost – we would use more if we could.

"But it allows us flexibility during seeding and what value do you put on that?"

"We'll ideally incorporate Sakura within two days of seeding, but we have the ability to spray it out and seed within three days, rather than four to six hours with trifluralin.

"It can wash off straw and into the soil, so I'm achieving good value with the product. Even though it's a high-priced product, you should get very good weed control.

"If I used trifluralin in a similar area, I may lose up to 50% if it stuck to the straw, and then a further 20-30% through volatilisation."

This year, in conjunction with his agronomist, Mick said they would start to do some mixes with other chemicals, such as trifluralin, to avoid total reliance on Sakura.

He said they used other Integrated Weed Management (IWM) practices such as windrow burning to help control weed seed numbers, as outlined on the Diversity Can't Wait website.

"Weed control is our main priority.

"If you can control weeds eight years out of 10, you can make money farming in this area.

"I just appreciate that companies are out there trying to work on the resistance issue and we need more chemicals like Sakura, so I can maintain minimum tillage practices."

According to Landmark Coorow Agronomist Andy Regan, Mick's story is not an isolated one, with Sakura being one of the most popular pre-emergent herbicides in the region.

Andy said he generally recommended to clients to use Sakura in a rotation with canola.

"I recommend using Sakura following a canola rotation, so you get a really clean crop during the canola phase and then go in with Sakura to get a really clean wheat crop," Andy said.

"It's such an effective product, but also growers don't have that pressure of a small window of incorporation."

Andy said a grass control trial last year at four sites across WA, including Coorow, highlighted just how valuable Sakura could be, citing its impact on crop yield and the extended weed control achieved.

The trial, run by Bayer's Rick Horbury, compared the performance of a range of different pre-emergent grass control options, including prosulfocarb, trifluralin, Boxer Gold, Sakura and Avadex® Xtra.

Different tank mixes of some of the products were used and applications were performed at the lowest and highest label rates.

"Sakura achieved 90% control and yielded an average 2.14 t/ha, achieving an average \$73.48/ha return on investment," Andy said.

"The return on investment is huge by using a premium product like Sakura, so while it can seem expensive upfront, it's well worth the cost when it's making such a big difference to the bottom line."



ABOVE:

Andy, Ian and Mick take a closer look at grain quality at the completion of the 2016 harvest on the Callaghan's Marchagee property.

OPPOSITE:

Bayer Commercial Sales Representative in Western Australia, Ian Cook, Marchagee grower Mick Callaghan and Landmark Coorow Agronomist Andy Regan pictured discussing some of the latest developments in weed control in front of one of Mike's Miller Nitro self-propelled sprayers.



Ben Creek, AGRivise Agronomy, and Bayer Customer Advisory Representative Craig White inspect the early growth of the new triazine-tolerant (TT) hybrid canola variety, InVigor T 4510, at the Rylington Park training and research facility near Boyup Brook in Western Australia.

New hybrid TT canola looking promising

THE NEW TRIAZINE-TOLERANT (TT) HYBRID CANOLA VARIETY, INVIGOR T 4510, IS LOOKING THE GOODS AT THE RYLINGTON PARK RESEARCH PROPERTY NEAR BOYUP BROOK IN WESTERN AUSTRALIA.

One of the first InVigor® branded varieties to be launched in Australia, InVigor T 4510 was a shining light in most National Variety Trials (NVT) last season, showing excellent reliability across a wide range of environments.

It is ideally suited to low-medium and medium rainfall areas, but can also offer strong yields in higher rainfall areas, where the added use of Aviator Xpro or Prosaro fungicides ensure in-crop blackleg and sclerotinia disease protection.

Up against similar maturing TT lines at Rylington Park, Bayer Customer Advisory Representative Craig White said the early growth of InVigor T 4510 was looking good and even, also considering the difficult start to the season in the area.

"It's emerged much more even than some of the other varieties," Craig said.

He said Aviator Xpro fungicide was set to be applied to the canola variety, in addition to a block of faba beans on the Rylington Park property.

Aviator Xpro is currently registered for blackleg and sclerotinia control in canola, as well as ascochyta blight control in chickpeas, with registration in other crops anticipated in time for the 2018 season.

Bayer recommends that Aviator Xpro is always used according to the most recent registered label.

Talk to our team

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