

LIEBE GROUP NEWS

August 2021

Volume 24

Issue 6



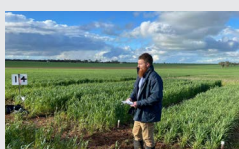
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*Herbicide
resistance in the
Liebe region*



*Liebe Group
Annual Dinner -
22nd September!*



*Nitrogen strategies
for early sown
long season wheat
varieties*



*Late season pests
and swathing
economics*



The Liebe Group mission is to facilitate grower prioritised research, development and extension to support our members to be profitable and sustainable.

From the Cover

Members braving the mud at the 2021 Post Seeding Field Walk.

DIAMOND PARTNERS



Rabobank



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FROM THE EXECUTIVE OFFICER

KATRINA VENTICINQUE

WELCOME to the August Liebe Group Newsletter!

As of 9th of August, the Liebe Group Agricultural Research and Education Facility has officially been open for 3 years. I would like to acknowledge the tremendous effort of the group's Management Committee, Building Project Manager & member Deb Metcalf, the previous Executive Officer Bec McGregor, as well as all member supporters and funding contributors that enabled this fantastic facility to be what it is today.

It is great to see the constant flow of people in and out of the building, creating a thriving hub of research, networking, up-skilling and opportunity for our local agricultural community.

With the majority of our in-house workshops and events completed for the year (still a few more coming up, check out the events section!), we are still here for a chat and cuppa. Members are always welcome to utilise the space (meeting room, desk, Wi-Fi etc) if you need it! Our Annual Dinner is also approaching, check out the flyer on page 17.

Recent feedback from our members has helped to inform the progress of our 5-year review of the Liebe Group's Strategic Plan, which will be showcased at the annual Spring Field Day!

Speaking of the Spring Field Day, much has been happening over the past few weeks in at the office to prepare for the main event of the year at our Main Trial Site! This season's event will include visiting most of the trials and demonstrations, several interactive marquee presentations and delicious burgers for lunch catered by the fabulous RRT Dalwallinu. The afternoon will finished off with a sundowner bbq cooked by the Elders Scholz Rural team and a cash bar supporting the Dalwallinu P&C. For more information check out the flyer on page 15.

With harvest drawing closer and crops looking well-watered, the Liebe team look forward to seeing how the season finishes up!

All the best.



GOLD PARTNERS



SILVER PARTNERS

Syngenta

Nutrien Ag Solutions

FMC

Bayer

Pacer Legal

Refuel Australia

Australian Grain Technologies

GrainGrowers

Adama Australia

Nufarm

Boekemans Machinery Dalwallinu

Intergrain

McIntosh & Son

WET CONDITIONS DID NOT DAMPEN 2021 POST SEEDING FIELD WALK

OVER 70 local farmers and industry representatives attended the recent Liebe Group Post Seeding Field Walk that was held at the Dalwallinu Main Trial Site on Wednesday 21st July.



Over 70 local growers and industry representatives attended Post Seeding Field Walk last month.

With a wet start to the season, the site was slippery but that did not deter attendees from enjoying the afternoon, viewing 8 of 20 trials in this year's program. Presenters were able to provide a brief overview of the trial aims, objectives and any observed results to date.

Several of the trials highlighted on the day provided growers with an opportunity to see management options for crop safety and herbicide effects, as well as weed control and different varieties for wheat crops.

The current trial site host farmer Matt Hyde reflected on the day, saying that he "enjoyed the day, it was very positive with a great turn out."

Matt also says he is "enjoying hosting the site and seeing the trials being implemented on their farm to see what could work in future years".

Latham grower and past Main Trial Site host Dylan Hirsch said "It was so amazing to have my gumboots and see those who forgot, suffer!"

Mr Hirsch said the "CSBP early sown wheat trial was very interesting, as was Imtrade's EPE propyzamide trial".

CSBP's nitrogen strategies for early sown long season wheat varieties aims to demonstrate what the yield potential is of three different long season wheat varieties new to the WA market, and the impact of nitrogen strategies of rates and timings on these varieties.



Angus McAlpine, CSBP, talking through his trial on nitrogen strategies for early sown long season wheat varieties.

This site was visually appealing, with better than average rainfall to date allowing for tall crops making good use of the extra moisture.



Included in this year's event was a bonus mini-field walk which visited three satellite sites between Pithara and Dalwallinu. Looking at pre-emergent ryegrass control in wheat, broadleaf weeds in chickpeas, and a tine vs disc seeder comparison, this was well received by all those in attendance.



The mini field walk visited three satellite trials including Nufarm's pre-emergent ryegrass control in wheat (pictured).

Allan Myers, Kalannie, said the day was "very informative, and good to finally see it up close. There is so much new technology coming in. Row placement trial was very impressive, with the strike rate of emergence".

The formalities of the day concluded with a social evening at the local AFGRI Equipment dealership with pulled meat rolls and drinks, which allowed participants to discuss the day, share their outlooks on trials, and attitudes moving forward in the current growing season.

The Liebe Group would like to thank Matt Hyde for hosting the 2021 Main Trial Site, and look forward to seeing the farming community back together again at the Spring Field Day on 9th September.

Thanks are extended out to all of Liebe Group's Diamond Partners CBH Group, CSBP, Rabobank and RSM, with many of their organisations having representatives attend the day, highlighting its importance and value for the local farming community.

Liebe Group Silver Partner FMC returned this year as event sponsor, providing further support to ensure the event was able to fulfil all expectations.



Groups on the move to see the next trial at the 2021 Main Trial Site.



Judith Storer, Liebe Group, sharing her trial into double break rotations.



Walking through Imtrade's investigation into host crop safety.



Matt Willis, Bayer, sharing his trial looking at the control of grass and broadleaf weeds in cereals.



Tristan Clarke, Elders Scholz Rural, sharing his trial on seeding interaction with pre-emergent herbicides.



Alana Hartley, AGT, sharing their trial on wheat varieties and depth of sowing.

BITESIZE LEARNING SERIES: UNDERSTANDING BUSINESS STRUCTURES

OUR second Bitesize Workshop for the year took us through choosing the right business structure for your farm business.

Kate Keamy and Kieran Sullivan from RSM joined forces to give our members a deeper look into business structures and what they mean for your business to make sure you have the best fit for you.

The group went through the differences between Trading Entities and Asset Ownership including the importance of “quarantining assets” to protect them if there is a liability against the business. The example given was to quarantine your farm land so if there was a legal claim against your business you would be able to keep the land and continue farming. Kate and Kieran went through the differences and benefits of each structure including partnerships, trusts and companies. Kate encouraged the group to think of a partnership as being made up of puzzle pieces coming together, signifying multiple entities coming together to form the partnership.

Kate reassured people that you can change your structure throughout your farming career to make sure it always suits your business. However, she did ask the group to think about future plans when setting it up initially and how on farm and off farm assets will be impacted.

Kieran made the point that changes in legislation and tax rates can change the benefits of different structures over time. It is important to regularly review your business structures to ensure they remain relevant and in line with your business and personal goals.

Thank you to Kate, Kieran and RSM for taking the time to speak to our members and provide them with the information required to review whether they have the right business structure for them.



Keiran Sullivan, RSM, and Kate Keamy talking through the different business structures.



STEPPING INTO THE SHEEP YARDS AT MLA PRODUCER DEMONSTRATION SITE

ON Friday the 30th of July, The Liebe Group hosted their inaugural MLA Producer Demonstration Site field walk in Buntine. The event addressed on-farm animal health management in a practical and interactive format and is the first of 12 workshops that Liebe will be host on livestock topics over the next six years as a part of the project.

The event started with the local grower and host of the event, Robert Nankivell, sharing his experience establishing a new serradella variety that has become available this season, Fran2o, on his property. He walked the group through the pasture, highlighting some points of interest in the pastures performance.



Braving the wind and cold to view a new serradella variety established on Liebe member Rob Nankivell's property at Buntine.

Most notably, due to a delay in access to seed, the pasture was sown later than planned which has significantly delayed the serradella maturity. Rob planted a 1:3 serradella: barley mix by weight to achieve a more consistent sowing rate due to the extremely small seed size of the serradella. This has resulted in a mixed serradella and barley stand which would be ideal for grazing, however as Rob aims to harvest the pasture for seed, the barley will be sprayed out to leave a clean serradella pasture.



Hannah Tunstill of Wheatbelt Vet Services then provided the opportunity to get out of the wet and windy weather with her presentation on common sheep illnesses in the region. She addressed pregnancy toxicity, hypocalcemia, intestinal parasites, and trace mineral deficiencies.

The causes, signs, diagnosis, treatment and prevention of each were discussed, and throughout the presentation, the group had a lively discussion on how each could be most efficiently managed by the producers. The presentation was very well received with many growers commenting on how the information provided would help them change their management to optimise their flock's health.



Hannah Tunstill, Wheatbelt Vet Services, sharing her knowledge on common sheep illnesses within the Liebe region.

Katherine Davies of DPIRD then got the group out of their seats once more with her interactive session on condition scoring. She began with a discussion of how a sheep's condition score impacts their performance at each stage of the production cycle. The discussion focused on how a condition score impacts a ewe's lamb and wool production, and how less than ideal condition can lead to significant and costly complications and reduced production rates. She concluded the session by teaching the group how they can condition score their own sheep and getting them to practice on several of Rob's sheep that he had mustered into the nearby yards.

DPIRD Vet Jess Bowers then gave the final presentation of the evening on state-managed disease processes. Luckily for those of us here in WA, the chances of finding an exotic disease are extremely low, and the process is instead focused on simply continuing to prove WA's disease-free status to maintain market access. Producers can access support from DPIRD, covering lab costs and vet fee's to diagnose the cause of suspicious livestock deaths in many circumstances. With the multitude of programs available to producers, it is always worthwhile to give DPIRD a call if you are a producer faced with suspicious livestock deaths or illnesses.

In conclusion, the day was a resounding success and livestock producers in the region can look forward to more frequent livestock focused events over the coming years facilitated by the Liebe Group.

If you have any enquiries, would like to access any of the materials shared at this event or are interested in attending future Liebe Group livestock producer events please contact the Liebe office on 08 9661 1907 or email research@liebegroup.org.au. This PDS is funded by Meat & Livestock Australia (MLA).



Participants got the opportunity to be hands on with their learning through the MLA Producer Demonstration Site Program.

HERBICIDE RESISTANCE IN THE LIEBE REGION

ON Thursday the 5th of August the Liebe Group hosted a Herbicide Resistance workshop and a part of the paddock level herbicide resistance management for Western growers and advisers project, as funded by GRDC. The workshop communicated results from seeds that were collected in the Liebe region on local member's properties.

Roberto Busi presented the resistance information that had resulted from his testing. The 2021 testing was conducted from his greenhouses at UWA, a program that is still scaling up. In this testing situation, a susceptible population has less than 5% plant survival, a developing population has 6-19% survival and a resistant population has more than 20% survival. The greenhouse has tested ryegrass, radish and brome grass to date with samples of barley grass and capeweed currently growing out for testing. Also, new this year, Roberto has begun testing herbicide mixes as well as single herbicides.



Roberto Busi presenting as part of AHRI's herbicide resistance testing workshop series.

Roberto began the day by presenting the results from resistance testing on ryegrass, which received the largest range of different resistance tests. This included 30 herbicides tested against 3,000 samples for a total of 300,000 tests. A few points of interest included a growing level of resistance to glyphosate, with the data set showing 13% resistance, up 3% from 2020 testing. This is a very rapid change that follows worrying trends in the eastern states that moved glyphosate out of many production systems. Resistance is also present for several pre-emergent application herbicides including trifluralin (13%), prosulphocarb (5%) and overwatch (8%). The presence of resistance to overwatch is very worrying as it is a new herbicide to the market in 2021 and shows that the chemistry is potentially vulnerable to resistance development.



After a short break, Fiona Depster continued the day with a discussion of survey results that compared grower's perceptions of their resistance status and their actual test results. In the majority of instances (~70%), growers accurately estimated their resistance status, however, overestimating resistance was also common (~20%) whilst underestimating resistance levels was less common (~10%). These results are encouraging, however there was a trend in miss identifying resistance levels (both under and over estimation) to chemicals that tend to have less reliable results that are potentially more influenced by environmental factors.

Roberto Busi then continued the day with a presentation on the results from the resistance testing on radish seed. As was expected, several chemicals have high levels of resistance in radish populations including Group B (70%), Group I (50%) and Group F (54%). Additionally, resistance is developing to several herbicides including Atrazine (2%) and Callisto (14%), whilst we have still yet to see any resistance to Crucial, Terrador, or Reflex. Additionally, it is of interest to note that Roberto has not witnessed any radish populations that are resistant to both group F and group H herbicides.



Roberto Busi presenting at the Herbicide Resistance workshop in August.

The event finished with a discussion on brome grass, however, brome grass has only been tested for resistance to a small number of different herbicides. Resistance levels were high to both Group B and I, whilst some resistance is now developing to groups C and K. However there is still no recorded resistance to Groups G or M.

The overall messages from the day included keep up with your mixing and rotating, even though it is always a balance between efficacy and cost. Protect your more vulnerable chemical, and keep resistance low for as long as possible. And don't forget to integrate these learnings with your non-herbicide weed control methods!

For more information on the data presented here, look to the 2021 R&D book for a comprehensive report or contact Roberto Busi at AHRI on 08 6499 7870.

ON-FARM HR & SAFETY A HOT TOPIC!

OVER one and a half days at the start of August, Liebe members came together to complete a comprehensive HR & On-farm Safety masterclass with Danielle McNamee from ProcessWorx. This training was focused on providing farm businesses current and practical information to ensure best-practice management of their enterprises.

Danielle said "it was such a pleasure to present to such a motivated group of farmers – I really enjoyed helping them."

The participants brainstormed key interest topics including contracts, inductions, Individual Flexibility Arrangements, OH&S, employee bonuses and legal compliance requirements to be covered throughout the day.

Cherie Fry said that "I really enjoyed the HR and Safety workshop and found it so worthwhile. Danielle from ProcessWorx made the information easy to understand and held great interactive sessions, with plenty of tools to take home to help improve our farming business."

Group work and role playing activities provided interactive learning opportunities including acting out a realistic situation where a farm manager needed to discuss the performance of a sprayer driver not keeping up with their duties. Speaking from various experiences dealing with these types of situations, Danielle was able to guide both parties through the proper process to handle the concern. Recommended pathways could include the implementation of a Performance improvement Plan (PIP) and assisting the employee to improve with further training and support.



Group work and role playing activities providing interactive learning opportunities at the HR & Farm Safety Masterclass.



In-depth discussion and questions were flying throughout the entire first day including the importance of having proper procedures and policies in place to cover all situations that may arise, how to legally terminate employees, what the requirements are around employee breaks and timesheets, and understanding awards and employment contracts.



MEMBERS NEWS

The discussion continued into the second day where the group moved onto the topic of Farm Safety.



"Why farm safety?" asks ProcessWorx Managing Director Danielle McNamee.

Danielle kicked things off by going through the key changes to the Act that will be coming into effect from January 2022. This was a somewhat overwhelming conversation as it highlighted that failure to comply with the Duty of Care requirements could result in large fines or even jail time.

It was then discussed how developing a Safety Management System that includes a risk register, WHS policies, processes and safe work procedures will help ensure the Duty of Care requirements are being met. A point of advice was given to bring your employees along with you as you implement new processes to help encourage behavioural changes rather than just "preaching the rules" to them.

Danielle took the group through the importance of having a risk register and implementing control measures to either eliminate or manage risks. In 4 groups participants then worked together to build a risk register for different areas of a farming business to help give them a head start when they build one for their own business. The day finished with some more questions and examples of documents that you should include in your Safety Management System.

Sarah Barnes said "I really enjoyed today as coming into it the topic was quite daunting but the workshop has made it seem more doable."

Thank you to our Gold Partner Danielle for her time to deliver these workshops on such important topics that assist our members to build their understanding and capacity.

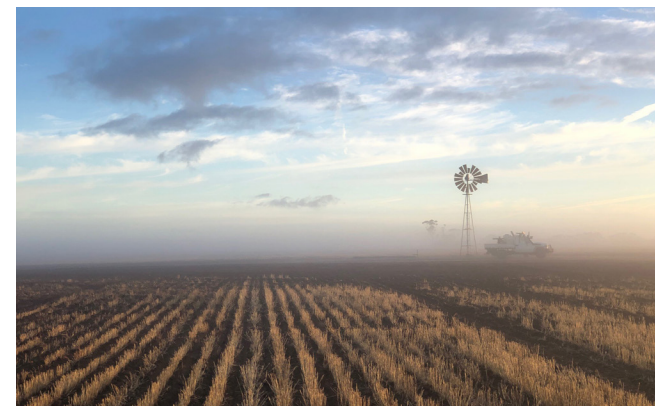
If you are interested in attending another workshop such as this, please contact the Liebe Group office for waiting list.



Attendees working through Performance Improvement Plans.



Danielle McNamee introducing attendees to farm HR & safety.



Winning images from the 2020 photo competition (from top: Tash Mills, Helen Heinrich, Peter Waterhouse)

LIEBE GROUP 2021 PHOTO COMPETITION

BEHIND THE SCENES OF FARMING

**3 X LUCKY WINNERS EACH
RECEIVE A \$150
REFUEL AUSTRALIA FUEL CARD!**

THE RULES

- Photos are to be submitted via [email](mailto:admin@liebegroup.org.au) admin@liebegroup.org.au
- 5 photos may be entered into the competition per person but more can be shared via Facebook
- Judging will be completed by 3 members of the Liebe Group Management Committee
- Entry into the competition includes permission for the Liebe Group to use images in future publications and media
- Mobile phone images are welcome
- Winner will be announced at Spring Field Day, Thursday 9th September 2021

ENTRIES CLOSE FRIDAY 27TH AUGUST

RSVP BY
THURSDAY
19TH AUGUST!

Pinot in the Paddock

FIELD WALK

MONDAY 23RD AUGUST | 3 - 4:30PM
DRINKS AND NIBBLES TO FOLLOW

Calling all Liebe ladies... get to know what's in the ground at the Liebe Group's Main Trial Site!

This field walk has been designed to build the capacity and confidence of our women members to understand the trials and demonstrations that will be presented on throughout the season.

Liebe Group R&D Committee members will be on hand to guide participants through some of the trials, discussing what is being researched, why it is important, and how the results can be used in our local farming systems.

REGISTRATIONS

For more information and to register:
PH: 08 9661 1907
Email: admin@liebegroup.org.au

SPRING FIELD DAY

THURSDAY 9TH SEPTEMBER, 2021

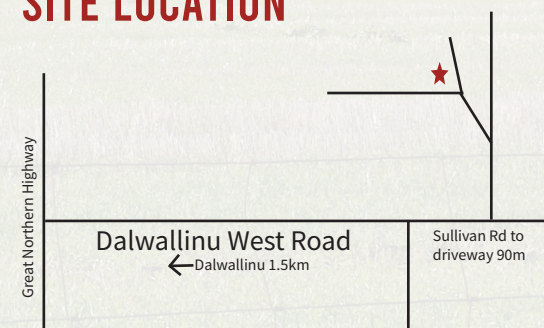
HYDE PROPERTY | DALWALLINU WEST RD, DALWALLINU



FIELD TRIALS & DEMONSTRATIONS

Comparison of chickpea inoculant placement and the interaction with seed applied fungicide	DPIRD
Clean seed and fungicidal seed dressing – an essential first step to managing chickpea ascochyta	DPIRD
DPI Chickpea	Living Farm
Lentil, Field Pea and Chickpea & Wheat NVTs	Living Farm
Opportunity cost of herbicide residue effects across crop types (Imi Trial)	Liebe Group
Impacts of deep sowing long coleoptile wheat	AGT
Increasing the profitability of the double break rotation in the MRZ or WA Wheatbelt through incorporation of an early sown high value pulse	West Midlands Group
Pre-Emergent and EPE Control of Annual Ryegrass in Wheat	Bayer
Knockdown control and crop safety matrix	Elders & Adama
Investigation into the efficacy and Host Crop Safety of Edge and Edge Unify when applied PSPE and Post Emergent in Pulses	Imtrade
Capturing early sowing opportunities with long season wheat varieties and the impact of nitrogen rates and placement	CSBP
Investigation into the efficacy and Host Crop Safety of Edge and Edge Unify when applied PSPE and Post Emergent in Canola	Imtrade
Soilborne Pathogen Identification and Management Strategies for Winter Cereals	GGA
Pre-emergent soil throw effects when sown interrow, edge row and on row	Elders

SITE LOCATION



THE DAY INCLUDES A FIELD DAY BOOKLET, PRESENTATIONS, NETWORKING OPPORTUNITIES & CATERING.
LUNCH PROVIDED BY THE RAPID RELIEF TEAM - DALWALLINU

COST

Liebe Members	Free Entry
Non-members	\$50
Industry	\$100
Students	\$20

REGISTRATION

From 8.30am for 9am start

Please register online
<https://tinyurl.com/SpringFD21>
or via Liebe Office on 9661 1907
Full agenda available online

GUEST PRESENTERS



John Gladigau
Executive Director
Bulla Burra Farms



Jo Drayton
Suicide Prevention Officer
Holyoke

QUERIES

For more information, contact the Liebe Group office
Ph: 08 9661 1907
E: admin@liebegroup.org.au

SUNDOWNER FROM 5:30PM | SAUSAGE SIZZLE & CASH BAR

EVENT PARTNER



DIAMOND PARTNERS





GEN Y PADDOCK CHALLENGE BUS TRIP

FRIDAY 3RD SEPTEMBER | FROM 11.30AM

Join your fellow Liebe Group members on an afternoon bus trip through the local countryside with our Gen Y Paddock Challenge participants!

Check out the demonstrations each grower has developed to investigate best practice methods for increased soil productivity in their farming businesses.

The bus will depart Dalwallinu (@ Liebe Office) at 11.30am and will stop for pick-up at Buntine Hall at 12pm. A light lunch will be provided on the bus.

Finish off the afternoon with dinner and drinks (at Dally Pub or in paddock with a bonfire dependant on weather)

PLEASE REGISTER BY TUES 31ST AUG

Liebe Group Office

9661 1907 or admin@liebegroup.org.au

DEMONSTRATIONS

Terraland Ripping Non-Typical Soils

Blair Stone, Marchagee

Post Emergent Deep Ripping

Dylan Hirsch, Latham

Compost Amelioration of Saline Soils

Casey Shaw, Buntine

Benefits of Extreme Deep Ripping (>500mm)

Shaun Fitzsimons, Buntine

Optimising Canola Establishment with Disc Seeder

Judy Storer & Boyd Carter, Jibberding

Stubble Height to Minimise Wind Erosion

Judy Storer & Boyd Carter, Jibberding

ALL MEMBERS WELCOME

PLACES LIMITED



SAVE THE DATE!

Hands on Precision Ag Training Workshop

Monday 20th September

Liebe Group office

17 Johnston St Dalwallinu

Register today

admin@liebegroup.org.au

08 9661 1907

Bring your computer & any relevant farm data on USB or hard drive



EMPLOYMENT OPPORTUNITY

CASUAL OFFICE CLEANER

The Liebe Group are looking for a cleaner for their office!

- 2-3 hours per week (flexible timing)
- All cleaning products/equipment provided
- Professional cleaning experience an advantage but not essential
- Must be reliable with attention to detail

For more information or to apply, contact Katrina
0400941412
eo@liebegroup.org.au



As a valued member, you are invited to attend the

LIEBE GROUP'S ANNUAL DINNER FIESTA

Wednesday 22nd September

From 6pm at the Liebe Group office.

The dinner is a celebration of the group's commitment to provide our members with the latest agricultural research and development, and capacity building opportunities.

Cost: \$50 per person

Cost includes dinner, beer, wine & soft drink

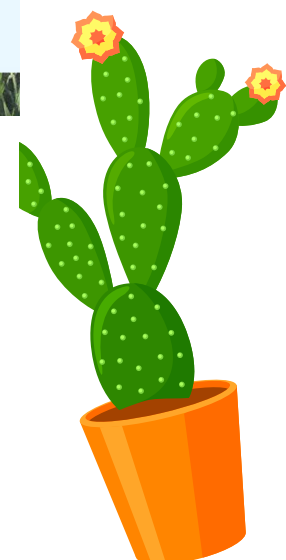
RSVP: Thursday 16th September

08 9661 1907 | admin@liebegroup.org.au

Kids welcome!

Pinata & games

Prize for best 'Fiesta' costume



GROWING CANOLA IN A 'VERY FUEL HUNGRY 2030'- WORLD

Lisa Curtis
Assistant Marketing Manager
Rabobank



Rabobank

THE global hunger for Australian canola is only expected to increase as we approach 2030 according to Rabobank grains & oilseeds analyst Dennis Voznesenski.

“On one hand, new sustainability-linked government initiatives in North America and Europe will drive demand higher but, on the other, constraints on supply growth will limit the supply response,” he says.

“In the United States, the push from the federal and state governments to grow renewable biofuel consumption – thereby lowering carbon emissions – is increasing the demand for canola,” he says.

The ‘low carbon fuel standard’, a state-led initiative in California and Oregon, defines the carbon intensity of different feedstocks used in biofuel. With the lower the carbon intensity of a feedstock, the more carbon credits a renewable-biofuel processor can earn.

“Canola, along with used cooking oil and distillers’ corn oil, has one of the lowest carbon intensities, making it a superior choice for use in renewable biofuel production than, for example, soy oil.”

If only canola was used as feedstock, Mr Voznesenski says Rabobank estimates a 130 per cent increase in hectares of canola, for the US and Canada combined, could be required to meet the demand of existing, under-construction and proposed renewable diesel refineries in the US by 2030.

“With this ‘local’ demand, Canada could no longer be a large canola supplier to Europe and Asia, leaving a substantial market gap,” he says.

“The EU has recently increased its renewable fuel targets for transportation from 10 per cent to 14 per cent by 2030, including crop-based, other renewables and advanced fuels made of waste products.

“Crop-based fuels will be limited to only seven per cent of transport fuels, and, added to this, an increase in fuel-efficient and electric cars is expected to reduce total fossil fuel use and, consequently, biofuel demand by approximately 15 per cent.”

Mr Voznesenski says that while “this may sound like a negative prospect for canola”, the EU is also banning the use of most palm oil by 2030, which currently accounts for approximately 25 per cent of its renewable biofuel feedstock.

“While the overall crop-based biofuels ‘pie’ might shrink by 2030, the share and absolute tonnage of canola demand is expected to rise by about one million tonnes by 2025, before easing towards 2030 as electric car adoption rises,” he says. “An EU supply-side response will be difficult as the EU adopts its Green Deal policies which will increasingly limit fertiliser and plant protection chemical use.”



Rabobank grains and oilseed analyst,
Dennis Voznesenski.

In China, Mr Voznesenski says while he does not see canola demand increasing in the coming years, with higher prices prompting a switch to other edible oils, he also doesn’t expect demand to fall significantly.

“One region that could ease the expected canola deficit is the Black Sea,” he says.

“In Ukraine, over the next five to 10 years, rising yields could lift production to four million tonnes versus the current record of 3.4 million tonnes, partially offsetting – but not eliminating – the deficit in Europe.”

The overarching story, he says, is that the while the world is going to become “increasingly hungry for canola”, there is simply not enough to go around.

“In terms of the main risks for canola demand growth to keep an eye on, in our view it is a faster-than-expected adoption of electric cars, which would reduce demand for fossil fuels and biofuels alike.”

To find out more about other Rabobank research, contact Rabobank Dalwallinu and Moora branch manager Georgina Day on 08 9661 0900 or subscribe to [RaboResearch Food & Agribusiness Australia & New Zealand](#) on your podcast app.

BUSINESS STRUCTURES EXPLAINED

Kieran Sullivan
Director
RSM



I recently attended a presentation to members of the Liebe Group on the various types of business structures and the importance of understanding your structure and why it exists. If thought it would be a good time to refresh. Structures can vary greatly from business to business and it's important to understand not only your structure but why your structure has been setup the way it has, including what it is used for. Often there is a separation between the asset owning structures of the business and the operating or trading structure used in the business.

I thought it was timely that we review the different types of structures and what they mean for your business. In general, there are 5 different structures that are used in connection with your business:

Sole Trader

You are carrying on the business in your own name and in addition, owning all the assets in your own name as well. Any profits or losses generated as a sole trader are included in the income tax return of the individual that is carrying on the business. They also take responsibility personally for any debts of the business and are exposed to any potential litigation issues for the business.



Partnership

A partnership can be described as two or more individuals or entities, coming together with a view to making a profit. In the absence of any separate agreement, a partnership is administered by the Partnership Act of 1895. It allows any profits or losses generated to be distributed between the partners as they agree. It is a good tool for operating a business through but not as an asset owning entity. It is important to note that all partners are jointly and severally liable for any debts of the partnership. It can offer the flexibility of a business continuing through the entry or exit of partners along the way. Remembering you can bring in a trust or company as a partner.



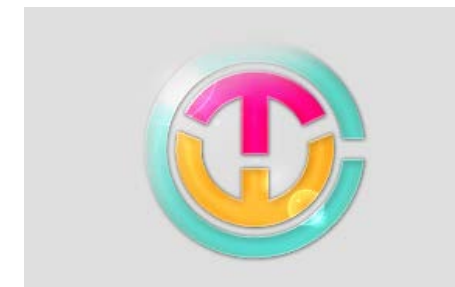
Discretionary Trust

Although there are different types of trusts, most commonly you will have a discretionary trust setup for your business purposes. A discretionary trust holds assets on behalf of the beneficiaries who will one day become eligible to receive those assets. It also distributes its income on an annual basis to the beneficiaries who then will be taxed personally on that income, the trust itself does not pay any tax. There is often a day-to-day controller of the trust (trustee) who makes the decisions on how the trust is run and how the income is distributed. The Appointor is the ultimate controller who can change the trustee and the trust rules. The rules of the trust are outlined in the Trust Deed when the trust is created. Anyone involved in a trust should become familiar with the trust deed. The trust will commonly run for 80 years and does give some separation of liability between the business and people involved.



Company

Companies are a separate legal entity and can continue on indefinitely giving stability and longevity to your business. As a separate legal entity, they provide a level of separation between the people running the business and the business itself. A company pays tax at a fixed rate of between 25% - 30% depending upon its circumstances. You do need to be aware that it is not always as easy to get money out of a company compared to other structures and the funds may lose their Primary Production nature which is key to many of your business considerations.



Company

An SMSF is a private superannuation fund that you manage yourself. It is considered private as it is restricted in the number of members (owners) it can have and they usually comprise members of a tight family group. The trustees (who also must be members) are responsible for the investment decisions of the money inside the fund, hence the name Self-Managed. Often an SMSF will own a piece of farming land used in connection with the farming business. Superannuation is a highly regulated and specialist industry, and you need to ensure that you understand the complexities that come with having an SMSF before setting one up.



Often it can seem confusing as you may have a combination of the above structures as a part of your overall business and succession planning operations. These are setup to ensure the best flexibility and protections are in place for the whole family group. Understanding the makeup of your structure and why it is setup that way is important to your business success. Make sure you ask your advisors how your structures are setup and what they mean for you. Remember, everyone's structures will be different for different reasons.

TRIAL UPDATE:
NITROGEN STRATEGIES
FOR EARLY SOWN
LONG SEASON WHEAT
VARIETIES

Angus McAlpine
Sales Support Agronomy
CSBP



SUMMER and early season rainfall has prompted early sowing in many parts of the WA wheatbelt. Sowing earlier than the traditional May break makes use of summer moisture and may mean higher yields – if the right varieties are used. Longer growing varieties sown early (March/April) have demonstrated higher yields compared with typical spring wheats sown in the traditional window (May/June).

A CSBP trial at Dalwallinu is investigating the yield potential of three long season wheat varieties that are largely untried in the northern WA wheatbelt. Using multiple N rates on each variety (Table 1) the trial aims to provide information on the varieties, including:

- Nitrogen requirements including rate and timing.
- The different development and flowering times of each variety.
- Grain yield and protein.

A better understanding of how long season varieties perform in the northern wheatbelt and how to manage them may encourage growers to plant them in future seasons.

Trial details

The three varieties were sown on 8 April 2021 at a seed rate of 53 kg/ha:

- Illabo (AGT) winter wheat (APW/AH) a dual-purpose wheat for grazing and grain production.
- Denison (AGT) a very long season spring wheat (APW).
- Rockstar (Intergrain) a medium-long season spring wheat (APW/AHN).

Table 1. Trial fertiliser treatments and rates

Trt	Variety	Drilled 8th April (kg/ha)	Banded 8th April (L/ha)	Streamed 3rd June (L/ha)	Streamed 17th June (L/ha)	N
1		97 All Phos	-	-	-	0
2		100 Agflow Boost	100 Flexi-N	-	-	54
3	Illabo	100 Agflow Boost	50 Flexi-N	50 Flexi-N	-	54
4		100 Agflow Boost	100 Flexi-N	100 Flexi-N	-	96
5		100 Agflow Boost	50 Flexi-N	150 Flexi-N	-	96
6		100 Agflow Boost	100 Flexi-N	2000 Flexi-N	-	180
7	Denison	100 Agflow Boost	100 Flexi-N	100 Flexi-N	100 Flexi-N	96
8		100 Agflow Boost	100 Flexi-N	200 Flexi-N	100 Flexi-N	180
9		97 Agflow Boost	-	-	-	-
10		100 Agflow Boost	100 Flexi-N	-	-	54
11	Rockstar	100 Agflow Boost	50 Flexi-N	50 Flexi-N	-	54
12		100 Agflow Boost	100 Flexi-N	100 Flexi-N	-	96
13		100 Agflow Boost	50 Flexi-N	150 Flexi-N	-	96
14		100 Agflow Boost	100 Flexi-N	200 Flexi-N	100 Flexi-N	180

Basal 20 kg P/ha

Results and observations to date

Nitrogen

Nitrogen has been a key driver of early crop growth in all three varieties. Tissue tests five weeks after seeding identified marginal N status in both the 50 and 100 Flexi-N (FN) banded treatments.

The higher N plots are showing increased biomass, tiller numbers and crop health (NDVI) (Figure 1). By June, at the 96N rate, plots with 100 Flexi-N (FN) banded at seeding had higher NDVI readings than plots with 50FN (Figure 2) suggesting more N earlier in the season is necessary to maximise early crop growth.



Figure 1. Illabo and Rockstar showing increased biomass and crop health with high rates of nitrogen.

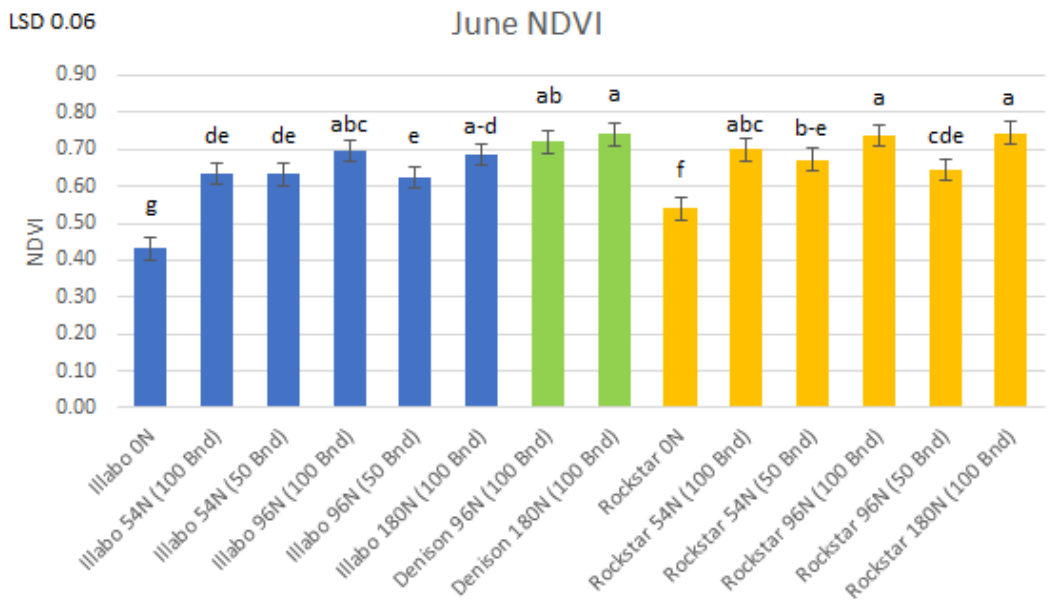


Figure 2. NDVI readings in June. Letters represent the statistical difference of NDVI between the treatments. If they are the same or are included in the same group there is no statistical difference. Differences between varieties will be influenced by differences in crop development stages and canopy architecture.

Growth and development

The long spring varieties, Rockstar and Denison, put on more biomass early compared with the winter wheat.

By late June the spring varieties had moved into stem elongation (reproductive phase) while the winter wheat was still in the vegetative growth stage. This extended vegetative growth stage has contributed to the higher number of tillers in the Illabo.

Next steps

We will continue to track the crop development stage to note when the flowering and grain fill stages occur to use as a local guide for future seasons. Grain yield and protein observations at harvest will help establish how nitrogen supply has influenced the performance of each variety.

KEY POINTS:

- Season 2020/21 saw a large export program and relatively low wheat basis.
- The total Australian export task is a large determining factor for WA basis.
- A return to average exports should result in a more average basis for WA wheat

2020/21 Historically Low Basis

Wheat basis levels in WA versus Chicago (CBOT) DEC-21, MAR-22 and JUL-22 swaps were historically low when compared to the long-term average. In fact, WA basis Vs Spot futures for JAN-JUNE (post-harvest) was the lowest it has been since the 2010/11 harvest. In a recent conference call with one of our information providers, we discussed the factors that contributed to this and what could potentially be expected this season.

Figure 1 shows wheat basis in WA (Vs Spot CBOT in AUD) since early 2007. It was certainly an 'exciting' time to be involved in grain markets during late 2007, early 2008. The wheat market was in the throes of being deregulated (export licences being granted in WA) and a massive rally in futures prices to levels that, to date, have not been exceeded. Basis levels in late 2007 were negative and as low or 'bad' as they have been. 2020/21 basis levels in WA were as low as they have been since this period, partly due to a very large Australian crop and elevated futures levels.



Figure 1: WA Wheat Basis (Kwi APW1 vs Spot CBOT wheat futures, in AUD). Source: AgScientia

Large Total Australian Exports

Figure 2 shows the (inverse) relationship between WA APW1 basis and the size of the total export program out of Australia.

In years when there is a large export program, basis is relatively low. Conversely, in years when exports are low and supply is tight, basis is high as price is driven higher by competition buying for the limited supply to meet demand.

Basis in 2010/11 was a bit of an exception as basis was very high in a year when exports were average. This was likely due to the impact of the shipping slot auction system in place at the time that supported price/basis, as marketers were very competitively buying grain to cover their shipping programs.

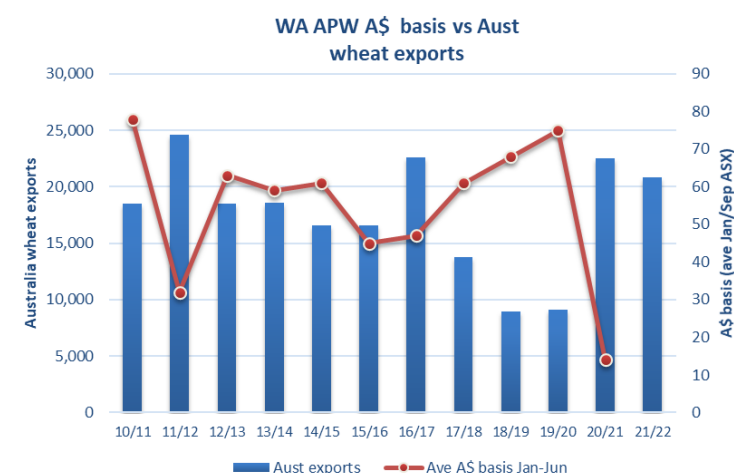


Figure 2: WA APW1 basis vs Australian wheat exports. Source: AgScientia

Return to Average?

Since 2010/11, there have only been three years when Australian wheat exports have been more than 20 million tonnes (mmt). With the start to the season, there is the potential for exports in 2021/22 to be close to the 20mmt figure again.

Figure 3 shows the relationship between total Australian exports (Sep to Oct) and WA basis. Exports back closer to or less than 20mmt should theoretically see improved basis levels compared to 2020/21.

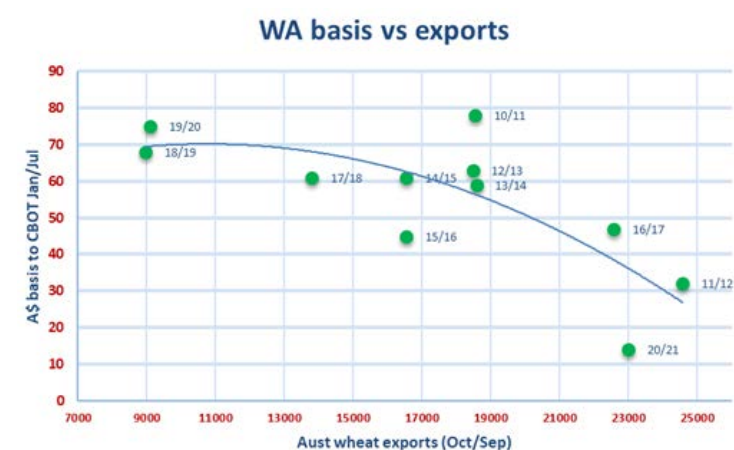


Figure 3: Relationship WA wheat basis vs Australian wheat exports. Source: AgScientia

Conclusion

So, what does this mean for 2021/22 basis? Obviously, there is still a very long way to go for the season, both here and in the northern hemisphere. The northern hemisphere crop still has a lot of growing to do until it is in the bin. Already, we have seen a very volatile market as futures values respond to weather markets and production estimates.

The Australian crop has even further to go. On balance, assuming we don't have two bumper Australian crops in a row, you would expect a moderate reduction in total wheat exports. As a result, you would expect basis levels to improve and be slightly higher when compared to last year.

It is important to remember that it is not just the size of the WA crop that will determine WA basis levels. If the east coast has an above average crop resulting in a large Australian export program, it is likely that WA basis would be below average.

WA WHEAT BASIS TRENDS

Don McTaggart
Agronomist
Farmanco



LATE SEASON PESTS
AND SWATHING
ECONOMICS

Tristan Clarke
Agronomist
Elders Scholz Rural



WET paddocks, swans in lakes and mice going nuts! Didn't ever think that Dalwallinu would see all three of these phenomena at once but here we are. After a seemingly never-ending string of rainy days through July we are finally seeing some sunshine beating down on the crops just in time for them to really start to show their potential.

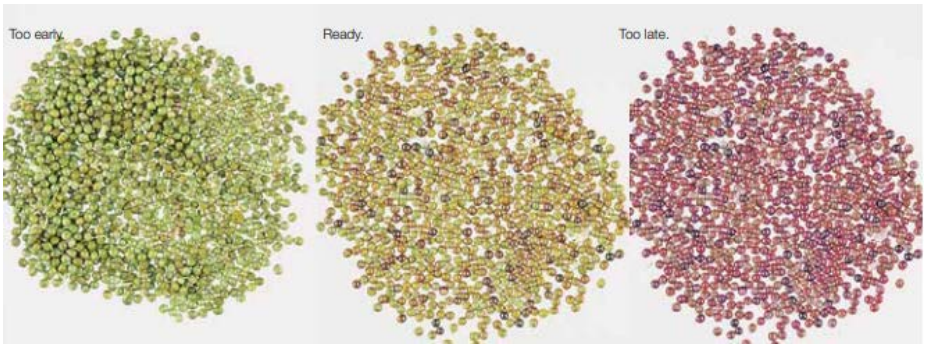
With a few mice poking around it is important that we keep monitoring crops and keep an eye out for any other diseases/insects that may make their way into the crops in coming weeks. Some reports of powdery mildew in wheat in the Yuna region and a few low-level reports of aphids floating around are things to keep an eye out for in the case that we continue to see some mild weather.

As plants develop further into grain fill it is important that we keep an eye on the damage that mice may be doing and decisions to bait should then be made. Threshold levels can be determined through transect walks and chew cards and I encourage that all of you at least monitor to some extent so that we have an idea of the number that are in paddock.

With the crops looking so good and large areas of canola in the ground many of you may be considering how on earth you are going to be able to make it to your summer holiday in time and not be stuck behind the wheel of the header well into January. The options available are somewhat limited and sometimes not one system suits all. The below gives an overview of swathing vs desiccation and some of the agronomic and economic implications that need to be considered.

Swathing too early can be a detrimental mistake and can cause significant losses, on the other hand swathing too late can be a bit of a logistical issue and the gains of getting started early may quickly diminish. So when is the right time and what are the economics of swathing? 40-60% colour change on the main stem is commonly accepted as the optimal time to swath and has been proven in many studies to date, however more recent studies with more hybrid canola being grown has indicated that with more secondary and tertiary flowering that up to 70% of yield can come from pods not on the primary stem that it is crucial that growers look at all the pods when choosing a time to swath.

Identifying this colour change however is much harder and picking what seeds have actually "changed colour" can be quite subjective. Later developing pods should be opened to ensure there are no translucent grains in them and that they are firm to roll between the thumb and forefinger. If these cannot be rolled the pod had not reached the optimal moisture window to swath without yield losses.



In research undertaken in 2011 as seen in Table 1, it was seen that even at the price of \$600/t up to \$210/ha could be lost by windrowing 1 week too early. At prices well over \$800/t this year being a week too early could be a very costly exercise to growers in both yield and oil content. Swathing later proved to not be detrimental to yield or oil so if there is one key takeaway from this research then that is to not get too trigger happy when calling the swather in to start, it could be costly!

Testing canola moisture if possible, may be a better way of determining optimal swathing time as it will take the guess work out of identifying colour change. Aim for 35-45% moisture content from a sample that includes pods from primary as well as secondary and tertiary stems. The correlation between moisture content and % seed colour change is clear below so should provide some assistance to getting more accurate reads on canola maturity for swathing timing.

Table 1 : Summary of crop data and dollar values at windrowing times – Gilgandra NSW – 2011

	7 days earlier	3 days earlier	Optimum date of windrowing	3 days later	10 days later
Date	30 September	4 October	7 October	12 October	17 October
Days after end flowering	15	19	22	27	32
% seed colour change	3	13	50	75	97
% seed moisture	54	45	43	39	27
1000 seed weight (g)	2.548	3.052	3.373	3.549	3.549
Yield (t/ha)	1.8	1.9	2.2	2.2	2.2
Oil (%)	37.7	40.6	42.3	42.3	42.3
Yield LSD (<0.05)	0.4				
Oil LSD (<0.05)	2.7				
Value of crop (\$/ha)					
\$600/t	1010.34	1116.06	2054.25	2054.25	2054.25
Change in value (\$/ha)	-210.40	-139.88	0	0	
(%)	-24	-16			

Source <https://grdc.com.au/resources-and-publications/grdc-update-papers/tab-content/grdc-update-papers/2013/02/canola-the-economics-and-physiology-of-the-timing-of-windrowing>

PREPARING YOUR PEOPLE FOR HARVEST

Danielle McNamee
Managing director
ProcessWorx

JUST like machinery, employees are an asset you need to prepare before harvest. Before the season ramps up, take the opportunity to reflect or adapt your business practices to improve productivity and efficiency. If you are hiring casual workers for the first time or the 10th it is important to understand what the law requires. Getting your records and processes in order is an important step, start harvest on the right foot, improve your efficiency and ensure you comply with HR and Safety legislation.

We've summarised four steps to prepare your people for harvest.

Contracts

Employment contracts outline the rights and obligations of the employee and employer. The Pastoral Award states all employees must have a written employment contract. We recommend all employees are issued an employment contract when they commence working on the farm. Having a written employment contract allows you to detail the terms and conditions of employment including probation, accommodation, keep, utilities, pay rates, hours of work, vehicle usage and fitness for work.

If disputes arise over pay or entitlements employment contracts are often referred to for resolution, so it is important to have quality contracts. When employing workers, you will also need to ensure, the employee has the right to work in Australia, they are given a copy of the Fair Work Information Statement, Casual Employment Information Statement, National Employment Standards and they complete a superannuation and tax file declaration form.

Individual Flexibility Agreement

An Individual Flexibility Agreement (IFA) is a written agreement between an employee and their employer used to change the effect of clauses in their Award. IFA's are commonly used to change the pay rates in Awards to suit the farmer and the employee. Farmers often find that Awards can be inflexible and paying individual entitlements, allowances and penalties for employees can make payroll complicated and time-consuming, increasing the chances of error. Due to the nature of seasonal work, paying employees a flat rate for all hours worked makes this process much simpler.

However, farmers need to ensure that the flat rate they are paying takes into account the entitlements, allowances, and penalties the employee would usually be awarded if being paid as per the Award. Therefore, the employee must be Better Off Overall. If the employee is not Better Off Overall, you are required to pay overtime and penalty rates or increase the hourly rate. An IFA is essential to demonstrate the allowances, entitlements and penalties included in the higher hourly rate determined by the Better Off Overall Test (BOOT).



Inducting Workers

It is important to induct new workers onto your farm so they are familiar with your human resources and work health and safety policies and procedures. The induction process is a good time to communicate expectations with your employee. New workers must be oriented to the farm, any machinery or equipment they will use, accommodation and vehicles.

Inductions ensure new employees transition smoothly into their role, minimising confusion and time-wasting. Not only do inductions make your farm more efficient, but as an employer, you are legally required to do them. Online inductions and induction checklists are helpful to streamline the process and ensure your new employee understands your farm, their responsibilities and your expectations of them.

Things to include in your induction process are, an overview of your human resources and safety policies and procedures, an overview of the Farm and introduction to other employees, a review of accommodation rules, emergency and first aid procedures explained and practical training for using machinery.

Safety Meeting

New work health and safety laws have confirmed safety's significance in agriculture moving forward. Under the new Act, farmers have an increased responsibility to ensure a work environment without risks to health and safety, safe plant and structures, safe systems of work, safety and health information, training, instruction or supervision and monitoring of the health of workers and conditions of the workplace. We recommend having safety meetings with employees before peak seasonal periods. As an employer, you need to be confident your employees have received adequate information and instruction from you to operate safely. Safety meetings are a good time to review key safe work procedures for harvest and update your risk register.

ProcessWorx has extensive experience working with farms to ensure they meet their HR and Safety obligations. Farmers can have peace of mind that a team of experts is helping their business, so you can focus on farming. Our main point of difference is the time our Advisors spend with farmers understanding their individual needs and the ongoing compliance updates we provide.



EXPRESSION OF INTEREST - WA FARM DATA SHARING PROJECT

Grower Group Alliance

ARE you drowning in farm data and want to make better decisions on farm? We are keen to hear from you and for you to be involved in what is WA's first farm data sharing project. After 10 months in the making, we have signed off for a new project which aims to demonstrate the seamless flow of electronic data to help farmers make more sophisticated investment decisions in their business using existing farm data.

GGA has partnered with DPIRD and Curtin University, with investment from the State government and the Food Agility CRC, to develop new modelling capability, APIs and electronic infrastructure that will see data sharing for improved farm business analysis.

We are calling for Expressions of Interest from farmers that have farm data in electronic format that are interested in using their data for better insight into their business.

The project will create a whole farm management simulation tool that will enable farmers to model investment and management decisions. After consulting with broadacre farmers from around the State, in this first instance we are looking at different liming strategies and corresponding risk and return on investment.

The information provided through the data sharing and modelling capability is estimated to save around \$1 million for the 20 growers that we are seeking to be involved over the three years.

If you are interested, the data that is required includes three to five years' worth of yield history, management history and soil types including pH. The project would also want farmers participating to be involved in the development of case studies and the promotion of the outcomes of the work.

For more information about the project contact the GGA team:
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UNDERSTANDING & MANAGING THE DISEASE SCLEROTINIA IN LUPIN AND CANOLA

Ciara Beard
Research Scientist
DPIRD

Geoff Thomas
Research Scientist
DPIRD



Department of
Primary Industries and
Regional Development

WITH an amazing wet growing season comes the additional challenges of disease management. The wet conditions have favoured several diseases initiating and spreading and we will focus here on sclerotinia in canola and lupin. Both diseases are caused by the same pathogen *Sclerotinia sclerotiorum* which has a wide host range and can infect most broad-leaved crops. It has been recently observed in chickpea this season in the West Midlands, a rare occurrence, so a sign of a very wet year!

Sclerotinia survives as sclerotia (hard, dark resting bodies) in the soil for many years. Close to average autumn and early winter rainfall is necessary for: a) sclerotia to germinate and form apothecia which spread ascospores initiating the disease cycle and b) good emergence and establishment of dense crops which favours high humidity levels under the canopy to suit Sclerotinia. Continuing regular rainfall and high relative humidity during winter and spring is needed to: a) favour presence of apothecia persisting under the crop canopy to coincide with crop flowering in order for ascospores to infect petals which fall down into the canopy leading to c) stem/branch/pod infection occurrence, with yield limiting levels especially favored by wet/humid end to the season.

Lupin Sclerotinia

Sclerotinia stem rot in lupins is a sporadic disease. Risk of Sclerotinia is higher in paddocks that have heavier soil types and a history of Sclerotinia; and in crops that are dense with early canopy closure and good yield potential. Sclerotinia development in lupins is highly dependent on there being sufficient rainfall to favour the complete disease cycle, with seasonal conditions perhaps even more important than for canola Sclerotinia.

There have been many reports of disease in lupin crops (albus and narrow leaf) this season as it has been wet and humid enough at the right times for apothecia development, petal infection and subsequent crop infection.

The disease in lupin can occur at ground level (basal infection – where the whole plant wilts, see Figure 1), on the main stem and branches and on the main spike and pods (Figure 2). The latter was observed to be very common in DPIRD trials in the Geraldton region and is likely the main cause of yield loss from the disease in lupin. This has implications for the optimal timing of fungicide application in lupin which has been found to be later than that in canola.

Fungicide application needs to focus on protecting the pods in lupin rather than the stems so fungicide application from 100% bloom to early pod emergence has been the focus of DPIRD studies. The range of registered fungicide products in lupin continues to grow, current fungicide registrations can be found on the DPIRD website at <https://www.agric.wa.gov.au/lupins/registered-foliar-fungicides-lupin-western-australia>.



Figure 1: Basal (ground level) stem infection causes white fungal growth on the stem base and wilting of the whole plant.



Figure 2: Sclerotinia infection on lupin leaves, pods and branches

This season consideration should be given to other diseases such as phomopsis, and particularly anthracnose which in albus lupin which is favoured by rain splash.

DPIRD trials and observations have found that foliar fungicides can significantly reduce sclerotinia infection and severity in the upper canopy where fungicide can make contact. Ground level (basal) sclerotinia infection is often at and below ground level so foliar fungicides are unlikely to ever be effective at managing this type of infection once it is present. Though fungicide application can reduce disease levels in stems and pods, it rarely eradicates symptoms completely and may not reliably give a yield benefit.

Damaging disease levels in lupin are difficult to predict and it is challenging to know how to manage the disease and if management will be profitable as it is not the same as in canola. DPIRD have been conducting research on sclerotinia in lupin in the Geraldton port zone since 2016 but the only years significant disease developed in experiments were 2016, 2018 and 2020. In 2016, a yield response of 18% was recorded in albus lupin but no significant response occurred in narrow leaf lupin with the same treatments at the same site.

In 2020, across three grower demonstrations, foliar fungicide applied at early pod emergence significantly reduced but did not eliminate the incidence of Sclerotinia and generated only a small yield response (3-6%) above untreated plots. This yield response was unprofitable in narrow leaf lupin and marginally profitable in albus lupin. An earlier fungicide application, or multiple applications, may have been more beneficial especially for albus lupin but confirming this requires further research.

Despite a yield response not being guaranteed, fungicide application may be worthwhile for grain quality benefits and reducing sclerote production, which in turn would reduce the need to grade sclerotes out of seed. It could also minimise inoculum spilling into paddocks to cause future infection of canola and lupin crops. Research in 2020 found the grain produced in an albus lupin crop had significantly higher sclerote contamination than that of a narrow leaf lupin crop nearby. Fungicide application in albus lupin significantly reduced the amount of sclerotia inside stems, within pods and growing into grain. Further research into grain quality benefits from fungicide application and the difference between lupin species is warranted.

A new 4-year lupin sclerotinia project commenced this year funded by GRDC along with DPIRD, MIG and CCDM (with collaboration from David Cameron and Chris Robinson, Farmanco). In the Geraldton and Albany port zones we will be investigating:

- How the infection process occurs in narrow leaf lupin and albus lupin and how the disease cycle might be able to be interrupted,
- How the disease causes yield and/or quality impacts in each lupin species,
- Integrated disease management strategies for sclerotinia in lupin including agronomic practices (such as time of sowing, crop rotation, row spacing, crop density) as well as fungicide strategies.

Canola Sclerotinia

Sclerotinia in canola is more common than in lupin and can cause up to 20% yield loss. Symptoms are usually observed on the stem and branches as bleached greyish lesions, and sometimes white fluffy fungal growth, sometimes also seen on leaves and pods. Plants mature prematurely and bleached stems can be carefully split to observe the black sclerotia within. When warranted, it is best managed with a foliar fungicide application between 20-50% bloom before the disease symptoms are observed. 50% bloom (20+ main stem flowers open) is the latest crop stage fungicides can be applied.

Disease depends on: the presence of inoculum (previous sclerotinia infections in paddock or nearby, sightings of apothecia in area), favourable weather conditions at all parts of the disease cycle (showers and/or humidity), crop growth stage and yield potential. It is challenging to consider all these factors so we recommend you use SclerotiniaCM - a decision support tool available for iPads and android tablets to help in making fungicide application decisions, ie. whether you are likely to get an economic return from managing the disease in your specific canola crops this season.

The tool allows you to assess the risk and likely economic returns from those decisions on a paddock by paddock basis. The user can specify individual paddock data (sclerotinia history, crop growth stage, yield potential) as well as recent and expected weather conditions so that the output relates to their own cropping circumstances. To download the free SclerotiniaCM tool, visit the App store from your iPad, or Google play from your Android tablet. Further information is available at <https://www.agric.wa.gov.au/apps/sclerotiniacm-sclerotinia-management-app>.

Please report disease finds to PestFax via the PestFax reporter app or by emailing the editor on PestFax@dpiird.wa.gov.au.

Further information

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GRAIN STORAGE SUCCESS STARTS IN WINTER

GRDC Media Release
August 2021



A wet start to the winter cropping season and crop production forecasts of 46.8 million tonnes – 13 per cent above the 10-year-average – have given many grain growers the confidence to start looking ahead at harvest logistics and grain storage capacity for this year.

While growers are keenly aware the latest figures from the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) are merely a forecast until grain is in the silo, storage specialists say now is the time to ensure facilities are prepared and ready.

Grains Research and Development Corporation (GRDC) Grain Storage Extension project co-ordinator Chris Warrick is encouraging growers to start maintenance and do a check on storage facilities to help set up for a successful 2021 harvest.

Mr Warrick said growers were increasingly opting for on-farm storage and were focused on improved capacity, understanding what was needed to store grain for longer periods of time and building their knowledge of fumigant and chemical use.

“Managing on-farm grain storage is now an enterprise in itself, requiring planning and preparation to manage successfully,” Mr Warrick said.

“The GRDC Grain Storage team regularly receive calls from growers either looking for guidance on setting up storage, including pest prevention, or looking for help after they’ve discovered a pest or grain quality problem.”

To reduce the risk of issues during and post-harvest the storage expert is advising growers to make time now to assess and undertake maintenance of grain storage systems.

“Preventing issues is always better than dealing with them,” Mr Warrick said.



GRDC Grain Storage specialist Chris Warrick is encouraging growers to take time over winter to setup grain storage by adding or improving aeration cooling, doing maintenance, improving hygiene and finish off with a structural treatment.

He advises growers work through six steps to prepare for what is forecast to be an above-average winter harvest:

1. Aeration cooling is under-utilised in many regions, possibly due to a lack of understanding. Aeration cooling can be ordered for new silos or retro-fitted to existing silos and is an effective way of preventing insects and mould, maintaining superior grain quality and providing storage to hold high-moisture grain safely until it can be blended or dried.
2. When choosing aeration fans, aim for two to four litres of air per second per tonne of grain storage capacity. One fan cannot adequately be ducted to multiple silos or effectively moved between silos. The most efficient solution is to have dedicated fan(s) installed directly on the bottom of each silo.
3. Existing aeration can also be setup for better utilisation, by connecting permanent power supplies to fans, installing an automatic controller or learning when to run fans to optimise aeration cooling. While extension cords to silos may have been used in the past, data shows that once aeration is setup properly it’s easier to operate and gets utilised to its full potential.
4. Use the downtime in winter to maintain storages in the same way you maintain other harvest equipment. Check all hatches and outlets operate freely, replace any damaged or perished seals, pressure test gas-tight sealable silos and top up oil relief valves. Consider safety improvements, such as adding signage, lights and drainage or engineering safer ladders or walkways to access the top for inspection, maintenance and fumigation.
5. Storage hygiene is critical. During maintenance make silos and their surrounds easier to clean by covering pockets or ledges where grain accumulates. Make hoppers, conveyors and augers easy and safe to clean out. Adding concrete or gravel around storages will make cleaning up spills faster and more effective. All these steps will reduce the risk of contamination and limit breeding grounds for insects. Removing or reducing food sources for insects, also reduces their population, which is important as conditions warm up and insects begin breeding.
6. The final step to winter storage preparation is structural treatments. Apply a small film of Diatomaceous earth dust or slurry to the inside of storages and grain handling equipment to ensure any remaining insects are killed.

Mr Warrick said if growers work through these steps, they could be assured that their grain storage systems were clean of insects and functional, safe and easy-to-operate, which would contribute to a more successful harvest.

He said learnings from the 2020/21 harvest also indicated that temporary on-farm storage such as poorly prepared bags and bunkers could be vulnerable to mice and water damage. Losses associated with damaged or flooded grain in short-term storage meant these were not always the cheaper option and had resulted in more growers investing in permanent storage for this season.

For more information contact your nearest grain storage specialist on 1800 WEEVIL or visit GRDC’s Stored Grain information hub.

Mr Warrick has also provided growers with straightforward, practical advice on what they can do to improve their storage via a GRDC webinar that is available through GRDC’s YouTube channel.

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CALENDAR OF EVENTS

LIEBE GROUP EVENTS 2021

Pinot in the Paddock	Monday 23rd August	Hyde Property, Dalwallinu
Gen Y Bus Trip	Friday 3rd September	
Spring Field Day	Thursday 9th September	Hyde Property, Dalwallinu
AgChats: Carbon Farming	Thursday 16th September	Kalannie Sports Club
Hands on Precision Ag Training Workshop	Monday 20th September	Liebe Group Office
Annual Dinner	Wednesday 22nd September	Liebe Group Office

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