LIEBE GROUP NEWS

August 2020
Volume 23
Issue 6

What's Inside

LiEBE GROUP
Working together in Agriculture

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

Liebe Group Main Trial Site looking good in the lead up to Spring Field Day.

DIAMOND PARTNERS

Rabobank

CSBP

CBH GROUP

RSM

MEMBER NEWS

EVENTS

PARTNER UPDATES

NEWS

FROM THE EXECUTIVE OFFICER

KATRINA VENTICINQUE

WELCOME to the August edition of the Liebe Group Newsletter. What a welcome sight those grey skies and roadside puddles are! Our local Liebe Group region (as well as many other parts of WA) received some much-needed rainfall over the past week, which has thankfully rejuvenated the landscape.

Following on from a very busy July, the Liebe Group office has been filled with events, planning, project applications, meetings and trial monitoring activities. The Rabobank-supported 'Advanced Excel Workshop' had fantastic attendance (see page 5 for debrief), the August AgChats with RSM proved to be very timely and well-received by members (see page 4 for debrief), and the Ladies Landcare Luncheon, with support from NACC, turned out to be a perfect afternoon (see page 6 for debrief).

The annual Spring Field Day on 10th September is 3 weeks away, with a jam-packed agenda visiting all of the trials at the Main Trial Site in Latham. Two special guest speakers, Neil Bennett from the Bureau of Meteorology and Cameron Scadding from Source Certain International have been confirmed for the day. We are also excited to announce that the Rapid Relief Team has come on board to provide a delicious complimentary BBQ breakfast, lunch and afternoon tea in support of our local agricultural community. A huge thankyou goes out to our long-term Spring Field Day event sponsor, Elders Scholz Rural for their ongoing commitment in support of this annual showcase of R&D in our region.

Several other workshops and events are in the pipeline in the lead up to harvest including:

- Rural Mental Health Workshop on 20th August (see flyer on page 10 for more information). We encourage you all to 'bring a buddy' along, with casual bbq dinner and drinks to finish off the afternoon.
- Gen Y Paddock Challenge Bus Trip on Wednesday 26th August (see flyer on page 11 for more information). This half-day tour will take you around some of the demonstrations that our local members have implemented, concluding with a bonfire and sausage sizzle out in the paddock.

The Liebe team would kindly ask for early registrations for these fantastic events, as places are limited. Plans are underway for the September AgChats session on VRT technology (page 12), as well as an interactive Bitesize Learning workshop on chemical safety in the home.

GOLD PARTNERS

Elders Scholz Rural · Farmanco · IMTRADE Australia Agriculture Reimagined · Bayer · agrimaster Agribusiness accounting software · AFGRI Equipment

SILVER PARTNERS

Syngenta	Refuel Australia	Scott's Watheroo Dolomite
Pacer Legal	Nufarm	FMC
Adama Australia	Intergrain	Carbon Ag
GrainGrowers	Boekemans Machinery Dalwallinu	
Nutrien Ag Solutions	Australian Grain Technologies	

MID-YEAR MONEY REVIEW FOR FARM BUSINESSES

LIEBE Group members joined local RSM representatives Keiran Sullivan and Reagan Manns to discuss all things finance at the August AgChats workshop. The 13 participants highlighted the importance of getting on top of business preparations early in the financial year to ensure a better outcome come June 30.

Decision making around seasonal cash flow, budget tracking, financial reports and statements were on the agenda, with Liebe farmer from Xantippe, Gavin Carter saying "it was good to get some timely reminders about EOFY organisation, and the following Q&A on the instant-asset write off was very informative".

Reagan, the Manager of RSM in Jurien Bay, commented that "Growers were particularly interested in discussing the numerous changes to depreciation as a result of COVID19 and AgChats provided a great forum to answer questions specific to the farming industry".

The evening workshop ended with some great social chatter over a sausage sizzle and a few drinks. Thanks to Liebe Group Diamond Partner RSM for presenting and to GrainGrowers for their ongoing support of the AgChats Workshop Series, which brings together the local agricultural community for capacity building opportunities throughout the year.

Reagan Manns and Keiran Sullivan providing a mid-year review at the August AgChats.

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LIEBE MEMBERS EXCEL AT RECENT WORKSHOP

A small and interactive workshop was held on 27th July for local community members to advance their skills and understanding of Microsoft Excel. The aim of the workshop was to build confidence in using the spreadsheet tool to make tasks more efficient not only for their farming business, but also within their personal and family lives.

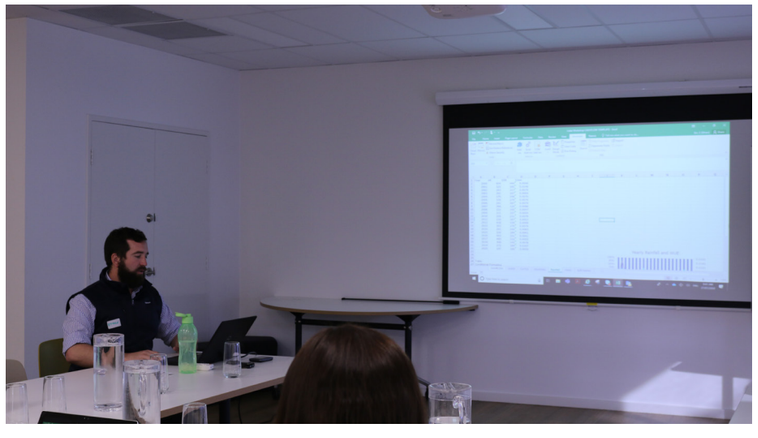
Ethan Sirr, Rural Manager at Rabobank Moora, facilitated this learning opportunity, kindly passing on the knowledge he has amassed over his years working with Excel.

At the end of the workshop Ethan commented that it was "an interactive and engaged group with a diverse knowledge base so everyone got something out of it."

Many practical skills were covered over the course of the morning including conditional formatting, tables, graphs and data validation tools.

Liebe Group member Frank Crago, who attended the workshop said that "it gave me ways to tackle some of the challenges I have been facing".

Thanks to Liebe Group Diamond Partner Rabobank for their support of the workshop.



Ethan Sirr, Rabobank, assisting Liebe Group members with Microsoft Excel.

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LADIES LUNCH FOR LANDCARE WEEK

THIRTY local women gathered together on Wednesday 5th August for a Ladies Landcare Luncheon, as part of National Landcare Week. The luncheon, supported by NACC through funding from the Australian Government's National Landcare Program, provided the opportunity to learn about local landcare, soil health, salinity management and sustainable rural living practices.

How to combat hot and dry conditions for soil improvement was the topic of discussion with Fiona Blackham from Gaia Permaculture, starting the day by reiterating that "soil is the best place to hold water so it is important to keep it healthy".

By increasing soil organic matter through compost systems, soil biological properties are improved which results in root elongation and abundance which, in turn, increases access to nutrients and water.

Fiona Blackham, Gaia Permaculture, sharing her expertise on soil health at the Ladies Landcare Luncheon

Denise Borger attended the day and said "Many thanks to the Liebe Group for hosting such a wonderful day! I really enjoyed Fiona's soil health presentation, especially the fruit fly trap information – my fruit trees will be very grateful!".

A fantastic morning tea and lunch was shared by the group, thanks to Jenny's Bakehouse. The opportunity for light-hearted conversation and prompting from the day's focus on sustainability provided a warm atmosphere for idea sharing.

In the afternoon, Ella Maesepp of Katanning Eco Home shared her experiences with getting her family on board with a low waste, sustainable rural lifestyle.

Lunch supplied by Jennys Bakehouse

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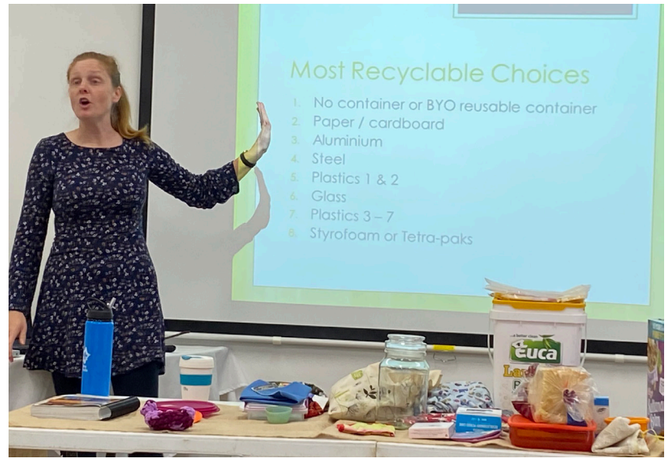
Ella stressed that tackling waste at a family level can be a slow process which is easier to take step by step.

Highlighting her family's war on waste, Ella's top tips for reducing waste included:

- Avoid double packaging
- Buy in bulk
- Bring your own container
- Use the most recyclable choice of packaging

Denise Borger enjoyed Ella's presentation saying "I loved the tips and tricks that Ella provided for making quick and easy lifestyle changes to become a little bit more eco-friendly – my new stainless steel clothes pegs work a treat".



Ella Maesepp, Katanning Eco House, sharing her top tips for reducing household waste

Kahlee Nankivell, Nutrien Ag Solutions, with her lucky door prize.

The day ended with Liebe Group member Lilly Martin, and Nutrien Ag Solutions Kahlee Nankivell winning lucky door prizes and all ladies going home with verticordia or thryptomene denticulata plants for the garden.

Thanks to the NACC team for working with the Liebe Group to provide all the women that attended with the opportunity to learn with friends. We hope they all went away with some new understanding of the importance of soil management and reducing waste.

PHOTO COMPETITION WINNERS RECIEVE VOUCHER

THE Liebe roup photo competition winners for 2020 were presented with their vouchers by Ian Burrows, Managing Director of Refuel Australia, on Friday 10th August.

It was a close competition but the winning images encompassed farming life to a tee.

Congratulations Helen Heinrich, Tash Mills and Peter Waterhouse, and thank you to Silver partner Refuel Australia for sponsoring the competition.

Winning images from (clockwise from top left) Helen Heinrich, Tash Mills and Peter Waterhouse.

Ian Burrows (second from left) with photo competition winners Blake Waterhouse (on behlaf of Peter Waterhouse), Helen Heinrich and Tash Mills.

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SPRING FIELD DAY

THURSDAY 10TH SEPTEMBER, 2020

HIRSCH PROPERTY | COOROW-LATHAM ROAD, LATHAM

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FIELD TRIALS & DEMONSTRATIONS

DKP TRIAL	COGGO
BARLEY SMUT TRIAL	BAYER
BARLEY NVT	LIVING FARM
WHEAT NVT	LIVING FARM
DOUBLE BREAK PULSES PROJECT	GRDC (WMG)
VETCH VARIETY TRIAL	NVBP
BROADLEAF HERBICIDES IN LUPINS	SYNGENTA & ELDERS
ULTRO X POST EM GRASS HERBICIDES IN LEGUMES	ADAMA
CANOLA NVT	LIVING FARM
OP X TT CANOLA X PLANT DENSITY X N RATES	NUTRIEN AG
GEN Y: PRE VS POST SEEDING DEEP RIPPING	NLP (LIEBE GROUP)
OVERWATCH: GROUP Q HERBICIDE	FMC
PROSULFOCARB DEMO	IMTRADE
LOOSE COMPOST TRIAL	CARBON AG
C33 FARMING SYSTEMS	CARBON AG
ALUMINIUM TOXICITY TRIAL	NLP (LIEBE GROUP)
GROUP G HERBICIDE COMPARISON	NUFARM

SITE LOCATION

The day includes a field day booklet, presentations, tea and coffee, afternoon tea and lunch.

COST

Liebe Members	Free Entry
Non-members	$100
Students	$20

REGISTRATION

8am: Free BBQ breakfast
9am: Start of day

Please register online
https://tinyurl.com/SPRINGFD20
or via Liebe Office on 9661 1907

GUEST PRESENTERS

Cameron Scadding
Forensic & Analytical Chemist
Source Certain International

Neil Bennett
Media and Communications Manager
Bureau Of Meteorology

QUERIES

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

SUNDOWNER FROM 5PM: $2 Sausage Sizzle and cash bar

EVENT PARTNER
Elders
SCHOLZ RURAL

DIAMOND PARTNERS
RSM
CSBP
Rabobank
CBH GROUP

Join us to have a chat about mental health and wellbeing in rural Australia

This Rural Minds Workshop is a relaxed way to learn about mental wellbeing and resilience for you, your family, friends and community.

Specifically designed for rural and remote communities, and delivered by people who know what it's like out here, Rural Minds is just good, solid, practical, information without all the bull...dust.

SPONSORED COMMUNITY WORKSHOP

Dalwallinu WA

Thursday 20th August – 1:00pm to 5:00pm

Venue - Liebe Group Office, 17 Johnston St Dalwallinu WA

The workshop will be followed by a Liebe Group Sundowner & Sausage Sizzle

Liebe Members Free. Non-members $30. Payment on the day

Registration: Phone 08 9661 1907 or email admin@liebegroup.org.au

HOLYOAKE FAMILY • INDIVIDUALS • YOUTH | LIEBE GROUP Working together in Agriculture | RURAL MINDS | Rural & Remote Mental Health

facebook.com/RRMHRuralMinds twitter.com/RRMentalHealth rrmh.com.au

EVENTS

Cocktails and Canapes

SAVE THE DATE
for Liebe Groups annual dinner

Friday 16th October 2020

6pm

Liebe Group Office
17 Johnston St, Dalwallinu

LIEBE GROUP Working together in Agriculture

GEN Y PADDOCK CHALLENGE BUS TRIP

WEDNESDAY 26TH AUGUST | FROM 11.30AM

Come along with 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 in Buntine (@ the Hall) at 12pm. A light lunch will be provided on the bus.

Finish off the afternoon with a sausage sizzle (kindly sponsored by Elders Coorow), some drinks & a bonfire at Charles Wass' property. Growers from West Midlands Group will be joining us for the BBQ providing an opportunity for extended networking.

DEMONSTRATIONS

Pasture Performance Using a Plozza Plough
Charles Wass, Coorow

Early Post-Emergent Deep Ripping Canola
Dylan Hirsch, Latham

Fertiliser Rates on Heavy Clay
Blair Stone, Marchagee

Comparison of Double Ripping Treatments in Cereal
Brendon Manuel, Watheroo

PLEASE REGISTER BY FRI 21ST AUG

Liebe Group Office
9661 1907 or admin@liebegroup.org.au

ALL MEMBERS WELCOME

PLACES LIMITED

Australian Government | National Landcare Program

This project is supported by the Liebe Group, through funding from the Australian Government's National Landcare Program

LIEBE GROUP AGCHATS

VARIABLE RATE TECHNOLOGY: IMPLEMENTING IT IN YOUR BUSINESS

THURSDAY 3RD SEPTEMBER

8-10AM | THE LIEBE GROUP OFFICE | BBQ BREAKFAST FROM 7.30AM

INTERESTED IN VARIABLE RATE TECHNOLOGY BUT NOT SURE WHERE TO START?

Join us for a facilitated discussion with representatives from Farmanco, Boekeman's Machinery Dalwallinu and AFGRI Dalwallinu alongside experienced growers to understand the benefits and costs of Variable Rate Technology (VRT).

Topics for discussion include:

- How to implement VRT on your property
- The pros and cons of VRT
- The costs of implementing VRT - retrofit vs new machines

TO REGISTER OR FOR MORE INFORMATION

Liebe Office: 9661 1907
Email: admin@liebegroup.org.au

SUPPORTED BY

Grain Growers
Real benefits. Real results.

JOBKEEPER 2.0 - ARE YOU STILL ELIGIBLE?

Reagan Manns
Manager
RSM

RSM

WITH the JobKeeper program now passing the halfway mark of its originally slated 6 month duration, a much anticipated update was provided by the government in July as to what happens when the program ends. Whilst initially the government's position was that all COVID stimulus measures would 'snap-back' at the end of their legislated duration, the reintroduction of lockdowns in Victoria and ongoing threat of an outbreak has resulted in the JobKeeper program being extended for an additional 6 months, albeit, with some fundamental changes.

Dubbed JobKeeper 2.0, the program has been refined to address some of the key concerns and pitfalls of the original program. The most significant alterations have been made to the eligibility testing and the minimum rates of 'pay' required to be paid to eligible employees.

Under the current JobKeeper program, businesses were only required to satisfy the decline in turnover test once for a selected month or quarter. Once eligibility was established, businesses were required to submit monthly reports to the ATO detailing current and projected turnover however their eligibility was not impacted if turnover returned to 'normal' or even increased.

'Re-testing' turnover decline

JobKeeper 2.0 introduces a new round of testing requirements which helps to provide integrity to the program and ensure that it is targeted at those businesses which have experienced a severe and ongoing decline as a result of COVID19. Under the new program, businesses will need to 're-test' their decline in turnover in both October and December to maintain their eligibility for the full duration of the program.

Whilst full details on these new eligibility test will only be revealed once the legislation has been passed, there were a few key changes. In a significant departure from the original program, businesses will no longer be able to test eligibility on a monthly basis, the turnover decline must be tested on a quarterly basis. It also highlights that businesses will no longer be able to determine eligibility based on projected (i.e. estimated) turnover, only actual turnover for a period is to be used. These two changes highlight how the program has been restricted to more accurately target those businesses affected by COVID19.

To be eligible for ongoing JobKeeper assistance businesses will need to pass the relevant decline in turnover rates as follows:

Eligibility Period	Decline in Turnover Test Period	Conditions
October - December 2020	April – June 2020 July – September 2020	The relevant decline in turnover test must be satisfied in BOTH quarters
January - March 2021	April – June 2020 July – September 2020 October – December 2020	The relevant decline in turnover test must be satisfied in ALL three quarter

New JobKeeper minimum wage conditions

Controversially, the original program established a flat minimum wage of $1,500 per fortnight for all eligible employees on JobKeeper. This created an anomaly where many long-term casual or part-time staff received a pay increase as a result of the JobKeeper program.

To help address this, JobKeeper 2.0 has introduced a two-tiered structure to the minimum wage requirements which sees full time employees separated out from casual and part-time workers. Workers will be allocated into a tier based upon their average weekly work hours during February 2020. Using February as the test period ensures that workers who have had their hours cut as a result of COVID19 will not be adversely affected.

In addition to this tiered structure, the payment rates for both tiers will be reduced over the duration of the 6 month program. The intention of these reductions it to begin 'weaning' businesses off government support as the economy begins to restart and those businesses most severely impacted begin to restructure and strategize for the future.

The new rates will be as follows:

Period	Employee working >20 hrs per week*	Employee working <20 hrs per week*
28 September 2020 - 3 January 2021	$1,200 pf (before tax)	$750 pf (before tax)
4 January 2021 - 28 March 2021	$1,000 pf (before tax)	$650 pf (before tax)

** The 20 hour work test is with reference to the month of February 2020 (with some Commissioner discretion).*

Further detail of the changes as a result of JobKeeper 2.0 are not expected until the legislation is introduced to parliament in September, however, this initial guidance on the new program provides some surety to businesses continuing to suffer as a result of COVID19.

AUSTRALIAN UREA APPLICATION 'FULL STEAM AHEAD' DESPITE COVID SUPPLY RISK | GLOBAL FERTILISER OUTLOOK

Lisa Curtis
Assistant Marketing Manager
Rabobank

LOW global prices, long-awaited favourable seasonal conditions across most regions and a so-far unscathed supply chain will ensure urea application continues full steam ahead on Australian farms – despite COVID-19 supply risks – according to Rabobank's latest Global Fertiliser Outlook.

The semi-annual report said overall global fertiliser prices were either at, or near, 10-year-lows, with the plummeting cost of raw materials, growing production capacity and mediocre demand keeping prices of nitrogen (urea), as well as phosphate and potash down.

Report co-author, Rabobank agricultural analyst Wes Lefroy (pictured) said one of the key factors driving down prices was the falling cost of energy. The abrupt drop in fuel demand during COVID-19 lock-downs forced the price of natural gas down 46 per cent (UK NG ICE) and coal 11 per cent (ZCE Thermal Coal) – both critical to the production of urea and processed phosphates.

Australian urea application

The report said the bank expected Australian winter-crop planted area would increase by 26 per cent this year, up 12 per cent above the five-year average, boosting urea demand.

With La Nina conditions a possibility this spring, Mr Lefroy said, urea application would continue in earnest.

Domestically, local farmers were taking full advantage of reduced input costs – however the recently-released Global Fertiliser Outlook warned that COVID-19 had amplified the risk of isolated shortages and resulting price increases.

"Australia is heavily reliant on global imports and, in light of the pandemic, risks are higher than usual – any COVID-19-related interruption to freight may impact availability of urea during winter and spring, especially for orders at short notice," he said.

Shortages, caused by either freight interruptions or excessive local demand may cause local prices, and basis, to sharply increase.

Mr Lefroy said a higher-than-previously-expected Australian dollar had supported growers' purchasing power in recent months, but Rabobank expects the Australian dollar to weaken to 64USc over the next six months – taking some of the shine off the low global price for Australian farmers looking to lock in fertiliser contracts ahead of next season.

Low prices

With global nitrogen prices currently sitting at their lowest value since 2017, Mr Lefroy said lower cost of production, and ongoing low global demand, would likely keep prices down.

Indian suppliers are expected to increase ammonia and urea production in 2020 in response to increased domestic demand, reducing India's significant dependency on the international market. Coupled with low cost of production, this increased international supply is forecast to keep prices at lower levels during at least part of quarter three.

For phosphates, he said, the global outlook would be greatly influenced by input costs, but low commodity price levels and the low cost of raw materials may limit any price increases.

"With utilisation rates at current levels, cheap inputs and commodity prices not incentivising any extra demand, it is difficult to see much upside for phosphate prices on a global level for the next six months," Mr Lefroy said.
For potash, he said, regional prices were expected to be influenced by supply contracts in China and India, with their contract prices used as a reference for some potash importers in South America and Southeast Asia.

"With the main demand season getting closer, the prices of potash in these regions are expected to stabilise slightly above those ones locked on contracts," he said.

GOOD MAINTENANCE PAYS, IT DOESN'T COST!

Matthew Joyner
Machinery & Precision Sales
Boekemans Machinery
Dalwallinu

HARVEST is the culmination of a full year of hard work and great investment. We know harvest "windows of opportunity" are not always as wide as you would like, with weather and crop conditions having the final say on when the crop gets into the bin. Make sure you spend every available day harvesting, instead of recuperating because poor judgement resulted in an accident. Observe all Safety Instructions in the combine Operators Manual for a safe and profitable harvest season.

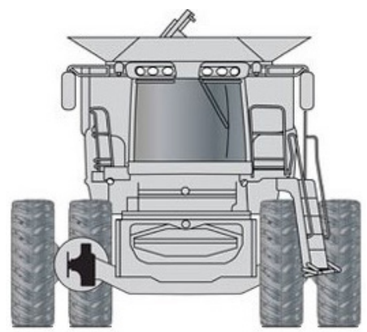
During harvest time it is easy to get in a hurry and perhaps neglect one or two "minor" maintenance items. Before long, more items may start to seem "minor", in an effort to get to the paddock a few minutes sooner. Then, a breakdown may be a reminder that no maintenance item is "minor". Not only will the repair be more costly than maintenance, it will be much more time consuming. Be sure to follow all the maintenance recommendations in your Operators Manual to enhance your combine productivity all season long.

Complete daily maintenance steps will be detailed in your combine's Operator Manual. Some checks should be made at the end of each day's use, preferably while performing daily cleaning:

- Check all drive chain and belt tensions
- Check the feeder chain
- Empty the rock trap
- Open the cooling system rotary screen an cooler elements to check for debris accumulation and restricted air flow
- Rotate the rotary screen to assure screen sections are not out of place, damaged or missing
- Confirm adequate tyre inflation

Additional checks are recommended to be performed prior to starting, when the engine is cooled to ambient temperature.

- Check the engine oil level
- Check coolant recovery tank level sight glass
- Check hydraulic reservoir level sight glass
- Drain water from the primary fuel filter water separator
- Confirm audible alarms and indicator lamps function properly on startup



Less frequent, but regular maintenance should include:

Use compressed air to clean debris from the alternator	Inspect or clean the engine air filter housing and element	Re-lubricate drive chains if previously lubricated

Have you, or did someone you know purchase a new combine in the last few years and continue to use it in much the same way as the machine it replaced? Many times operators don't fully realize and take advantage of modern features. As a result of not fully utilizing new features, the owner may not be receiving all the money from the money spent.

Many of the items suggested in this article can be completed by the owner when preparing for the season or the operator when starting a new paddock. Other adjustments, service procedures or repairs might be more effectively completed by your dealer's trained service technicians.

We highly recommend you contact your dealer about a pre-season combine inspection. It is a proactive way to ensure your combine and header will operate with the best possible performance when you need it.

Pre-season combine inspections services include a visual and functional inspection of your machine and should result in lower cost of ownership and higher resale values.

Benefits include:

- Increased productivity
- Less down time during the season
- Lower operating costs
- Improved fuel economy
- Documented maintenance
- Serviced by factory trained technicians
- Serviced with genuine parts, lubricants and filters

Few things could ruin an otherwise rewarding harvest more than a devastating combine fire. Spending some time each day keeping the combine clean and well-maintained is the best way to preserve harvest as a good memory, instead of something you would rather forget.

By nature, mature crops are dry and dirty, and are a source of considerable debris that can accumulate on harvesting equipment. During busy harvest-time, operators may not like taking the time to clean the combine daily. The most appropriate cleaning time is at the end of the day. Any debris that may be near a hot surface, or is possibly already a smoldering pile, is removed before it becomes a problem.

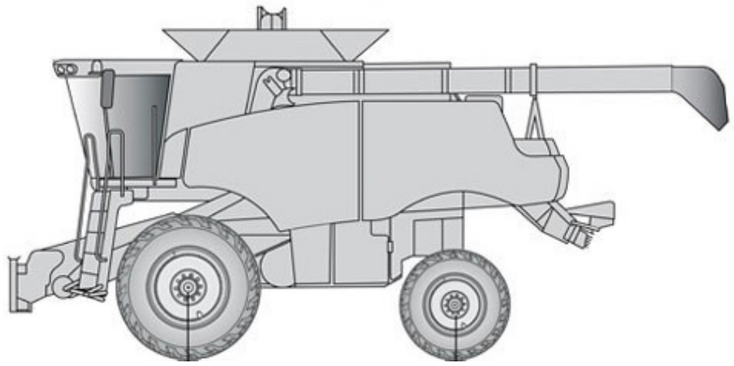
Attempts to perform only major, time-consuming cleanings on a less-frequent basis will likely require MORE TIME in the course of the harvest season, than to make a proactive commitment to devote a few minutes to cleaning on a daily basis. Cleaning time is also a good time to perform a basic visual machine inspection. Remember, "**it's not what you expect, it's what you inspect that counts**".

Some additional "food for thought". Modern, high-productivity combines are powerful machines, and along with power comes heat. Fire cannot start without heat and fuel. You cannot remove the heat from the engine, hydraulics and other hard-working systems, but you can remove the fuel source by keeping your combine clean.

Areas requiring special attention to keep combustible debris away from high heat are:

- The engine, specifically the exhaust manifold, turbocharger, muffler and exhaust pipe
- Hydrostatic pump, motor, hydraulic lines and tubes
- Brake and transmission housings
- Electrical components
- Engine drives and all moving parts
- Batteries and battery cables
- Straw spreader drive gear compartments

Equip your combine with at least two fire extinguishers, refer to your Operators Manual for suggested locations.



It's a good idea to have at least one water-charged extinguisher on your combine. However, use a water extinguisher only on crop debris. Water applied to an oil fire may tend to spread the flames.

Watch for fuel or hydraulic fluid leaks. Correct any fuel or hydraulic fluid leak immediately. Clean the machine thoroughly after any hydraulic fluid or fuel leaks or spills. Residual hydraulic fluid or fuel mixed with trash creates a very combustible mixture. This can make an accidental machine fire much harder to control.

For more information on machinery maintenance, contact Matt Joyner at Boekemans Dalwallinu on 0437 611 725.

IS INDIA A NEW MARKET FOR OUR MALT BARLEY?

Mae Connelly
Grain Marketing Consultant
Farmanco

KEY POINTS

- China's 80% tariff on Australian barley effectively blocks us from our biggest market;
- India has been suggested as a replacement malt barley market;
- The potential growth in Indian beer consumption, and therefore malt barley demand, is exciting…;
- However, the market will need to be developed from a low base and is expected to take years to reach a 500,000t target.

Introduction

China introduced an 80% tariff on Australian barley exports in May 2020. This effectively blocks us from exporting to China for the next five years that the tariffs could be applied. As Figure 1 shows, China usually takes around 70% of Australian barley exports. With China taking an even greater percentage of WA barley exports, this leaves us in need of new export markets.

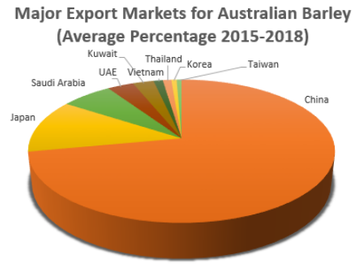


Figure 1: Major Export Markets for Australian Barley by Average Percentage 2015-2018 (Chart by Farmanco, Data sourced from AEGIC - https://www.aegic.org.au/australian-grains/barley/)

One new market that may provide some opportunity is India. There has recently been a change to Indian import biosecurity rules, where Australian barley intended to be used as malt can be treated with phosphine for fumigation. Previously, all barley imports from Australia had to be treated with methyl bromide as the fumigant. This chemical reduces grain seed viability, so it was not compatible with malting barley given the need for grain to germinate in the malting process.

This change to biosecurity protocols has been the result of long-term negotiations and is considered a big win as it applies only to Australian barley. With the loss of China, our biggest barley buyer, could India become a new significant export destination for our malt?

Australian malt barley supply and demand

Australia usually produces about 2% of the world's barley, but accounts for 30-40% of global malt barley exports. On average, the national barley crop is around 9 million tonnes (mmt), and usually about 2.0 to 2.5mmt of this crop is malt quality, although this varies significantly between seasons. National domestic demand is around 1.1mmt, leaving about 900,000t to 1.4mmt of malt barley needing export markets.

Beer consumption in India

Beer makes up only 25% of Indian alcoholic beverage sales, with hard spirits dominating the market. Per capita annual Indian beer consumption is 2 litres (L), which is much less than the Asian average of 57L. This makes India amongst the lowest in beer consumption globally, as Figure 2 shows.

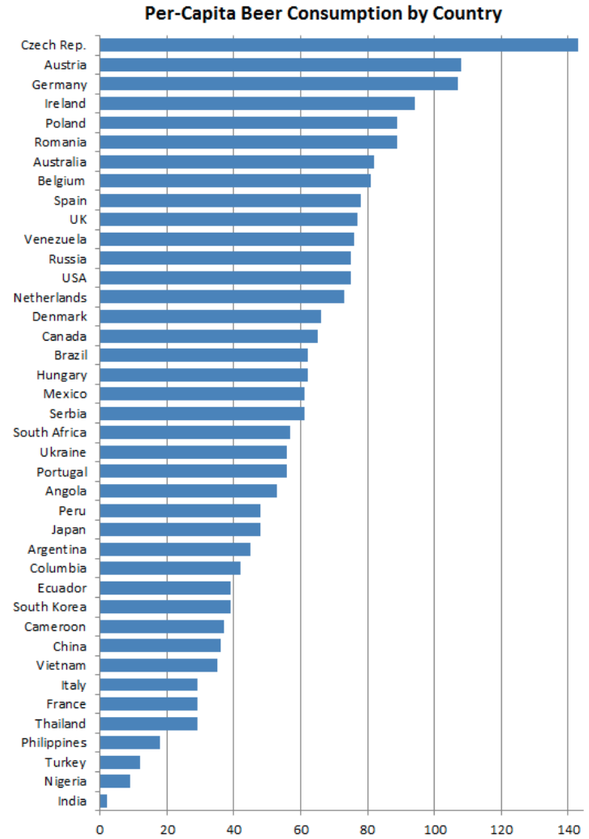


Figure 2: Beer consumption per capita by country (Average litres per person per year). Source: https://wolfstreet.com/2012/07/30/beer-a-reflection-of-the-world-economy/

Out of India's population of 1.4 billion people, only an estimated 220 million people can afford to drink beer currently. Spirits are cheaper and therefore more accessible to more Indians. Alcohol is taxed by volume in India, meaning that the tax is much less on a shot glass of a spirit compared to a pint of beer. Operating costs of beer are also high compared to spirits, due to unreliable transportation and frequent power outages making the fresh beer supply chain expensive and difficult to manage.

Beer consumption in India is dominated by younger people, especially in urban locations who are also increasingly affluent. By 2030, it is estimated that India's population will be 1.51 billion people (bigger than China), and that 20% of this number will be aged under 25. Apart from the affordability issue, beer drinking in India is increasingly becoming part of the culture.

Therefore, as India continues to develop, increase in size, and become more affluent, its youthful and increasingly urbanised population will have greater demand for beer.

It is only just starting to be acceptable for women to drink beer publicly in India. With Indian society rapidly becoming more "westernised", it is expected that by 2030 it will be acceptable for women to drink beer publicly in at least the urban regions of India. Having both genders drinking beer will further increase demand.

Indian malt barley production

India has been producing around 1.7mmt of barley each year, which comes to market annually in March. Of this, 85% is 6-row barley which yields around 6 tonnes per hectare (t/ha). The remaining 15% is 2-row barley which yields around 2t/ha. 95% of Indian barley is harvested by hand using a scythe. The variety is not recorded at delivery, and there is no sampling process so therefore no receival standards.

The quality of Indian "malt" barley is therefore more of a feed standard. Although pricing is going to be a limitation, there is demand from Indian malt houses to secure a supply of good quality imported malt barley.

PARTNER UPDATES

Barley farmers in India are less supported by government compared to farmers growing food crops such as rice and pulses. Water tables are falling in India, and issues with electricity infrastructure mean that less irrigation is available. The water infrastructure that is available is being directed by government to food production, rather than barley. This means that Indian barley production is likely to fall into the future, further increasing the requirement for malt barley imports.

Indian malt import demand

Austrade data shows India imported 431,000t of malt barley over 2018/19, while for 2019/20 (July 2019 to May 2020 only) it has imported 139,000t. The decline is due to COVID-19. Imported grain for malting is transferred into bags on arrival at port, and then transported by road to malt houses.

India has been purchasing mainly Argentinean Fair Average Quality (FAQ) barley to malt, along with some French grain.

Indian maltsters want to purchase good quality Australian malt barley however, even though there is now likely to be more available to them with the loss of the Chinese market, price is going to be an issue.

Challenges

India has a zero tolerance on many weed seeds. Until Australia can negotiate a tolerance or agreement on the weed seeds commonly found in our barley, probably the only malt barley that can actually be executed to India will be in containers rather than bulk shipments, as the quality is easier to manage. The solution that Australia is hoping to negotiate is some kind of weed seed tolerance, along with imports only being allowed at certain Indian ports where transport from the port to the malt house can be done without the risk of weed seeds escaping into agricultural land.

The nature of the Indian market is that it is price sensitive. Although we can provide better quality malt barley than our competitors, India is not going to have the inelastic demand that a country like Japan has.

The demand for our malt barley is not expected to be more than some container trade this coming harvest, so a lot more market development is required to build the trade up into the 500,000t level being targeted.

Conclusion

The recent change of Indian biosecurity protocols to allow Australian malt barley to be fumigated with phosphine rather than methyl bromide has opened up India as a potential malt barley market. However, it is not going to become a 500,000t market overnight, and will instead take several years to build up to this level of demand. Other issues, including a weed seed tolerance, still need to be negotiated between Australia and India.

India will therefore not be able to replace the Chinese malt demand immediately or in full, but they will be a helpful long-term market to reduce our significant reliance on China.

NEWS

FALL ARMYWORM IN WESTERN AUSTRALIA

GOVERNMENT OF WESTERN AUSTRALIA
Department of **Primary Industries and Regional Development**

THE fall armyworm moth (Spodoptera frugiperda) is a plant pest that can damage a wide variety of crops. Early detection and reporting of fall armyworm will help protect Western Australian plant industries and the environment.

Overview

The fall armyworm (Spodoptera frugiperda) is a plant pest that can damage a wide variety of crops. The larvae predominantly feed on crops and pastures from the Poaceae (grass) family, in particular maize, but also sorghum, forage grasses, turf grasses, cereals and rice. The pest can also feed on non-grass crops such as cotton, peanuts, vegetables and some fruit crops. Fall armyworm is known for its ability to disperse and migrate long distances, which enables it to exploit new habitats and expand its range.

Egg mass of fall armyworm.
Photo: James Castner, University of Florida

Mature larva of fall armyworm.
Photo: James Castner, University of Florida

Spodoptera frugiperda male.
Photo: Lyle Buss, University of Florida

Fall armyworm feeding on corn.
Photo: DPIRD

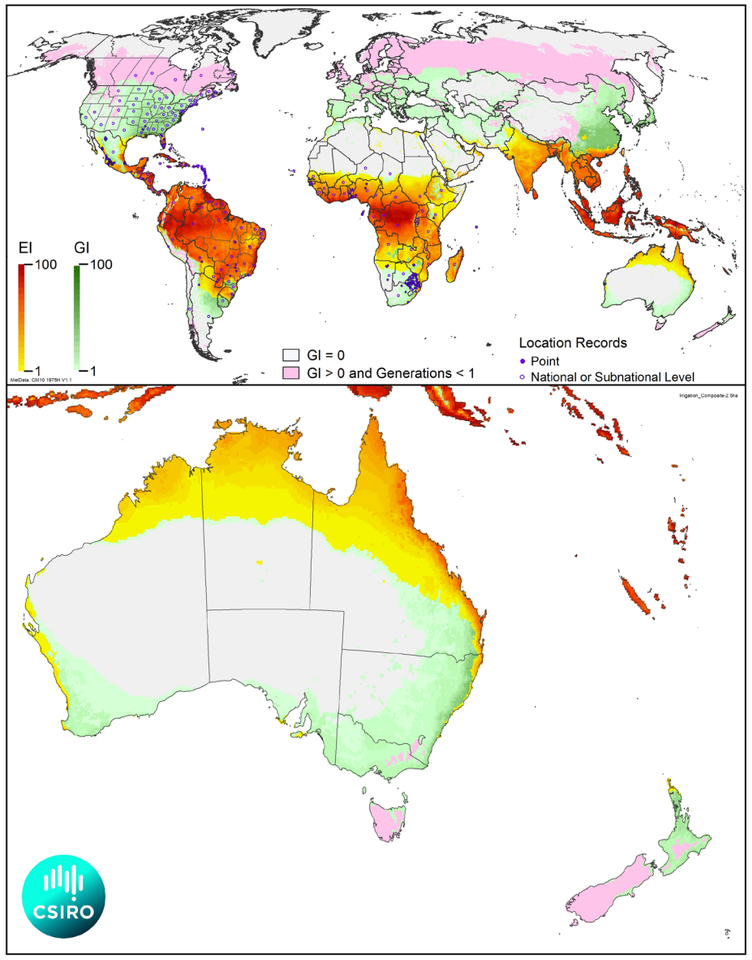
Fall armyworm typically feed on the vegetative parts of plants, as illustrated here on corn, but they can also feed on the head of grain crops and fruits or horticultural crops.
Photo: DPIRD

The Department of Primary Industries and Regional Development (DPIRD) is conducting surveillance on the spread of fall armyworm across north Western Australia.

Fall armyworm is a moth native to the American tropics. It has become a worldwide pest and was first recorded in Australia in January 2020 on two Torres Strait islands, followed by discoveries in Queensland (February 2020), and the Northern Territory (March 2020).

Fall armyworm was first detected in Western Australia in Kununurra, in the Kimberley region, in March 2020. It has also been found in several locations around Broome.

The Consultative Committee on Emergency Plant Pests (CCEPP) met on 24 February 2020 and concluded that fall armyworm is not technically feasible to eradicate—for National Management Group decision.



Map indicating modelling of the expected distribution of fall armyworm in Australia. Source: du Plessis, H., van den Berg, J., Kriticos, D.J. & Ota, N. (2017) Spodoptera frugiperda (Fall Armyworm). Pest Geography. CSIRO-InSTePP, Canberra. Used with permission. (©2017 CSIRO)

The expected distribution of fall armyworm in Australia has been modelled based on weather data over the past 30 years. The following map indicates areas where the insect is likely to survive year-round as well as areas where low winter temperatures prevent permanent presence.

Areas with suitable hosts would likely be invaded by this strong flying moth as conditions become suitable. This is the case in the tropical and sub-tropical areas elsewhere in the world where the insect survives year-round and moves both north and south as conditions become more suitable.

The global and Australian potential distribution of fall armyworm (Spodoptera frugiperda) modelled using CLIMEX above in the yellow-red-shaded areas indicate relative climatic suitability for establishment of persistent populations. The green-shaded areas suggest climatic suitability for seasonal migration during the warmer months. Pink areas are predicted to be unable to support a full generation of the moth.

FALL ARMYWORM IN WESTERN AUSTRALIA: MANAGEMENT IN GRAINS, CANOLA AND PULSES

Department of Primary Industries and Regional Development
GOVERNMENT OF WESTERN AUSTRALIA

A variety of grain crops are grown in Western Australia across different regions. In the north, fall armyworm is expected to persist year round, therefore grains grown in those areas are likely to be vulnerable throughout the production period. The potential of fall armyworm to migrate into the southern grain producing areas of Western Australia, such as areas of the Wheatbelt and Great Southern, and damage crops at various growth stages is not yet known. Growers should be vigilant and aware of this new pest when monitoring cereal, canola and pulse crops for pests.

Cereals, canola and pulses are considered secondary host plant for fall armyworm and may not be attacked if a preferred host plant, such as sorghum or maize, is available. Information about fall armyworm in cereals, canola and pulses can be found below.

Damage

CEREALS (WHEAT, BARLEY, OATS)
Kansas State University advises:

- The first sign of damage is “window-pane” injury caused by tiny larvae chewing on seedling leaves.
- The larvae, which are usually too small to be easily observed at this time, hide in or around the base of seedlings.
- Within a few days, the larvae become large enough to destroy entire leaves.
- Larvae increase in size at an exponential rate, and so do their food requirements.
- Later instars do the most damage, sometimes destroying entire stands, and are the least susceptible to insecticides.
- Without treatment, problems can continue until larvae reach maturity or until a frost kills caterpillars.

CANOLA AND PULSES (CHICKPEA, FABA BEAN, FIELD PEA, LENTIL, LUPIN, MUNGBEAN)
For seedlings, tiny larvae produce small window-pane damage to leaves, while larger larvae can cut the base of the plant. Mature plants suffer attack on reproductive parts. Later larval instars make larger holes, causing ragged leaf damage, and produce larger droppings.

Monitoring

Until we acquire a greater understanding of fall armyworm in southern grain growing regions of Western Australia, it is recommended that growers monitor crops for fall armyworm in a similar way as currently conducted for existing caterpillar pests which are similar in size and cause comparable damage to vegetative and reproductive parts of plants.

Fall armyworm feeding on a wheat plant in Kansas, United States.
Photo: Holly Schwarting, K-State Research and Extension

CEREALS (WHEAT, BARLEY, OATS)
Current monitoring techniques for existing armyworms include visual inspection for leaf damage and caterpillars at early growth stages and a combination of visual inspection and sweep netting for later growth stages. Thresholds are not well-established for existing armyworms in Western Australia.

For information on the commonly occurring armyworm in cereal crops, see DPIRD's webpages Diagnosing armyworm and Armyworm: economic considerations for management.

Fall armyworm is most active in the morning or late afternoon and may hide during other times of the day.

CANOLA
Crops from seedling stage through to bolting should be inspected for leaf-chewing damage caused by caterpillars. Cutworms and weevils may also cause chewing damage.

To monitor fall armyworm in flowering or maturing canola in spring, fall armyworm should be identified and counted via sweep netting programs, which are already occurring for native budworm and diamondback moth caterpillars.

Kansas State University advises:
- Examine plants along the field margin as well as in the interior because fall armyworm often moves in from road ditches and weedy areas.
- Look for windowpane damage in young canola plants or cut plants.
- Do not allow fall armyworms and cutworms to reduce plant numbers at the seedling stage.

PULSES (CHICKPEA, FABA BEAN, FIELD PEA, LENTIL, LUPIN, MUNGBEAN)
Crops from seedling stage through to bolting should be inspected for leaf chewing damage caused by caterpillars. Cutworms and weevils may also cause chewing damage.

To monitor fall armyworm in flowering or maturing pulse crops in spring, fall armyworm should be identified and counted in sweep netting programs, which are already occurring for native budworm caterpillars, which look very similar.

When to take action

CEREALS (WHEAT, BARLEY, OATS)
Thresholds for fall armyworm in cereals are not well-established. The common armyworms, which are known to cause damage to cereal crops in Western Australia, especially maturing barley, may pose a greater risk than fall armyworm, however growers should be vigilant and monitor for fall armyworm in their crops.

Kansas State University advises that if 25-30% of wheat plants have feeding damage, watch closely and apply a control if plant stands are threatened.

CANOLA
Thresholds for fall armyworm in canola are not well-established. Applying the threshold calculations for native budworm may assist in providing optimal management of fall armyworm

Kansas State University advises:
- Economic thresholds are not well established in canola, but damage is usually minor and yield loss minimal if the plants are healthy and growing vigorously and populations are not excessive.
- Producers should watch fields closely and only treat if larval populations appear to threaten stands, cause significant defoliation or begin feeding on seed pods.

Management

An integrated pest management (IPM) approach should be considered for protecting crops from infestations of fall armyworm.

Fall armyworm has entered an existing suite of pests and associated natural enemies, systems of production and pest management programs. Careful consideration needs to be given to any actions taken for fall armyworm control that may have adverse effects on management options already in place for other pests in grains crops, especially where natural control agents are used.

Natural enemies of other insects in the same group as fall armyworms that are already present in grains crops may also attack fall armyworm. There is already evidence of wasps parasitising fall armyworms in maize and sorghum in Kununurra. However, the effect of natural enemies with fall armyworm will become more clear as our experience with the pest accumulates.

An important management practice is to maintain farm biosecurity measures and implement good farm hygiene, and remove alternative hosts such as weeds and volunteer crop plants, especially during periods, and in places, where fall armyworm would not easily be able to survive year-round.

Other cultural practices, such as trap cropping, may reduce fall armyworm numbers. Understanding the value of the various cultural practices for fall armyworm management that have been tested overseas will require further study under Australian conditions.

In the short term, insecticides are available to help protect crops from fall armyworm. However, this insect has a reputation for developing resistance to insecticides. Resistance management strategies will therefore be required to maintain the effectiveness of insecticides for controlling this pest.

Application of insecticide will be most effective if applied late in the day and into the night, when larvae become more active and emerge from protected areas of the plant.

Insecticides available for use against fall armyworm includes those available under recently approved Australian Pesticides and Veterinary Medicines Authority (APVMA) minor use permits. Also available for use in WA, are any insecticides registered for use on crops for control of other insects if those products are considered effective on fall armyworm and provided they are applied according to label details. See section 87 'Use in accordance with label', page 53 of WA Health (Pesticides) Regulations 2011.

The following tables list the details of pesticides available with current permits in Australia for winter cereals (Table 1), canola (Table 2) and pulses (Table 3), and their specified application rates. Permits for other grains are also available. The permits should be read in conjunction with the relevant product label for information on withholding periods and other critical comments.

More detail on the permits is available from the information sheets found on the APVMA Portal. A direct link to each minor use permit PDF is provided in the tables below.

Note: New permits are regularly issued for fall armyworm control. Check the APVMA Portal for the most current information.

Table 1. List of current permits in Australia for winter cereals (as at 20 May 2020)

APVMA Permit	Insecticide	Rate of product/ha	IRAC* MOA** classification
PER 85447	Alpha-cypermethrin 250 g/L	88-96 mL/ha	3A
PER 85447	Alpha-cypermethrin 100 g/L	220-240 ml/ha	3A
PER 89279	Alpha-cypermethrin 100 g/L	240 mL/ha	3A
PER 89358	Gamma-cyhalothrin 150 g/L	30 ml/ha (barley and wheat)	3A

**Insecticide Resistance Action Committee **Mode of Action*

Table 2. List of current permits in Australia for canola (as at 20 May 2020)

APVMA Permit	Insecticide	Rate of product/ha	IRAC* MOA** classification
PER 89241	spinetoram 120 g/L	150 mL/ha	5
PER 89300	emamectin 17 g/L	450-700 mL/ha	6
PER 89358	Gamma-cyhalothrin 150 g/L	30 ml/ha	3A

**Insecticide Resistance Action Committee **Mode of Action*

Table 3. List of current permits in Australia for pulses (refer to permits for pulse types)

APVMA Permit	Insecticide	Rate of product/ha	IRAC* MOA** classification
PER 85447	alpha-cypermethrin 100 g/L	220-280 mL/ha	3A
PER 85447	alpha-cypermethrin 250 g/L	88-112 mL/ha	3A
PER 89241	spinetoram 120 g/L	300 mL/ha (ex. chickpeas) 200 mL/ha (chickpeas)	5
PER 89259	chlorantraniloprole 350 g/kg	70 g/ha	28
PER 89279	alpha-cypermethrin 100 g/L	300 mL/ha (check crops on label)	3A
PER 89279	Methomyl 225 g/L	200 mL /ha + wetter per label (soybean)	1A
PER 89279	Indoxacarb 150 g/L	400 mL/ha (soybean)	22A
PER 89300	emamectin 17 g/L -- D	450-700 mL/ha	6
PER 89358	Gamma-cyhalothrin 150 g/L	Check crop for rate	3A

**Insecticide Resistance Action Committee **Mode of Action*

For a list of registered insecticides for cereals, canola and pulse crops in Western Australia, including for other armyworms in cereal crops, see DPIRD PestFax team's Autumn winter insecticide guide and Winter spring insecticide guide.

For more information on fall armyworm in grain crops visit:

- DPIRD's PestFax newsletter article on Fall armyworm
- GRDC's Fall armyworm webpage

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CALENDAR OF EVENTS

Event	Date	Location
Mental Health Workshop	Thursday 20th August	Liebe Group Office
Gen Y Bus Trip	Thursday 26th August	Various locations
AgChats: VRT	Thursday 3rd September	Liebe Group Office
Spring Field Day	Thursday 10th September	MTS, Latham
Annual Dinner	Friday 16th October	Liebe Group Office
Chemical Safety Workshop	TBC	Liebe Group Office
HR Management & Contracts	TBC	Liebe Group Office