



#### **JOTTINGS FROM THE CHAIR**

Ken Drummond, SCF Chair

Salutations All,

There are many reasons to celebrate, commodity prices are up and the season has panned out to be a beauty.

Let us hope the weather stays on our side so we can sail relaxed into the upcoming festivities.

While the year presented some challenges, SCF has managed a busy program, Trial Review Day in March, Spring field Day in September and we also co-hosted

Livestock'20 with the WAPC, which was enormously well received.

There were also several field walks, which have proven to be invaluable, covering issue such as non wetting soils, alternative fodder and high rainfall cropping issues targeted for our region.

Nathan and his team are certainly making an important contribution to our industry and I thank them for their enthusiasm and hard work.

We all miss Ian Evans, he will always hold a special spot in the core of SCF and we wish him and his family, ALL GOOD THINGS.

Clare Webster leaves the board this year and we thank her for her wonderful work as the project ambassador for the Future Farmers Student Connect project.

Welcome Alaina Smith, our newest board member, her wealth of farming and research knowledge will be much valued, bless you for joining the team.

And a big thank you to all our volunteers, board members and those of you that never hesitate to raise a hand when required, your contributions are not unnoticed and are greatly appreciated, you are fantastic members of our community.

Wishing you all a happy and safe harvest, a Merry Christmas and headache free entry to 2021.

Remember the small things.

Ken Drummond

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CEO REPORT Nathan Dovey, SCF CEO

Hello all,

We are at the pointy end of 2020, and what a challenging year it has been for everyone. It sounds like most of you are well into harvest now and I am hearing reports of better than expected canola yields. This is excellent news since canola was the poorest looking crop for most of the year, after the dry and windy start. The statewide crop reports put out by GIWA are also reporting higher than expected yields for all crops, across WA.

Back in October, we had our last major event of the year; Livestock'20, which was co-hosted by SCF and the WA Producers Cooperative (WAPC). Thanks again to the Slade family for hosting day one and all SCF & WAPC staff for their efforts over both days, especially Sam

Jeffries who was convening her first major conference. At least two members commented that Livestock'20 was the best SCF event they had attended. There won't be any events for a while, because we will all be busy harvesting crops or trials and hopefully followed by some holidays. The next major event is likely to be the GRDC Albany Port Zone Crop Updates on the 3rd of March. The updates will be held at the Albany Entertainment Centre, please make room in the calendar for this event because there are some excellent speakers arranged.

I want to take this opportunity to thank all SCF staff for their efforts in 2020, managing our trials and events programs. The transition from Christine to myself as CEO has been as seamless as possible, and this is due mainly to the staff's willingness to tackle any task I put in front of them. In the last couple of months, SCF staff have applied for five different grant applications which are being assessed right now. We will let members know as soon as possible if we are successful in obtaining some or all of the grants.

We recently had our first board meeting as a new board after the AGM on October 9. I want to thank Clare Webster and lan Evans, one last time, for their contributions to SCF and also welcome new board members Rebecca Williss and Alaina Smith. Rebecca has also taken on the crucial task of the Finance Committee chair, which is much appreciated by everyone. I would also like to thank Ken Drummond for being an excellent chairperson to me, in my first year as the CEO of the SCF group. As you all know, Ken is hugely community-minded as well being an excellent sounding board. Our board currently has seven people serving SCF, but we can have up to 10 if needed. We would love another farmer member and an industry-independent to join us to ensure we are capturing the opinions of all SCF members and stakeholders. If you would like a confidential chat about joining the SCF board, please contact myself or Ken Drummond.

I wish members and sponsors all the best for the rest of 2020. Have a happy and relaxing Christmas period and I hope you all get to do some of the things you love, other than farming!

Kind Regards,

Nathan Dovey

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Stirlings to Coast on these platforms and visit us @ scfarmers.org.au:











In 2019 as a part of the GRDC funded ripper gauge project SCF established a trial site in Tenterden to evaluate the continued effects that deep ripping, shallow discing and plozza ploughing would have on a forest gravel soil type. In the first year after amelioration, the site was planted to barley, with harvest results indicating no significant differences between any of the treatments. There was however a 200-300kg penalty for intensive tillage from ripping or ploughing compared to shallow discing or the untreated control.

This has been seen again at harvest this year with no significant differences between any treatments. All treatments yielded around the 2.46 t/ha mark in canola with the Horsch Tiger Ripper yielding highest at 2.49 t/ha and the plozza plough with the lowest yield at 2.43 t/ha. With a short 4-year cropping history and high gravel content, the lack of compaction and non-wetting resulted in no benefit from either ripping, ploughing or discing as an amelioration tactic.

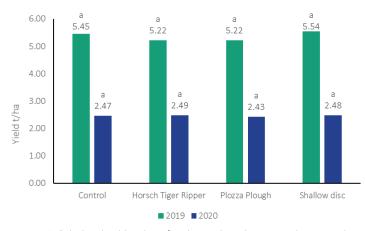


Figure 1: Calculated yields (t/ha) after deep soil amelioration techniques in barley in 2019 and canola in 2020 for the Ripper Gauge project funded by GRDC.

Table 1: Satelite NDVI data taken at four different dates in 2020. Numbers followed by the same letters are not significantly different (P=0.05)

Treatment	20/06/2020	21/07/2020	5/09/2020	29/10/2020
Control	0.48a	0.76a	0.68a	0.45a
Horsch Tiger Ripper	0.47ab	0.74a	0.70a	0.43a
Plozza Plough	0.45b	0.74a	0.69a	0.43a
Shallow disc	0.47a	0.75a	0.70a	0.45a

#### Ripper Gauge Variation in 2021-22

As some members may recall, the Kojaneerup ripper gauge trial site suffered significant wind erosion damage in the first year of the trial in 2018. Unfortunately, this was not an uncommon occurrence for ripper gauge demonstration sites located across the WA Wheatbelt in 2018-20. Based on these results, the GRDC would like Stirlings to Coast Farmers (SCF), and other grower groups, to investigate the option of deep ripping post-seeding when the soil has higher moisture and less risk from wind erosion. The down-side, of course, is the damage done to established plants and whether or not that leads to a yield reduction at harvest time.

SCF will manage one trial site in 2021, that will have three different post-seeding ripping treatments compared to ripping pre-seeding. At the 2018 SCF Spring Field Day, Andrew Fowler from Esperance described how he effectively deep rips post-seeding in their farming system. The objectives of the demonstrations will be to quantify the loss of yield (if any) at the three different post-seeding times and evaluate the logistics of deep ripping at this time in the growing season. Deep ripping after seeding could be a viable option for fragile, erosion-prone soils in our region.

SCF have funding to complete one site in 2021, and we will also monitor the results for the following season. If you are interested in hosting this trial research, please contact Phillip Mackie or Nathan Dovey at SCF to discuss.

Results from the Goad's (Kojaneerup) sandplain ripper gauge site were not available at the time of writing this article.







In 2020 SCF started a project with funding from Meat & Livestock Australia (MLA) looking at alternative forage crops for southern WA. The project will run for three years, and SCF aim to measure the benefits to livestock carrying capacity and livestock weight gains from crops like Pallaton Raphno, Sorghum, Millet and long-season Canola. The 'alternate' forage crops will be compared to traditional feed sources such as dry pastures and crop stubbles.

One of our 2020 demonstration sites is being hosted by the Pyle family at Manypeaks. Brothers Tim & David planted a 45ha paddock to new crop Pallaton Raphno on September 2nd after seeing a demonstration crop grown locally in 2018. The Raphno crop can potentially be grazed multiple times depending on summer rainfall, grazing pressure and pest management. Tim sprayed for diamond back moth (DBM) on November 2nd with Affirm and applied 100L/ha of Flexi-N a day later. Despite the insecticide application, there were still signs of damage from the DBM on December 3rd.

SCF researchers took biomass cuts of the Raphno paddock and the neighbouring ryegrass paddock that was cut for silage on October 15th. On December 7th, SCF collected plant tissue samples to test the nutritional value of the feed sources. The Raphno will be grazed until all leaf area has been removed. After a grazing event, a sub-sample of the lambs will be weighed to measure weight gain from each crop. It is hoped there will be multiple opportunities to graze the Raphno paddock in 2021, and SCF will also be measuring the benefits to the Pyle's mixed farming system.

"We have spent a lot on this crop when you consider the soil amelioration required to break up the Kikuyu pasture and the costs of the seed itself," said Tim. "When you calculate how many tonnes of pellets we could have bought for the same money, there is some pressure on this crop to deliver benefits to our enterprise."

A glance at the closest SCF rain gauge, highlights how much rain has been received since early August.

Table 1: Summary of the rainfall since the 3rd of August, 2020 at John & Christine Howard's GoannaAg digital rain gauge located at the Drawbin and Pfeiffer road T-junction.

Period	Rainfall (mm)
The 3rd of August to the 2nd of September	129.8
The 2nd of September to the 1st of December	149.6
Total rainfall	279.4

The rainfall received since early August will provide an excellent test of Pallaton Raphno's ability to grow livestock feed in the Manypeaks region. The control paddock is a ryegrass pasture that has re-shot since being cut for silage on October 15th. Biomass cuts and plant nutritional analysis will be carried out on both paddocks to make comparisons between feed quality as well as quantity. We look forward to sharing the full results from this demonstration site in the 2020 SCF Annual trials review booklet.



Figure 1: Drone image of the Pyle's Pallaton Raphno crop on December 3rd, 2020 before 1500 lambs were put into the 45ha paddock. The cross-bred lambs had an average weight of 42.5kg when they entered the paddock.



Figure 2:Tim Pyle closely inspecting his Pallaton Raphno crop sown on September 2nd, 2020. Tim is looking forward to calculating the lamb's growth rate compared to the paddock of ryegrass regrowth next door, that was cut for silage on October 15th.







Many members would be well acquainted with the challenges of waterlogging in the high rainfall zone (HRZ) and the overall impact it has on final grain yield production. Whilst there are solutions available to growers to manage waterlogging on-farm such as simple surface solutions (raised beds, evaporation basins, & interceptor drains)

right through to sub-surface options (slotted pipe, mole drains & pump-based solutions), very little research has been undertaken recently to determine whether a positive return on investment can be achieved from sub-surface installation solutions.

In early 2020, SCF was successful in a tender for a GRDC project to host a Sub-Surface Water Management (SSWM) demonstration site in the Albany Port Zone. This investment will aim to assist growers in making informed decisions around the installation of drainage to reduce the impacts of waterlogging on crop production areas and overall farm profitability.

Located at the Preston family farm in West Cranbrook, growers and members will have the opportunity to join us in the journey of implementing a sub-surface drainage solution (slotted pipe) and take advantage of a wide range of resources and field walks planned. Measurements will be collected over multiple years (2021 to 2023) to give growers a better understanding of the improvements in yield and time to return on investment, with key learnings presented in 2024.

Data, such as the cost of implementation, water movement, plant establishment, biomass and yield will be collected from within the 'drainage zone of influence' and compared to a region outside of this zone to simulate both drained and undrained scenarios, side by side.



Growers will have access to a live installation demonstration in early 2021 with installation contractor Drainage Downunder, followed by training seminars, workshops and materials covering dedicated topics such as:

- The regulatory requirements to drain land Registering a "Notice of intent to drain" (NOID)
- Methods of monitoring waterlogging & measuring drainage success – tools for the assessment and monitoring of waterlogging on-farm (satellite imagery & yield mapping)
- Steps to implementing effective sub-surface drainage solutions such as:
  - Contractor selection
  - Sub-Surface drainage options types of drainage available
  - Planning for success drainage design considerations and solutions
  - Maintenance requirements
- Steps to calculate a return on investment from implementation.

A second demonstration site is also being set-up in the Esperance Port Zone by South Coast NRM, and key learnings/results will be shared between both project sites.

### JOIN US ON THE JOURNEY!

Are you interested in learning more about sub-surface drainage? Not sure where to start, or what is involved? Come join SCF on the journey!

Throughout the next four years, SCF will be hosting a range of interactive workshops & demonstration days and producing a wide range of fact-sheets and videos that help guide our farming members throughout the whole sub-surface drainage process from start to finish.

To register your interest in attending these events or to receive the information materials, please contact Philip Honey on 0428 768 589





Over the last couple of weeks, both Stirlings to Coast Farmers and the WA Producers Cooperative have been busy installing several member-purchased weather-station equipment throughout Amelup, Kojaneerup, South Stirlings, and Takalarup.

Utilising the Davis Vantage Pro Sensor Suite, these members are now receiving up-to-date climatic information every 15 minutes, readily accessible via a mobile application or the Davis WeatherLink website. The free Davis WeatherLink platform records and reports on wind speed & direction, solar radiation, temperature & humidity, rainfall, and also soil moisture/temperature at a single depth.

Installation is relatively simple, with the weather-station packs including everything that you need to get started, including the tripod, main weather sensor suite, a small soil moisture/temperature station and the 3G communications box to send the data to the cloud. Stations are driven into the ground utilising 3 long ground screws and are also securely installed against a star-picket for added safety in strong winds.

The Davis stations are currently heavily discounted for SCF members, with pricing starting at \$2000 + GST, with a small upfront fee for installation, and a minimal yearly data upload (Telstra) fee. Some members are even sharing station purchases with their neighbours!

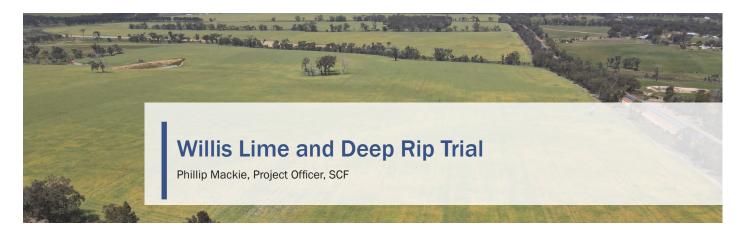
These stations are also able to transmit weather information into the DTN cloud, allowing stronger accuracy forecasting models to be created throughout the region. A discounted, optional hyper-local forecasting package is available for \$300+GST per annum, offering 5x (36-hour & 15-day) forecasting points anywhere within the SCF member catchment. Additional tools such a weather-condition based forecasting can help suggest optimal spray windows based on delta-T, wind-speed, forecasted rain, is all included in the DTN WeatherSentry forecasting package.

For more information about weather monitoring services, station options and installation services, please contact Philip on 0428 768 589.









SCF staff have been busy harvesting trials over the past few weeks, with our lime incorporation trial at South Stirlings being one of the first. This trial was established last year to look at the effect that ripping with inclusion plates has on moving surface-applied lime into the acidic subsoil of a deep sand duplex. The treatments also included the opportunity to test high rates of farm-sourced lime against equivalent rates of commercial lime when accounting for the neutralising value. The treatment list and the 2020 canola yields and 2019 barley yields are summarised in the table below.

All treatments yielded significantly more than the control plots in 2020 at a confidence interval (CI) of 90%. However, at the scientific standard CI of 95%, the yields are not statistically different from the control, which is a similar result to what we saw in 2019. Simply put, it means that we are 90% confident that there is a significant difference between the yields of the treatments and the control, but we cannot be 95% confident that they are different. For the layman, 90% is a reasonable level of confidence, and I am sure that farmers reading this believe a 420kg/ha increase in canola yield would be useful to their business! Furthermore, the yield increase from the deep ripping and liming combined is 560kg/ha and 520kg/ha for the Boyanup

and Willis (Farm-sourced) lime, respectively. Interestingly, the deep ripping without lime yielded the same as the deep ripping and lime treatments.

Grain samples from each treatment were collected but have not been analysed yet for oil content. Based on the results from the rest of the paddock, the oil percentage will be over 48% which means we are nudging \$700/tonne for (CAN1) canola. For the sake of the exercise, we will use an on-farm canola price of \$650/tonne to calculate the increased revenue per hectare from each treatment. See table one below for a summary.

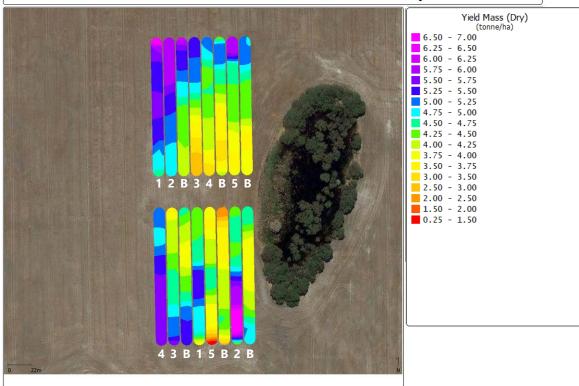
#### Conclusion

2020 was the second year of this trial, and the ripping and lime treatments have maintained yield advantages over the untreated control. This is a pleasing result for the Williss family after investing significant money in liming and deep ripping this paddock. Stirlings to Coast Farmers will continue to monitor this trial to determine the longevity of the yield improvements from deep ripping and lime treatments. A more comprehensive report will be included in the SCF 2020 Annual trial review booklet.

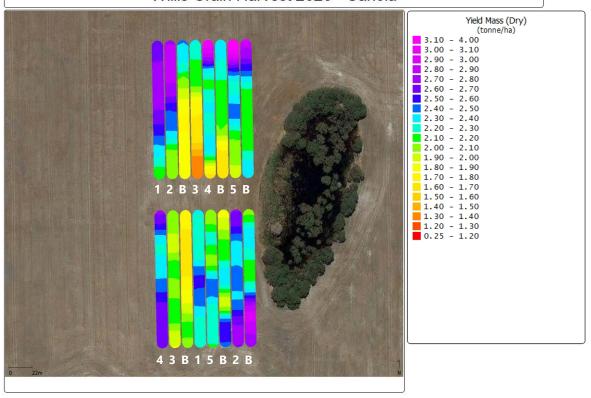
Table 1: Grain yields in tonnes per hectare (t/ha) from the South Stirlings Lime by Ripping trial hosted by the Williss family. The final column calculates the 2020 revenue per hectare based on a canola price of \$650/tonne. Means followed by the same letter do not significantly differ (P = 0.05 or 0.10), LSD)

Treatments	2019 Barley Yield (t/ha)	2020 Canola Yield (t/ha)	2020 Canola Yield (t/ha)	2020 Canola Revenue (\$)/ha	Increased 2020 Revenue (\$)/ha compared to control
Confidence	95%	95%	90%	N/A	N/A
Interval					
Deep Rip. Nil Lime	4.93a	2.46a	2.46a	\$1599	+\$331
Deep Rip + 5t/ha	5.49a	2.51a	2.51a	\$1632	+\$364
Boyanup Lime					
Deep Rip + 12t/ha	5.23a	2.47a	2.47a	\$1606	+\$338
Willis Lime					
Nil Rip + 5t/ha	4.29a	2.37a	2.37a	\$1540	+\$272
Boyanup Lime					
Control- Nil Rip,	4.40a	1.95a	1.95b	\$1268	\$0
Nil Lime					

#### Willis Grain Harvest 2019 - Rosalind Barley



#### Willis Grain Harvest 2020 - Canola



Figures 1 & 2: Yield mapping data collected for Rosalind barley in 2019 & 2020 to evaluate the effects of deep ripping, spreading commercial lime as well as on-farm sourced lime and combinations of liming and ripping. The colour scheme on the right indicates the yield value throughout each plot with treatment numbers in the figure corresponding to the relevant treatments in the table below.

-	· =
Treatments	Key
Deep Rip + 12t/ha Willis Lime	1
Deep Rip + 5t/ha Boyanup Lime	2
Control- Nil Rip, Nil Lime	3
Deep Rip. Nil Lime	4
Nil Rip + 5t/ha Boyanup Lime	5
Buffer	В







What an amazing two days the Great Southern Livestock'20 was! The themes of diversification & value adding by accessing technology as the future for WA livestock farmers made for a very informative field day and forum.

Held over the 22nd and 23rd of October and co-hosted by SCF and the WA Producers Co-operative, the program was jam-packed with the latest R&D in the Livestock industry and included a mix of practical demonstrations and informative presentations and forum sessions.

Day one included field displays and demonstrations on-farm at the Slade family's West Kendenup property, Glenridge Park, on the Thursday 22nd. A highlight of this day was the butchering display from MLA butcher Rafael Ramirez which generated a lot of interest and discussion! Also on offer in the afternoon were displays and demonstrations from Barenbrug, Pivotel, AxisTech, Gallagher, Clipex and Hitachi.



Day two moved to the Albany Entertainment Centre and was opened by the Honourable Alannah MacTiernan MLC. The program was filled with topical presentations and discussions on a range of Livestock based themes - from block chain and working in Co-operatives, to digital agriculture, sheep breeding, pasture utilisation, farm finance and farm water security, there was something for everyone. Attendees were also able to hear from across the ditch with Murray Taggart of the NZ Alliance Group 'zooming' in to discuss the success of the Group's Co-operative and how working collaboratively together has driven direct benefits on members' farms.

Finishing off a great day of Livestock'20 was a discussion panel talking about the 'grass ceiling' facing young farmers trying to get into farm ownership. Is 40% equity required by banks fair? Stamp duty? More profit share arrangements? And the fact that it is hard to attract young farm managers just on wages were just some of the points raised in this discussion session.

SCF and WAPC would like to thank everyone who helped make this event a fantastic and informative two days, with special thanks to our Main Event Sponsors - Meat & Livestock Australia, WA Livestock Research Council, Pivotel and the Department of Primary Industries and Regional Development – DPIRD for their generous support.

Papers and PDFs from some of the presentations will shortly be available for downloading on the Event website - www.scfarmers.org.au/livestock20.

































What a year this has been! It might have taken us a bit to get going once restrictions came in, but I am happy to report that the Student Connect program has finished strong.

Mount Barker students recently managed a smart farm visit to Slade's just before Livestock 20. Phil Honey introduced the students to some of the equipment on the farm, such as weather stations, soil moisture probes and how that data can be used to make informed and timely decisions. Andrew Slade provided an insight on how the technology is assisting their operation and where they want to go in the next few years. Following this the students wandered out into the field to view a demonstration site of different mixed pastures and Phill Mackie gave a drone demo of how paddock imagery can be used as a sampling technique to analyse NDVI and ground cover.

The event of the year, Livestock '20, went off without a hitch and Denmark Ag managed to bring some students to the on-farm field demonstrations on Day 1. They arrived in time to hear the MLA update by David Beatty and watch the lamb break down by the meat specialist Rafael Ramirez before heading out to check out the demonstrations and displays. There were plenty of



demonstrations to see with Clipex, Barenbrug, Axistech, Gallagher, Hitachi and Pivotel all showcasing varying technologies and products. Overall, there was a great turnout and many opportunities for networking. Students thoroughly enjoyed an afternoon out of the classroom as did their teachers, I hear.

Thank you to the students who took the effort to apply for the SCF Scholarship. The standard was once again high making the decision process difficult. Recipients are to be announced at their graduation ceremonies, respectively. Congratulations to Jas Cugley and Toby Manson as the recipients from Denmark Agricultural College and Great Southern Grammar, announced at their Graduation ceremony the other week.

Ag career info sessions have been held at Denmark and Mount Barker. I would like to thank all the speakers for sharing their experience and passing on some advice to the next generation of Ag professionals. Speakers included Kristine Rayner and Carla Milazzo DPIRD, Rodney Scott CBH, Simon Bigwood and Ian Donaldson Rabobank, Mark Ladney Summit Fertilizers, Scott Sedgwick Nutrien, Hannah Gaffney Elders, Phill Griffiths PF Olsen, Phil Honey and Phill Mackie SCF. Once again thank you to all speakers, your advice and experience is invaluable to the students and we really appreciate the time you took to share your personal career journeys.

Unfortunately, this is the final year for our Future Farmers Student Connect program made possible through the Federal Government's National Landcare Program Smart Farms Small Grants. We have thoroughly enjoyed partnering with the local schools, WA College of Agriculture Denmark, Mount Barker Community College and Great Southern Grammar and we look forward to possible future collaboration, when the opportunity arises









Mount Barker Smart Farm visit.









Schools Ag Career info sessions Denmark and Mt Barker.

# Have a quality harvest this year - don't compromise your health!

Farmer health, wellbeing and safety are often neglected when facing the pressures of harvest. Simple safety measures can dramatically reduce the risk of injury and illness. When planning for harvest, take time to integrate these measures to protect the health, wellbeing and safety of you, your family and other farm workers.

As harvest approaches, it's crucial that all machinery is checked to ensure a smooth and timely harvest. But simply mending the header and servicing the tractor won't cut it if you want to protect the key component – you. Considering your health, wellbeing and safety is so important with the upcoming long hours and pressure to get the job done.

Take some time to protect yourself against injury and accidents by planning ahead with these tips.



#### Check your tractor cabin to make sure you've got the right filter in place.

Harvest can be a dusty business so make sure you have an appropriate – and clean – dust filter fitted into your cabin. These should be recharged every 6-12 months (or after 400 hours of service).

#### Check the safety of your equipment.

Does your auger have a guard in place, and how about the PTO? These two pieces of equipment are the main cause of injury. Also consider the risks unguarded equipment has for children and pets – they don't understand the equipment you use or how dangerous it can be.





#### Plan a healthy harvest diet.

Sitting in the tractor or header all day, you won't need to eat as many calories as you usually would. Have a good breakfast of oats, barley- or bran-based cereals, grainy breads, eggs and/ or cooked veggies. Don't skip meals and avoid snacks that are high in sugar, salt and saturated fats

#### Avoid dehydration.

Have plenty of fresh water on hand and plan to drink a few litres of water a day. Doing this will also help avoid constipation that can result from sitting for hours on end.



#### Exercise.

Sitting in a bent or rotated position puts you at increased risk for of spinal and joint pain. Plan to make regular stops to get out of the cabin and walk around. Here are some exercises you can do in the cab:

- Point your toes and use your big toe to write your name in the air.
- Do some marching on the spot (while sitting down).
- Sit up straight and gently twist side to side.
- Arch your back then straighten up tall.

They might sound a bit silly, but it's better than a sore neck or lower back pain!

#### Manage fatigue

Your body needs sleep to regenerate, refresh and repair. Despite the pressure to get the crop off, you need to plan your sleep so that your mind and body can function properly. Don't forget the impact an accident or injury can have on your family and business. However, with the proper planning nearly all this can be avoided.



#### **ENJOY AND A SAFE HARVEST TO ALL.**



## Eyes in the sky focused on delivering easy to use on ground solutions

We have recently joined forces with Australian company Data-Farming in an exciting partnership that will grow and expand the value of easy to use precision agriculture (PA) tools. As a result, Summit clients now have free access, through the SummitConnect portal to 10 x 10m NDVI (normalised difference vegetation index) images. Updated at least every 5 days, these satellite generated images can provide growers with new ways of reviewing paddock performance.

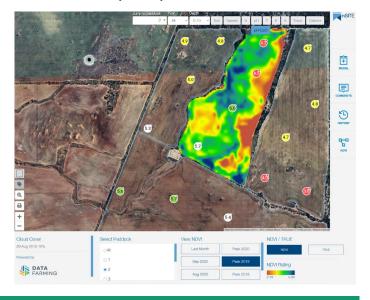
Large scale NDVI mapping can be particularly valuable for growers and Summit Area Managers, as problem areas in paddocks can easily be identified and followed up for further investigation by Summit inSITE Soil & Plant Analysis. It can also be useful in saving time and money by knowing where to best target fertilizer applications.

For us, combining laboratory analysis data with remote sensing information is a logical step. The days of bulk sampling are over. We also share a common philosophy with DataFarming, in regards to making accessing and benefiting from PA technology as easy as possible and in doing so, break down the barriers to grower adoption. Usefulness should be at the core. We are looking to simplicity over 'bells and whistles'.

Like us, DataFarming work closely with APAL labs, which further integrates the services for farmers who use Summit.

For further information, get in touch with your local Summit Area Manager:

- Andrew Wallace, Albany (East), 0427 083 820.
- Mark Ladny, Albany (West), 0498 223 421.





### **Carbon Calculator comparison for growers**

GrainGrowers recently released a research report comparing the various Carbon Calculators used to measure greenhouse gas, or carbon dioxide equivalent emissions on-farm.

The report found there was significant variability in the results produced by each calculator depending on farm location, crop type and farming practice.

This finding indicates that these calculators need improvement before farmers can be confident in assessing their net emissions. Brett Hosking, GrainGrowers Chairman, explains why the report was undertaken:

"Growers need practical tools that will work on-farm. Many growers want to understand their farm emissions and the carbon they store, which is why carbon accounting and measurement tools need to be consistent, accurate and fit for purpose." Five carbon calculators were reviewed in the study, including government-funded and commercial products that could be applied to cereal, pulses and oilseeds.

These calculators were then tested using data from two farms located in Western and Eastern Australia.

Of the models reviewed, only one took soil carbon changes into account. This meant that the report could only show total emissions (in t/CO2-e/year) and net emissions as stored carbon could

not be calculated.

The results of this study demonstrate the variability in the different models used in Carbon Calculators, which needs to be further improved to remove ambiguities around these areas. Ensuring growers are also made aware of the strengths and limitations of each calculator was also highlighted in the report as an imperative.

"Growers need to see both sides of the ledger. It is important to know where emissions are coming from, and equally important to know what is being stored," said Brett.

It is hoped that the report will enable growers to get more of an understanding about the availability, function, and shortcomings of current carbon calculators.

The full Carbon Calculators report is available at graingrowers. com.au and GrainGrowers are continuing work on ensuring growers have useful tools that suit Australian farming. GrainGrowers are a great resource for growers with innovative projects, leadership programs and latest news. Membership to GrainGrowers is free to all grain growing producers. For more information on the benefits of joining GrainGrowers, contact Alan Meldrum on 0427 384 760 for a chat.





### Growing appetite for plant-based meat substitutes brings opportunity for Australia's grain, oilseeds and pulse sector

The consumer appetite for plant-based meat substitutes has emerged as far more than just a fad over recent years, and Australia's grain, oilseed and pulse producers could be well placed to capitalise on this rapidly-growing market segment, according to a new report.

In newly-released research Getting Granular with Plant-Based Meat Substitutes: Opportunities for Grains, Oilseeds, and Pulses, agribusiness specialist Rabobank says while still in its infancy, Australia's plant-based meat substitute market could offer opportunities for local growers if exports can also be captured, and if both local and international markets value Australianorigin plant proteins.

As a net exporter of cereal grains, oilseeds and pulses, the report said, Australia has more than enough plant-based protein to meet the relatively small local market demand for plant-based meat substitutes, but the ability to capture opportunities, both domestically and globally, would depend on the type of plant protein consumers demand as the industry evolves.

Currently, soy and wheat products are the dominant ingredients used in Australian and global plant-protein offerings, with niche products – such as chickpeas, black beans, mung beans, lentils, black-eyed beans, rice and buckwheat – comprising just seven per cent of the market.

But it was these specialised crops that held the most potential to capitalise on the plant based meat substitute movement, Rabobank senior grains and oilseeds analyst Cheryl Kalisch Gordon said.

"Underpinning our expectations of continuing demand growth in the plant-based meat substitute segment over the next decade is that consumers will be more discerning in the choice of products that meet and hold their interest, and so manufacturers will need to expand the range of plant protein ingredients they use," she said. However, currently around 50 per cent of the plant-based meat substitute products Australians purchase at retail level are imported offerings ready for consumption – meaning there are no local plant proteins included.

"For locally-manufactured plant-based substitutes, the majority of wheat proteins used are local, but overall most of the plant proteins are imported as isolates, concentrates, textured proteins or partially-transformed ingredients," Dr Kalisch Gordon said.

This reliance on imports, she said, was in part due to the small local soybean crop, but also limited local capacity for commercial pulse fractionation – the technology that breaks pulses into protein, starch and fibre components for use as ingredients in food processing.

Dr Kalisch Gordon said faba bean and lentil fractionation capacity had been built and recently begun production in Victoria, while fractionation of lupins was being trialled in Western Australia.

Export pathways, she said, would be key to this processing success – with a strong local supply of lupins, faba beans and lentils and only a relatively-small domestic demand base for plant-based meat substitutes at present.

Read the full article at:

https://www.rabobank.com.au/media-releases/2020/201105plant-based-meat-substitutes-brings-opportunity-for-au-grainoilseeds-and-pulse-sector/

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### Why you should soil sample

At CSBP we recognise that as a farmer your soil is your biggest asset and the key to maximising crop and pasture growth and profitability.

Soil testing accurately measures the levels of macro nutrients such as nitrogen (N), phosphorus (P), potassium (K) & sulfur (S) in the soil as well as providing an indication of other factors that can affect crop performance such as pH, organic carbon, electrical conductivity and overall soil health.

Using geo-referenced soil test points ensures that you can re-visit the same sites each time a paddock is sampled. This way over time you can monitor nutrient trends as well the effectiveness of your fertiliser program. The easiest way to plan your soil testing points is by using the DecipherAg platform.

It is recommended to select soil test points at least every 30 hectares with the aim of soil sampling each site every 3 years, or sampling 1 third of the farm every year. Recent research undertaken by CSBP has also highlighted the value of deeper soil analysis in providing greater accuracy of the interpretation and fertiliser recommendations.

An easy way to remember this is by the 30, 30, 3 rule.

Soil test every 30 hectares

- To a depth of 30cm
- Every 3 years.

Samples sites should be representative of the management zone. Ensure that old fence lines, old headlands, stock camps and similar areas of the paddock are avoided as these can bias results. The use of biomass imagery can assist in this selection process.

Soil testing and NUlogic analysis ensures that you can use the right product at the right rate in the right place at the right time on your farm. Contact your local CSBP area manager to organise your soil testing program.



# Pacific Seeds Growing possibilities

# "Hybrid TT Canola for 2021 – Bringing the \$ Value to the Kitchen Table

Despite more and more Australian canola growers using hybrid canola as part of their programs, there is still some weighing up the various components of the value equation to determine the proportion of their 2021 canola program to sow to hybrid TT seed.

This is somewhat understandable as growers have the ability to clean and store OP TT seed on-farm, grade the seed to >2mm seed size and retain the volume they need. Of course, as is the nature with seed production, in some years there can be uncertainty around hybrid TT canola seed supply.

So, what's the answer? A number of TT hybrids are consistently showing in independent GRDC NVT trials to be 15-30% higher yielding than OP TT varieties across a range of environments, soil types and seasons. The extra yield potential provided makes it relatively easy to justify the extra cost of purchasing hybrid seed. The current pricing of Hyola 559TT and extended payment terms on offer provide an enticing way for growers to access the benefits of a TT canola hybrid at a price point similar to the purchase price of new season OP TT seed.

The pricing of a product such as Hyola 559TT becomes even more attractive when coupled with its higher blackleg resistance rating "R" in comparison with OP TT varieties (ranging from MS to MR). This provides growers with added disease protection and the potential for fungicide cost savings.

If you are currently assessing your canola seed options for the 2021 season and considering including a hybrid TT in your program, ensure you contact your local advisor, consultant or reseller to access some Hyola 559TT while stocks last.

Justin Kudnig, Canola Technical Manager, Pacific Seeds



### InterGrain's Kendenup trial site looks the goods this season



The Kendenup trial site is always of significant value to the Intergrain field program as the longer season environment allows us to screen a range of upcoming varieties with varied maturities and to see how they perform in a high rainfall region.

Furthermore, our program actively targets broad disease and phenology screening at the site whilst also monitoring coleoptile length expression. Additionally, this season we will be taking the opportunity to collect grain samples and conducting some pre-harvest sprouting tolerance testing. Assessment of a broad range of agronomic traits in a South Coast environment greatly assists us in delivering robust varieties which perform across a range of seasonal conditions.

This year we've been really pleased with the sites 5,400 plots. The site was sown on the 11th and 12th May and we've seen a significant improvement with early plant establishment this year when compared to previous years.

According to our Senior Wheat Breeder Dr Dan Mullan, the addition of a soil wetting agent at sowing was valuable in improving crop establishment due to non-wetting soil challenges.

A couple of eye-catchers at the site this year have been midslow maturing AH and AHN wheat RockStar and upcoming, slow maturing line IGW4502. IGW4502 has sparked interest over the last 4–5 years due to its very slow maturity (longer than Cutlass and similar to Denison), coupled with its IMI tolerance and AH classification in WA.

"Where we see the fit for IGW4502 is it provides an alternative maturity option, later than RockStar, whilst possessing IMI tolerance. It's a maturity class not currently available within an IMI variety, allowing early planting opportunities to be maximised, while still enabling the use of the IMI chemistry."

If you have any queries about RockStar wheat, IGW4502 or any other InterGrain wheat or barley varieties, please don't hesitate to contact Georgia Trainor (Southern WA Territory Manager), gtrainor@intergrain.com or 0439 093 166.



# A ChemClear collection is on the way for South Australia and Western Australia agvet chemical users.

Agsafe's ChemClear program is holding a collection in South Australia and Western Australia in April and May 2021. Agvet chemical users can now register their unwanted or obsolete agvet chemicals for collection by visiting the ChemClear website, www.chemclear. org.au or by calling 1800 008 182. Registrations close on 28 February 2021.

All successful registrations are acknowledged by email or post. A reference number relating to each of your Group 1 and 2 chemical registrations will be provided. Once your chemicals are registered with ChemClear, continue to store the chemicals safely and securely.

An appropriate quantity of storage stickers will be sent out by post, one month after your registration with ChemClear. These stickers will display your registration reference number and are provided for placement on the containers you have registered for disposal. These stickers will aid safe storage and identify the chemicals to your employees, auditors and others as being registered for disposal.

ChemClear will contact you directly to advise the location and date of the collection point in your local government area. If you have registered any Group 2 classified chemicals, you will be provided with a quotation on a per lt/kg basis for the collection and disposal of these products.

When a collection is scheduled in your area ChemClear will contact you and provide the following information:

- the address of the collection site
- a date for the collection
- an appointment time to deliver the chemicals to the collection team

To register your chemicals, please visit: www.chemclear.org.au/register-your-chemical





# A CHEMCLEAR COLLECTION IS COMING!

Dispose of your unwanted or obsolete agvet chemicals in one easy collection.

**Group 1** chemicals collected free of charge:

- part of the **drum**MUSTER program
- with readable labels
- still in original containers
- not mixed with other products
- within 2 years of expiry or deregistration

**Group 2 chemicals** are those that have expired and are not part of the *drumMUSTER* program. Group 2 chemicals incur a fee for service.

SA & WA Collection April - May 2021





Free collection of chemicals displaying the *drumMUSTER* logo.

Register your chemicals at ChemClear:



chemclear.org.au/register-your-chemical







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