LUCERNE Leader

LUCERNE AUSTRALIA

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LUCERNE VARIETY TRIAL UPDATE

Assess optimum plant stress levels for seed production

AgriFutures® Pasture Seeds

The results from the fifth and final-year seed harvest from the long term "Assess optimum plant stress levels for seed production" were presented at the LA Information Session held on 26th July 2023. The Information Session was well attended by 42 members and industry representatives. Attendees heard from Kalyx (Trial Results), SARDI (Tools to monitor impact of Lucerne Seed Wasp) and Lucerne Australia (Cost of Production Template). A big thank you to our guest speakers. A copy of the fifth-year summary results has been provided to all members by email with the final report to be released this spring. Lucerne Australia is currently exploring opportunities to utilise the existing site this coming season for several agronomic management trials of value to the lucerne seed industry.

Seed varieties have been supplied by: Alforex Seeds, Barenbrug, DLF Seeds, Naracoorte Seeds, RAGT, S&W Seed Company and Upper Murray Seeds.

More details on the trial, link to the moisture probe data and photos are available on the Lucerne Australia Website.

SHORT-TERM VOLATILITY, BUT INPUT PRICES SET TO BE CONTAINED FOR SEASON AHEAD

September 1, 2023
by Vitor Cacula Pistoia, Analyst RaboResearch, Australia & New Zealand

International fertiliser prices are poised to decrease or remain stable for the coming months. However, there will be "ups and downs" along the track said Rabobank farm inputs analyst Vitor Pistoia.

"There is a long way to go before the end of the current Australian cropping season, but the boundaries for the next one are already taking shape, and they look to be much more favourable when it comes to farm input prices," Mr Pistoia said.

"The last weeks of July showed just how volatile the global fertiliser market is.
The heatwaves in North Africa and especially Europe caused a spike in demand for natural gas due to increased use of air conditioning, sharply increasing the price of the energy feedstock," he said. "The price of gas surged 30 per cent only to decline now by more than two thirds from this peak.

"But not without pushing urea and other nitrogenous (nitrogen-containing) fertilisers on the way."

Mr Pistoia said it is important to note that each tonne of urea requires around 0.57 tonne of ammonia to produce, which in turn demands 0.86 cubic meters of natural gas on an energy content basis. "So, a substantial price movement for natural gas will directly affect nitrogenous fertilisers, and DAP and MAP as well to some extent. And this did happen."

The Rabobank analyst said the majority of the urea exporters' references (driven by the countries that set the price for fertiliser) rose between 20 to 30 per cent in the last weeks of July and, as a result, the downhill trend which had been seen in DAP prices stopped.

Vitor Cacula Pistoia, Analyst RaboResearch

"Added to this," Mr Pistoia said "there are some international tenders for urea causing mixed sentiment in the market,". "The biggest – which may finalise by the end of August – is expected to be at the one million tonnes mark. To give perspective, this represents roughly two per cent of the annual global trade for urea. Clearly, this will become a baseline for the deals following it during the months of September and October.

"The apparent bull market for farm inputs, however, is not forecast to be a trend. There are plenty of downsides along the line."

Mr Pistoia said "First, and more broadly, we have the soft commodity (grain and oilseeds) indicators which are quite volatile after the Black Sea grain corridor deal was not renewed, adding doubts to farmers' decision-making when it comes to fertiliser use. Some regions like southern Western Australia are benefiting from rising grain and oilseed prices, but this is not the general situation for the Australian winter. And the window to change fertiliser programs is short."

"Then there are some major food-producing countries, and therefore farm inputs consumers, facing bad weather and its consequences. Namely, parts of Europe, the United States and Canada as well as drought-and-inflation-scorched Argentina," he said.

"A third factor likely to keep downward pressure on farm input prices, especially for containerised goods such as agrochemicals and machinery parts, is the price of international container freight, which is now back down to pre-Covid levels," Mr Pistoia said.

"So, despite reduced production since early 2023 – and all the positive demand signals from still-strong soft commodity prices – farm input supply is still greater than demand, both for fertilisers and agrochemicals.

"Hopefully – and assuming no other 'Black Swan' event happens – Australian farmers will be able take advantage of these lower prices while there is plenty of supply until later in the year."

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LUCERNE AGRONOMY REPORT

by Scott Hutchings, Senior Agronomist, Cox Rural

Lucerne paddocks in the Upper South East are just beginning to be locked up for hay with spring granular & foliar fertiliser applications being applied.

Pest pressure from aphids has been low to date but growers are urged to monitor numbers in seed and hay crops before spraying and only spray if numbers are at required thresholds, if spraying is required choose products that are softer on beneficial insects (pirimicarb) or new resistance groups such as Transform at label rates, an emergency use permit is still in place for Mainman for aphids during the seed phase (not hay) of the crop. It is also important that earthmite spraying goes through the same process of assessment as spraying commonly used organophosphate products such as Omethoate, Dimethoate & Chlorpiryfos will also contribute to issues within the aphid populations later on.

Snails, particularly conical snails have been a problem and continue to be a problem causing severe damage in some seedling stands and damaging established stands. Baiting is the only registered control method and applying bait at maximum label rates to achieve the most bait points per metre is still the best long term option. Slugs have also caused some isolated issues as have earwigs so continue to monitor spring sown stands until established.

The cold wet conditions and heavy rain events of June also caused some issues with furrow wash and damping off so a reminder to sow shallow, retain ground cover where possible and treat seed with apron seed dressing this is particularly important with Siriver and some of the older lucerne varieties that seem more susceptible to damping off.

Early indications are that more area will be locked up this season based on last seasons good pricing and diminishing livestock returns. Although we have currently good soil moisture levels this may not necessarily translate into increased tonnage as the majority of area increase will be in speculative dryland paddocks that may not come to fruition if a drier & hotter than normal spring occurs as we usually see a higher attrition rate of paddocks in these conditions. Good paddock selection, winter cleaning to preserve moisture and early lock up will be important if dry conditions occur.

With the possibility of an increased seed production area and early dryland lock up, it will also be important to lock up irrigation paddocks in a timely manner, recent seed wasp research has further reinforced the need to lock up early and be harvesting by early March to minimise potential seed wasp exposure. This is not new information to the industry, just more data to reinforce existing best practice.

BLUEGREEN APHID MANAGEMENT THIS SPRING: INSECTICIDE-RESISTANT BIOTYPES FOUND IN NEW LOCATIONS & CROP TYPES

by Lizzy Lowe, Evatt Chirgwin, Stephanie Veskoukis

New research has found insecticide-resistant bluegreen aphids in more crop types than previously reported and has uncovered key information on the biocontrol options for this pest.

Growers and agronomists of lucerne, medics, clovers, vetch, pulses, and pastures are urged to stay up to date with resistance status and management options for bluegreen aphids.

In this article, we'll cover where and what crops resistant populations have been found, what naturally occurring predators can help control them, and how you can help improve regional recommendations by posting in bluegreen aphid samples for free resistance testing.

Newfound resistances

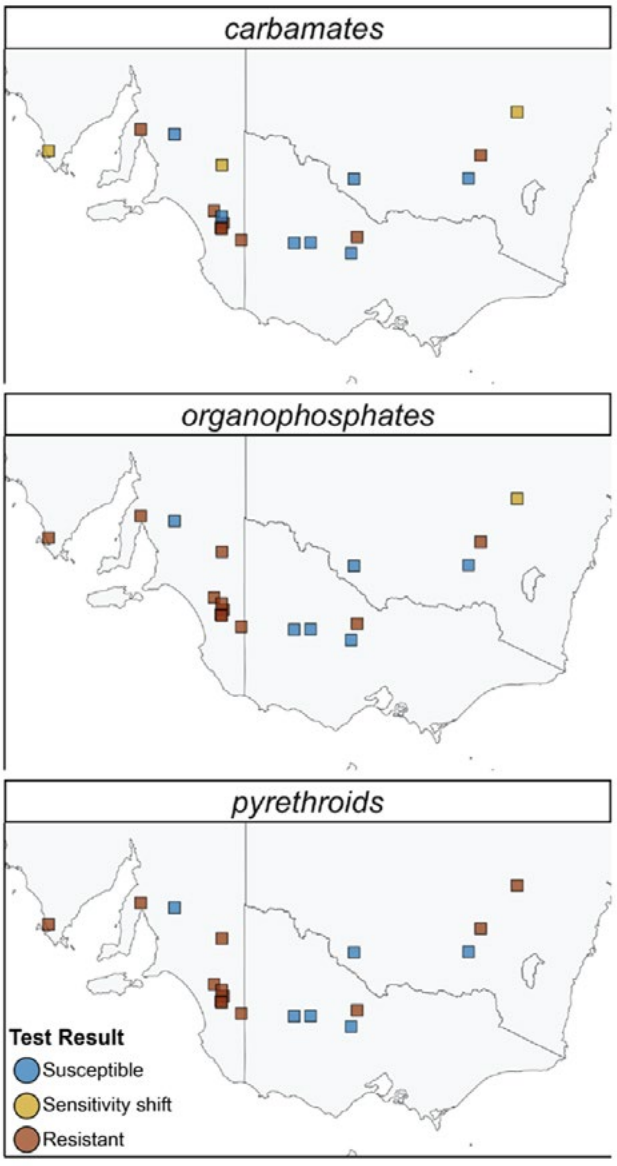
In 2021, Cesar Australia and Lucerne Australia discovered the first international cases of bluegreen aphid (*Acyrthosiphon kondoi*) evolving resistance to the insecticides registered and regularly used to control them (carbamates, organophosphates, and pyrethroids). More information on our preceding research can be found on Cesar Australia's pestfacts page.

Following investments from AgriFutures Australia and the GRDC, we are continuing to investigate the crop types and locations that insecticide-resistant bluegreen aphid populations have spread to.

Insecticide-resistant bluegreen aphid populations have now been found at 12 locations across Victoria, South Australia, and New South Wales. So far, insecticide-resistant populations have been most common in South Australia, where 8 resistant populations have now been discovered. Only one of the five populations tested from Victoria have shown resistance.

Not only a lucerne issue

Previously, insecticide-resistant bluegreen aphids had only been detected in lucerne seed and forage crops. However, our recent work discovered resistant bluegreen aphids in two crop types for the first time: lentils and sub-clover. Accordingly, growers of all crops prone to bluegreen aphid attacks should be vigilant and be aware that the chemical control option registered for bluegreen aphids differ across crop types (see management advice below).



Updated map representing the location of bluegreen aphid populations which have tested resistant or susceptible to carbamates, organophosphates, and pyrethroids in south-eastern Australia.

Previously, resistance has been found in lucerne crops – predominantly in lucerne seed crops. This is the first confirmation of resistance in other crop types.

Positive takeaways and activities on the horizon

While the discovery of new insecticide-resistant bluegreen aphid populations is concerning, some reassuring patterns have also emerged from our research.

New susceptible populations have also been found, indicating the resistant strain (or strains) of bluegreen aphids have not become completely dominant across southern Australia. Therefore, in some regions, organophosphates and carbamates may still provide effective bluegreen aphid control.

The magnitude of resistance has not increased in the newly collected populations compared to previous ones, indicating that bluegreen aphid populations have not yet evolved a higher level of resistance to any of the chemicals tested.

Spring will see us conducting more surveillance in, and more resistance tests (also known as bioassays).

So if you find bluegreen aphids, what are your options?

Most prominent during spring, bluegreen aphids feed on the upper leaves, stems and terminal buds of host plants. They can often be confused with pea aphids.

If upon monitoring, you find that your bluegreen aphid populations are exceeding action thresholds, consider the beneficials present in your crop prior to chemical control.

Alternating modes of action and using selective chemistry continues to be the best way to prevent resistance evolution. Sulfoxaflor (Transform) is registered for use on bluegreen aphid in lucerne and some pulse crops. Flonicamid (MainMan) is under a limited emergency permit to control insecticide resistant bluegreen aphid in the later stages of lucerne seed production.

If you're unsure about identifying an aphid in a crop, you would like a formal pest identification or population tested for resistance for free, please send through a PestFacts report or some sample specimens, and one of Cesar Australia's entomologists (contact details below) will confirm the species for you.

New biocontrol research

While insecticides are the most common bluegreen aphid control method, alternative methods, such as biocontrol, can be highly effective and help lessen the risk of further insecticide resistance evolving in the future.

Growers and agronomists are increasingly harnessing naturally occurring predators (aka natural enemies) of pests as a key component of their pest management strategies. However, controlling bluegreen aphids with natural enemies to has presented some challenges because outside of a handful of generalist aphid predators (e.g., ladybugs & lacewings), limited information is available on which naturally occurring species attack bluegreen aphids.

Cesar Australia and Lucerne Australia are investigating one of the most effective and widespread groups of natural enemies of aphids – parasitoid wasps. Parasitoid wasps deposit their eggs inside. Those eggs then hatch from the egg and eat their aphid hosts from the inside out: forming aphid mummies. When the wasp is fully developed, it emerges through the aphid shell, and flies off to repeat the cycle

The bloated, swollen golden bronze appearance of a parasitised aphid: also known as an aphid mummy.
Photo by Andrew Weeks, Cesar Australia.

The project has now collected bluegreen aphid mummies across 9 locations across SA, VIC and NSW. Samples were collected from clover, lucerne, vetch and lentil crops. Surprisingly, all wasps, so far, have been one species: *Aphidius ervi.*

Aphidius ervi is a common parasitoid species across southern and eastern Australia, and are known to parasitise other aphid pests of pasture seed crops (like the pea aphid). Each female wasp can parasitise over 300 aphids in her 2-3 week lifetime.

Although further data is needed, these preliminary results may indicate a possible lack of diversity in bluegreen aphid parasitoids. This result differs to other Australian grain aphids, which are usually parasitised by multiple species (often > 4) of parasitoid wasp.

If this lack of parasitoid diversity is also observed in future collections, management methods – particularly chemical usage – may need to be carefully planned to support A. ervi in crops and seasons where bluegreen aphid outbreaks are most likely.

Help develop better management recommendations – post us your bluegreen aphids for free resistance testing this spring!

We are continuing to collect and test new bluegreen aphid populations for insecticide resistance. To ensure we are testing from the most diverse and industry-relevant regions, we need the help of growers and agronomists.

If you encounter any bluegreen aphids, whether you suspect they're resistant or not, sending in samples would support this work and allow us to gain a better understanding of how resistance is evolving over time.

Your help will allow us to provide regional and crop specific recommendations for bluegreen aphid control and help mitigate the risk of future resistance.

Guidelines for collecting and posting aphid samples can be found on Cesar Australia's resources page. For any additional questions or help identifying samples, feel free to contact Evatt Chirgwin (email: echirgwin@cesaraustralia.com or phone: 0487292556).

Acknowledgements
The research informing this article has been funded by AgriFutures Australia and the GRDC. Cesar Australia in collaboration with Lucerne Australia are conducting this research. We thank the growers and agronomists who assisted with sample collections and chemical history information, and Dr Evatt Chirgwin, who leads the bluegreen aphid research projects.

DLF SEEDS UPDATE

by Jess Nottle, Seed Production Agronomist

Production Update

Discussions with lucerne seed growers of late have very much been around planning lock-up timing of dryland paddocks taking into consideration the El Niño forecast and low rainfall pattern of the past few weeks, plus getting irrigation infrastructure serviced and ready to go for pivots & flood. It seems most growers are focused on setting their crops up for seed as a priority over aiming for multiple hay cuts off irrigation.

We've started to see some aphids popping up in paddocks now stock have been moved off, particularly further to the north. Please remember to consult with your agronomist or advisor for aphid control options, and get your aphids collected & sent away for free resistance testing this spring.

Red legged earth mite being observed, albeit at low levels with a low impact on the crops. There is also free resistance testing available for RLEM.

The more participants in testing programs, the better!

Spring sowings of lucerne are well underway. Most of you will now have received your certification paperwork – please complete this paperwork promptly and return to the relevant certification agency. If you have any questions regarding your paperwork, please give me a call.

Now all lucerne seed is now cleaned and tested, our domestic and export sales people are working away in the background to sell the remainder of this years crop. Domestic sales in northern NSW & southern QLD have been a little slower this spring with their conditions being quite dry, and export sales have been ticking along despite quite some volume of uncertified seed making its way into some of our traditionally strong markets.

Please feel free to contact myself or Anthony with any queries you have.

Seed Production & Purchasing Jess Nottle – 0438 302 148 Anthony Quilter – 0427 572 125

AFIA LAUNCHES FODDER RESEARCH, DEVELOPMENT AND EXTENSION STOCKTAKE

The Australian Fodder Industry Association (AFIA) launched a fodder research, development and extension stocktake at the National Fodder Conference in Bendigo in August.

"AFIA believes that the stocktake, leading to the development of a strategic and collaborative R, D & E approach will deliver significant benefits to the Australian agriculture sector," said Paula Fitzgerald, AFIA Chief Executive Officer.

It is estimated that 38,000 properties are involved in the commercial production of fodder each year, however only about five per cent of farmers consider themselves to be fodder producers, where fodder is the largest or a major financial part of their farming system. Most farmers producing fodder consider themselves as 'belonging' to other commodity sectors where they derive most of their income – for example, livestock, grain, dairy or horticulture production.

"Because fodder production straddles many agricultural commodities, there is a need for greater strategic 'fodder collaboration' across the whole agriculture sector, rather than the current scenario where fodder is considered separately within individual commodity sectors," said Ms Fitzgerald.

"Fodder provides a vital element to many agriculture enterprises, yet there does not appear to be a national approach to fodder as a key 'resilience tool', whereby we focus on the production of a quality product, maximise nutrition for livestock, and ensure best practice hay stacking and storage for fire prevention and minimising pest attack. These present opportunities for both research and producer education.

While AgriFutures manages the export fodder levy and associated R, D and E investment, many other fodder-related R, D and E projects are underway with no overarching analysis or coordination, through Research and Development Corporations, universities and CSIRO. The AFIA R, D &E stocktake aims to gain an understanding of current projects and timeframes, identify gaps and opportunities for collaboration, and finally develop a set of fodder industry long-term strategic priorities (engaging all relevant commodities) to ensure investments are coordinated and focused to deliver needed outcomes.

"The impacts of climate change, and the unpredictability of events such as floods, fires and drought, is making farming and feeding livestock more challenging. A strategic approach with industry agreed priorities to improve fodder research and production and supply is a no-brainer for Australian agriculture," she concluded.
This project is supported by Southern Farming Systems, via the Drought Hub and Innovation funding.

Those engaged in fodder-related R, D & E are encouraged to contact AFIA via the project website or email fodder@afia.org.au.

LIMESTONE COAST SEEDS UPDATE

by Greg Excell, Limestone Coast Seeds

As we reflect on our second season of lucerne processing at Limestone Coast Seeds, it is interesting to note the many differences that we encountered compared to last year. Our first delivery was received more than a month later than last season, which as a result had an impact on low domestic sales. By 31st March we had only received 65% of our total lucerne intake, compared to 90% at the same time last year. It very quickly became apparent to us that this lucerne processing season was going to finish later than normal. Despite this, in the last few months we have dispatched more than 65% of this year's harvest from our site, which is more than last year to date. Once again, the first varieties to be exported this season have been Certified Siriver, Sequel and Aurora.

We continue to look at innovative ways to run our business and have recently purchased a Verbruggen Palletizing Machine to stack our bags. Since taking over this site two years ago, the number of bags that we have processed has increased by 125%, therefore making the automatic stacker a very welcome addition to support our dedicated and reliable staff.

Once again, we have sponsored the Seed and Grain Competition at the Royal Adelaide Show. Our staff diligently conducted the seed testing before forwarding the results to the judges. Check out our Facebook page to see this process in action.

Thank you to our valued clients, both new and existing. We look forward to working with you again next season.

VARIABILITY IN FEED AVAILABILITY AHEAD

by Isabel Dando, Industry Analyst, Dairy Australia

Dairy farmers across the country have been facing significantly variable seasonal conditions impacting their operations directly, or indirectly through the quality and quantity of supplementary feed growers produce. With the looming threat of an El Niño event, this trend is likely to continue; Australian farmers are no stranger to dry conditions and have often battled surging supplementary feed costs during such seasons. How the expected drier conditions play out in each region this year really depends on the interaction between longer term soil moisture stores, rainfall to date, and how the spring season fairs.

In New South Wales (NSW) and southern Queensland (QLD) particularly, below average rainfall has been a reality for many areas over the last six months. Crop condition is especially mixed across northern and central NSW, and with rapidly depleting soil moisture levels, production concerns continue to build.

According to The Bureau of Meteorology (BOM), root zone relative soil moisture across NSW is currently very much below average at 10 percentile. This is a similar story to QLD, with average root zone soil moisture also at a very low 16 percentile. In light of this, both future crop yields and homegrown feed production in these areas are now heavily dependent on rainfall throughout spring. Therefore, with the below average rainfall forecast, cuts to initial yield expectations are becoming increasingly apparent, falling from initial projections.

This is a different story to the southeastern dairying regions, where Victoria and parts of both South Australia and southern NSW have benefitted from above average rainfall over the autumn break and again in June. This has kept soil moisture levels above average in some regions, after a wet past three years. Relative root zone soil moisture is within the 50 percentile across both western and northern Victoria but is beginning to also deplete in some parts of Gippsland. This has helped many farmers to support full planting intentions, keeping expectations on track for an average season for both crop and homegrown fodder production.

In Tasmania, relative soil moisture also differs substantially region to region, ranging from between 50 – 80 percentile in the northwest, to 10 – 20 percentile across the eastern half of the state. Pasture growth and green feed availability therefore remain strong in the northwest, as wet conditions continue to support growth and mitigate demand for purchased fodder.

In a similar dynamic, regions in the southwest of Western Australia (WA) that have experienced favourable conditions over the last few months are likely to provide somewhat of a buffer against those areas with a heavy reliance on well-timed rainfall at this critical point of the season. Relative root zone soil moisture is within the 10 to 20 percentiles across the south of the state. While seasonal conditions are therefore highly variable, this interaction of a dry autumn break, below average soil moisture levels and this dry outlook for spring are contributing to the below average cereal crop yields now expected.

The current fodder situation differs however, with rainfall in recent weeks over the southwest keeping pastures green and protein hay plantings looking promising, with both tempering demand for supplementary feed and likely to help fill the shortfall of last year.

While the interaction between soil moisture, rainfall over recent months and the dry outlook for spring differs significantly between dairying regions, the relative impact on both grain and fodder prices rides on overall supply and demand dynamics, as well as the balance of on-farm feed stores over the medium-term. If we see widespread declining yields, this supply pressure will likely push both grain and hay prices up against increased demand. In a dynamic already being seen, the extent of inter-regional product movement into drier regions will really be the key impetus behind how prices move at the end of the season.

Table 1: Cereal hay and wheat prices compared to Last year (LY) and the five-year average (5YA).

		Aug-23 ($/t)	% change LY	% change 5YA
Northern Australia	**Cereal Hay**	***330***	***↑8%***	***↓1%***
	Wheat	***384***	***↑4%***	***↑8%***
Southern Australia	**Cereal Hay**	***314***	***↑59%***	***↑30%***
	Wheat	***378***	***0%***	***↑7%***
Western Australia	**Cereal Hay**	***288***	***↑13%***	***↓5%***
	Wheat	***368***	***↓5%***	***↑8%***

Source: Australian Fodder Industry Association (AFIA), Profarmer,
**Reference regions for above are North Coast NSW, Goulburn/Murray Valley and South West WA).*

UPPER MURRAY SEEDS REPORT

by Keith Lange – Area Manager Sales Southern Victoria & South Australia.

I have been with Upper Murray Seeds for 6 years as the area manager covering Southern Victoria and South Australia. I have been involved in the agricultural industry for over 25 years and I thoroughly enjoy working alongside agronomists and farmers. Great customer service is what I aim for when dealing with people and ensuring products are delivered on time. Growing up in Grassmere in Western Vic on a small property, and previously working in the dairy sector, has allowed me to have a good understanding of the industry. A nervous Carlton AFL supporter and a motorsport tragic, you will often find me with my grandkids, going caravanning or camping.

Upper Murray Seeds has a broad range of grasses to suit all areas of Western Vic & SA, particularly for the South East and Limestone Coast of South Australia. Planning ahead is becoming critical for producers and therefore I wanted to highlight some key products and their suitability for SA.

For those after some quick winter feed and early spring feed we have several annual ryegrasses that will impress. Blast tetraploid annual ryegrass has excellent leaf to stem ratio, i.e., very leafy, and ideally suited for hay & silage production. Atomic tetraploid annual ryegrass is another good option with dense tillers and its speed out of the ground, it ticks the box for early winter production. It has rapid growth along with being highly palatable.

For those looking to deep rooted perennials, the likes of our summer active Estancia tall fescue with Arkshield smart endophyte is a great solution. Arkshield protects the plants from disease, insects, heat & drought stress. Our winter active Charlem fescue is later maturing giving more winter feed, and excellent drought tolerance. Drover cocksfoot is also suitable for the area, and it has very good palatability and a softer leaf than others.

Phalaris is a good long-term option that can be sown in blends with clovers, cocksfoots & fescues. Stockman Phalaris is our

Keith Lange – Area Manager Sales Southern Victoria & South Australia.

semi erect type that has plenty of winter activity, can tolerate waterlogging, acid soils and is a very persistent tussock forming grass that will recruit new seedlings. Grazier Phalaris is a truly persistent Australian type. It's a productive perennial grass, that can handle stock grazing pressure once established. It provides year-round feed, particularly abundant in spring, and is a great addition in a pasture mix alongside Stockman.

Please reach out if you need any advice for this upcoming sowing season or help finding a local stockist in your area. I regularly attend LA meetings and trial days so please come up and say hello if you see me.

Mobile - 0428 406 464
Email - keithl@uppermurrayseeds.com.au

STAYING SAFE AROUND HAY

courtesy of Safe Ag Systems

With the harvest season fast approaching, safety should be at the forefront of your mind. It's an all too common problem of falling hay to crush or trap its victims. You know better than anyone how heavy squares, bales and rounds of lucerne are compared to other hays.

Add in the risks associated with machinery like telehandlers and tractors, it's a whole other element of farm safety. In this article, we'll guide you through what steps to take to be safe this lucerne season.

Check your machinery and surroundings

It's that time of the year when your machinery is about to get put through the wringer again. Before you dive in, take a second to consider if your machinery and surroundings are ready.

Take a look at your machinery's maintenance history. Is it due for a service anytime soon? You will also need to complete a Pre-Operational Checklist. This will train your eye to review the machinery and assess any issues before operating.

Once your machinery is clear for use, it's time to organise your farm's traffic management plan.

Step 1: Map out your traffic management zone

The easiest way to start is to sketch the layout of your property, including where your hay is located. Consider the potential scenarios and locations in which a person and a moving vehicle might collide. You're going to need to mark things such as:

- Defined driving routes
- Traffic flow
- Parking spots
- Speed limits
- Points of entry and exit
- Loading zones and exclusion zones

Step 2: Movement of machinery and equipment

Think of the movements your trucks, tractors, telehandlers or forklifts will be doing. Most will be reversing, changing direction and moving forward repeatedly as they're moving or loading hay. Ensure the loading zone is flat with a fairly solid surface, to prevent the risk of loading equipment overbalancing.

Step 3: Speed and Signage

The simplest way to reduce the risk of a person and vehicle colliding is to reduce the speed limit. Set a speed limit on your property or in certain areas and put signs up where drivers can see them. Signage can also be used in loading zones so pedestrians know to stay clear, like "Pedestrians Prohibited" and "Telehandler in Use".

Step 4: Alarms and notifications

Reversing vehicles are a significant hazard to pedestrians. Have reversing cameras on equipment and ensure audible reversing alarms are fitted and operational.

Step 5: Limit access to the loading zone

Think about who needs to be in the loading zone. Non-essential personnel should stay well clear, including the truck driver. Block off the area with tape, cones or signage if applicable.

Step 6: Use a spotter

Use a spotter in the loading zone. Their job is to watch the area and alert the operator of any hazards. Ensure a clear communication system is in place such as a two-way radio and/or hand signals.

Step 7: Visibility

Workers entering or working in the loading zone should be wearing high viz clothing. Workers must be vigilant and stay in the operator's line of sight, or at least be visible to the spotter who can alert the operator if there's a potential problem.
A few simple strategies can help you create a simple, yet effective, traffic management plan so you can keep safe.

Never be complacent around hay

Hay comes in all different shapes, sizes and weights. We know that. The term "hay" is rather diverse, and no two bales of cereal, legumes or grass hay are the same. Particularly in weight.

If you lift a bale of meadow and then grab a lucerne, you can feel the significant difference between the two.

Lucerne is typically heavier than most cereal hays. This is due to its plant density. On average a square lucerne bale might weigh between **30kg - 45 kg**. In comparison, a bale of grass hay is 18kg - 25kg.

And what of a round or big square bale? They're commonly noted to be well over **450kg**!

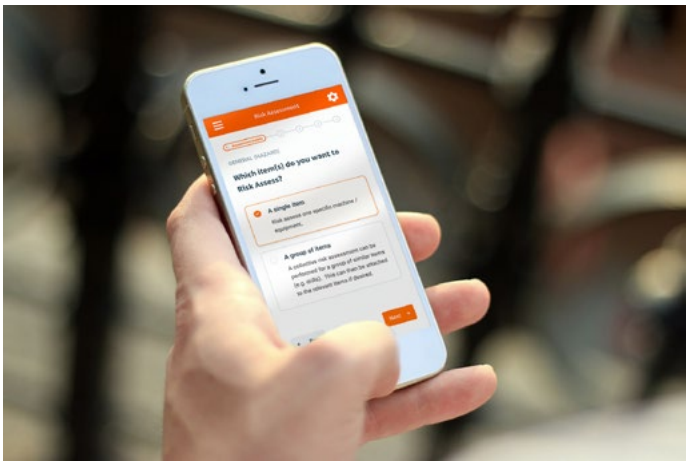
If a few bales are enough to knock a person down, imagine what a large square or round could do...

It's all too common to hear reports of hay accidents where farmers, workers or children get trapped or crushed under hay. Whether it's from rushing, unstable stacking or playing on bales, the force of one falling is enough to cause serious injury or fatality.

Children simply don't know or recognise the risks when playing. Make it your responsibility to teach them and ban them from certain areas of the farm. It only takes one unstable bale to cause a falling domino effect.

Complacency and not paying attention are big reasons why these accidents happen. It usually occurs when we've done a task or activity so many times that we forget about the risks involved.

In these moments you need to stop and re-evaluate your situation. Remember the risks involved and ensure you're adhering to the proper techniques and safety regulations. It might just save a life.



Here are a few tips to follow when moving hay:

- Never use incorrect equipment to handle bales
- Ensure workers are adequately trained to operate the equipment
- Build hay stacks on firm, level ground, away from any powerline or fire hazards
- Never stack hay higher than the lifting capabilities of your equipment
- Never load more bales onto your equipment than it can carry
- Ensure hay bales are correctly balanced on one another before adding any more

Adhering to these tips, acknowledging the risks and implementing a traffic management plan can assist you in staying safe and aware this lucerne season.

This article has been written specifically for our members by Safe Ag Systems. As a member of Lucerne Australia, you can receive a 10% discount off your annual subscription. Terms and Conditions apply so please head to their website Safe Ag Systems or contact their team on 08 8490 0939.

BARENBRUG UPDATE

by Daryl Turner, Southern Production Manager

Domestic Lucerne Market

Spring demand for lucerne has been consistent in most key growing areas. The depressed sheep and beef market does not appear to have reduced demand at this stage. After a challenging 22/23 production period the industry is aware that supply of most varieties will be limited and likely to be exhausted well before next year's harvest, hence we are seeing more forward orders from customers so they can secure product for autumn. Water is also largely unconstrained in the key northern Victoria and southern NSW regions and therefore there is confidence for perennial pastures such as lucerne. Further north though conditions are extremely dry, so demand is more limited to irrigated country only.

International Lucerne Market

The international side of things has been very much focused on getting seed tested, treated and on vessels to intended destinations. With the seasonal issues experienced, it certainly closed the time frame to get goods prepared and on vessels in time to meet market. Sales have remained positive, and we are now waiting to see the result from the US harvest and market movement. As you may have heard parts of California has experienced a tropical storm that did hit some of the lucerne production areas but appears that at the overall impact of this event has been minimal. Much attention remains focused on the upcoming sales seasons in key markets as this will certainly set the scene for remaining US sales and indications for the next Australian harvest. One of the major unknowns is the impact of the global

economy, as some regions struggle to pay for goods. Buyers are searching for cheaper alternatives that appear to be finding their way into the market from various areas. An interesting time to say the least.

Seed Production Update

I am excited to introduce Aaron Keane to our seed production team. Residing in the Adelaide Hills, Aaron joins Barenbrug as a Seed Production Agronomist and will be responsible for managing our seed production requirements throughout the regions which include Upper SE, Central SA and Eyre Peninsula.

Aaron has 15 years' experience across many facets of seed testing and certification processes attributed to his tenure with Seed Services Australia. You might already know Aaron as he has been working closely with many of our growers and seed partners, this will ensure a smooth transition to Barenbrug for all involved. He is very excited to be joining Barenbrug and looking forward a new chapter in his career.

Please join me in welcoming Aaron to our team and I look forward to him building and strengthening our seed grower relationships. He can be contacted on the following details.

Mobile – 0408 851 411
Email – akeane@barenbrug.com.au

SYNERGY SEEDS UPDATE

by Craig Myall, Managing Director

The trend observed of low quantities exported in Q1 of calendar year 2023 carried forward into Q2 with only 1,371mt exported during the period. 1,020mt of this occurred in June, directly as a result of new season crop becoming available for shipment at this time. For the first 6 months of the year, 2,182mt have been exported which is slightly down on both 2022 – 2,489mt and 2021 – 2,870mt, but significantly lower than 2020 – 4,456mt and 2019 – 3,892mt. The saving grace for exporters and seed growers is that the price is over twice the value that it was during those years. I think we can safely say now that 2023 could be the lowest volume of Lucerne seed exported from Australia in over a decade!

Major destinations for this seed year to date include the USA – 841mt, Saudi Arabia – 735mt, South Africa – 157mt, Argentina – 142mt, and China – 131mt. Generally, 3,000 – 4,000mt is exported to Saudi Arabia in a calendar year, however it appears we will be well short of this figure in 2023. It's going to be very interesting to see what occurs in the next quarter!

In general, the international markets have been reasonably quiet for a few months now, and for various reasons depending on the importing country conditions (government regulations, carryover, demand cycle, pricing, cheaper alternatives, etc.). My advice to seed producers is to ensure you grow varieties that have a "year on year" demand profile. Whilst seed yield and returns per hectare are very important, so is knowing your seed has a home!

With many swings in both the sheep and cattle industries over the past 12 months, we may see an adjustment in farmers rotations and cultivar choices. In some states the challenge of the live export sheep market decline is flowing into all market pricing. Destocking on sheep enterprises has already seen changes to pasture renovation plans for next year, which is driving a more conservative outlook for domestic Lucerne in 2023/24.

Early signs are that the upcoming 2024 certified harvest will come from an area not dissimilar to the last couple of years given not a lot of new sowings were completed in 2023. Of this area, 80% will again be Proprietary varieties which has been a common theme for many years now.

Synergy Seeds will welcome Ian Freebairn to its Production team in October as we look to bolster our in-field activity and support the grower base with information and expertise. Ian comes to our business with a significant amount of knowledge having spent many years already in the seed industry, a good deal of this in pasture seed production, and specialises in extensive crop and pasture production, and livestock health.

If you still have new planting areas available in 2023 or are planning a new site in 2024 and beyond, Synergy Seeds have attractive seed contracts for its growing Proprietary Lucerne range. Please feel free to contact Wayne, Nathan or myself on the numbers listed below to discuss our options.

CONTACTS	**Craig Myall**	Managing Director	0409 392 320	craig@synergyseeds.com.au
	Nathan Smith	Sales & Supply Manager	0487 655 220	nathan@synergyseeds.com.au
	Wayne Heading	Production & Procurement	0427 071 458	wayne@synergyseeds.com.au
	Adam Davies	National Forage Sales & Marketing Manager	0498 632 496	adam@synergyseeds.com.au

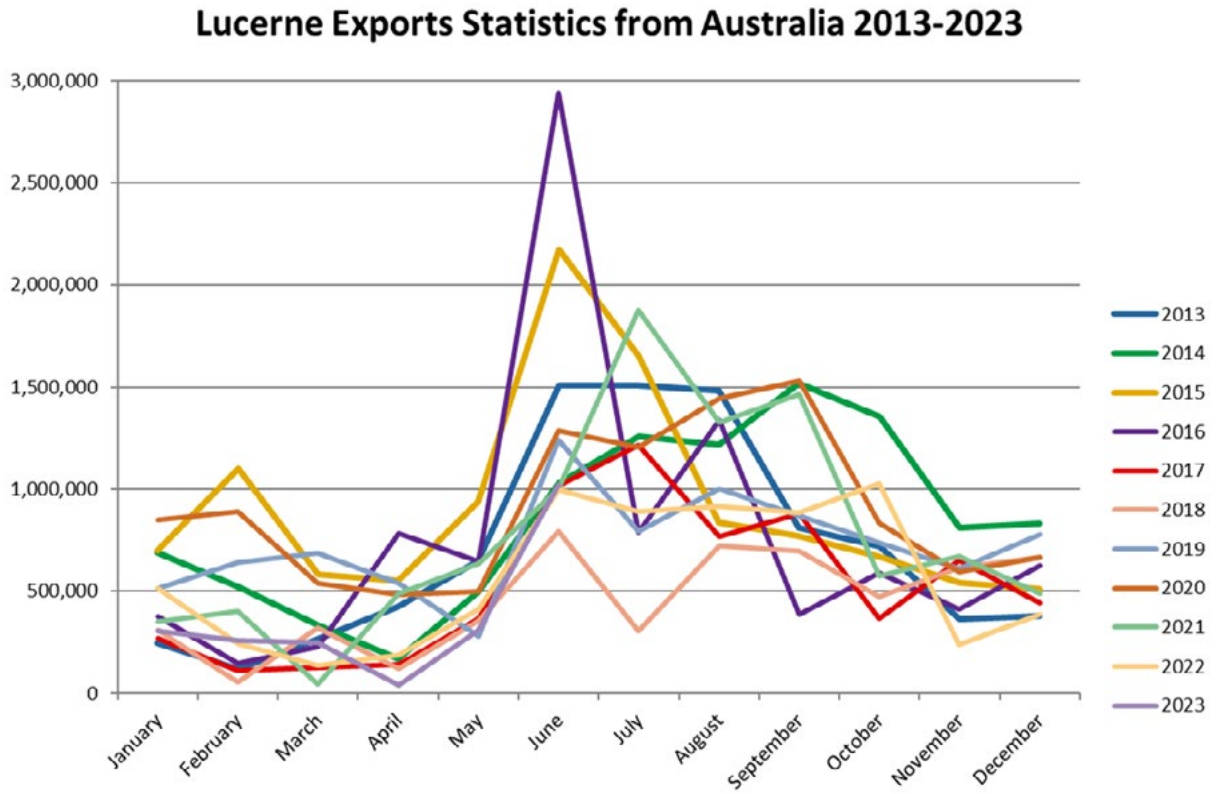
LUCERNE EXPORT STATISTICS FROM AUSTRALIA
- January 2013 to June 2023

courtesy of Teague Australia

Quantities below are in kg.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Year to date Difference 2020 & 2021
Jan	245,741	687,172	698,895	374,150	266,596	307,530	512,692	850,518	352,056	515,246	302,931	-212,315
Feb	118,025	518,553	1,099,252	148,919	108,988	57,008	639,425	887,613	400,125	243,786	258,832	-197,269
Mar	269,091	334,033	582,929	227,050	127,000	321,205	684,044	539,525	44,500	137,329	249,850	-84,748
Apr	424,057	171,816	549,340	784,031	143,025	123,100	536,501	482,194	439,500	186,064	40,819	-229,993
May	647,509	495,472	940,000	644,704	363,023	355,575	281,335	495,875	633,571	409,715	310,224	-329,484
Jun	1,509,605	1,029,000	2,176,805	2,942,685	1,018,477	794,995	1,239,461	1,286,579	1,000,145	996,989	1,020,183	-306,290
Jul	1,510,278	1,260,782	1,649,080	786,450	1,214,352	303,288	792,380	1,205,927	1,875,361	891,632		
Aug	1,482,357	1,217,121	834,178	1,339,684	767,256	721,730	1,002,472	1,443,626	1,329,201	914,012		
Sep	811,667	1,516,965	770,857	388,207	882,195	698,665	871,762	1,533,097	1,463,717	885,058		
Oct	719,882	1,356,922	667,503	588,199	364,673	472,480	738,090	832,925	573,749	1,026,920		
Nov	363,877	810,704	543,246	409,700	649,318	615,285	609,028	595,095	670,850	237,888		
Dec	379,122	829,293	511,127	623,560	443,729	664,134	775,684	667,771	488,544	385,212		
Total	8,481,211	10,227,833	11,023,212	9,257,339	6,348,911	5,434,995	8,682,874	10,661,226	9,271,319	6,829,851	2,182,839	

This summary was produced using data supplied by the Australian Bureau of Statistics.



We thank Teague Australia, an associate member of Lucerne Australia, for supplying these figures.

NARACOORTE SEEDS REPORT

by Joshua Rasheed, Director, Naracoorte Seeds

Lucerne Seed Stocks Getting Low

After another strong domestic and export Lucerne seed season we are seeing very low carry-over levels like last year. Domestic sales have been good, but in particular we saw strong sales for both certified and uncertified Lucerne seed to our main export markets, especially in the 1st half of the year. This may not be reflected in the export statistics, but this is only due to the fact sales were made in the 1st half of the year but most of the seed only shipped over the past 3 months.

On top of low carry-over levels of Lucerne seed we are again seeing low carry-over for clovers like Persian, Arrowleaf, Balansa, Strawberry and Red & White Clover, as well as Chicory. Like Lucerne seed we saw strong domestic and export demand, but also some products had production issues meaning we didn't have the volume of seed to start with. We will again be crossing our fingers for a strong production season to fill our sheds ready for 2024.

If you would like to know more about any of the above or have public pasture seed to sell, please feel free to give me a call to discuss on 0427 790 655 or email josh@naracoorteseeds.com.au

Summer Crop Options

Summer crops are a great option to help extend your feed window into next year. Naracoorte Seeds have good stocks of Brassica's, Turnips, Radish, Millet, Sorghum and Chicory so call today to discuss options.

Save the date – Naracoorte Seeds Field Day

Naracoorte Seeds will again be holding a Field Day on Friday 27th October 2023 at our site just South of Naracoorte. There will be a wide range of guest speakers and a large variety of pasture species to look at, so please contact our office for more details (08) 8762 1944.

LUCERNE AUSTRALIA Members

Allen's Warrawee Park	Dinyarrak Farms	Kelvale Emu Flat	Newton Pastoral Pty Ltd
Altus, TJ & JL 'Moonmera'	Farmer, BL & RE	Kenwyn Proprietors	Nupey Pty Ltd
Bergan Park	Florando Partners	Kester, RJ & J	Sanders, DE & FM
Berry, S & J Family Trust	Forster, SA & KA	Kinyerrie Partnership	Sanders, GE & LM
Brecon Proprietors	Fry, AL & JE & Son	Kuchel, DJ & CE	Sanders, SN & DA
Brown, DC & DG	Glendoon Pastoral Co	Lake Ellen Pastoral	Sanders, RJ & ED
Cacia Downs Farming Co	Graetz, S & H	Leach, PJ & Co	Scottswell Partners
Colara Farms	Harvey, M & K Family Trust	Loller, B & L	Simpson, GE & TM
Connor Pastoral Co Pty Ltd	Hawkins, MM	Makin Nominees	Twynem Partners
Corlinga Partners	Hunt, DB & JS	Maroona Proprietors	Vandeleur Rural Holdings
Crawford, CJ Pty Ltd	Hutchings, SC & CA	Martin, JP & SGP	Vowles, B, K & M
Creston Partners	Hyfield Pastoral Pty Ltd	McMurray, BJ & CB	Wallis, PA & ML
Crouch, RJ & Co	Jarra Farm Trust	McMurray, JA & KA	Wilsdon, RE & TK
Darwent Agriculture Pty Ltd	Jesse, Cameron	McWimay Pty Ltd	Zacker Pastoral P/L
	Keller Partners	Nalang Pastoral Co	

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AFIA (Aust. Fodder Industry Assoc)	JJ O'Connor & Sons Pty Ltd	Stoller Australia
Barenbrug Australia Pty Ltd	Kalyx Australia Pty Ltd	Synergy Seeds Pty Ltd
Brandt	Kongal Seeds	Tatiara Seeds
Cox Rural Keith	Limestone Coast Seeds	Teague Australia
D & M Rural	Naracoorte Seeds	Upper Murray Seeds
DTS Seed Assurance	Nutrien	Vermeeren Bros Manufacturing
Elders Keith	DLF Seeds	Western AG
Farmers Centre	RAGT	Wilchem
Forage Genetics International	Safe Ag Systems	Wise Farm Equipment
Frank Fatchen Pty Ltd		

LUCERNE AUSTRALIA Executive Committee

Got a question for Lucerne Australia?
Contact the Executive Officer or any our Executive Committee Members who will be happy to help.

Scott Hutchings, *Chairman*
Contact: 0428 551 188

Scott is a senior agronomist with Cox Rural Keith and has worked in the upper south east for 21 years covering pulses, oilseeds and cereals and lucerne for seed, hay and pasture. Scott holds a bachelor of Agricultural Science from Roseworthy Agricultural College. Scott and his wife Cath also run a small prime lamb production and opportunity dryland seed production enterprise.

Aaron Freeman, *Deputy Chairman*
Contact: 0428 875 600

Aaron manages 'Colara' at Tintinara owned by the Munro Family producing dryland lucerne hay and seed, cereal hay and cropping along with a self-replacing merino flock and prime lambs. Aaron and his wife Penny also own and operate a contract harvesting business Colara Contracting along with a prime lamb enterprise on a recently purchased property.

Katrina Copping, *Executive Officer*
Contact: 0439 538 332

Katrina was raised on a mixed farming enterprise at Mundulla and as an active partner in a family farm at Avenue Range has a good understanding of rural issues. She has spent most of her career working in research and extension and is strongly passionate about agriculture.

Ben Farmer, *Associate Member*
Contact: 0438 501 269

Ben started with Alpha Group Consulting at Keith in 2013 before purchasing a lucerne property with his wife Rachel in December 2016. After a period of time with Nutrien Ag Solutions they began Wilkei Seeds trading a large portion of feed grains and suppling a wide range of pasture seeds both to seed exporters and businesses throughout Australia. Ben believes his direct experience within most facets of the lucerne seed supply chain brings a valuable and unique perspective to the LA Executive Committee.

Adam Zacker, *Grower Member*
Contact: 0417 853 799

Adam owns and operates the family farm at Tintinara with his wife Hannah. They run a mix of cropping, sheep (both self-replacing Merinos and prime lamb production), a herd of Angus cows and both dryland and irrigated lucerne seed and hay. Adam is passionate about the lucerne industry and its challenges.

Rodney Lush, *Grower Member*
Contact: 0419 862 510

Rodney farms with his wife Sally at Coombe, producing lucerne seed, lamb and wool since 1991. The farm production system is based around centre pivot and flood irrigated lucerne and rain fed perennial pastures. He also provides farm business advice and support to clients in the Mallee, South East and Western Victoria as a consultant with Proadvice.

Scott Campbell, *Grower Member*
Contact: 0417 887 562

Scott and his wife Sophie Campbell own a mixed farming business at Keith, producing Lucerne seed, hay grain and prime lamb production. As a business with a high reliance on lucerne Scott believes it is im-portant to keep abreast of industry issues both domestic and international. His family have been involved in the lucerne seed industry for more than 40 years.

Harrison Berry, *Grower Member*
Contact: 0447 998 421

Harrison manages a family farming operation at Brimbago, south east of Keith with cropping and sheep enterprises and as well as producing flood irrigated and dryland Lucerne seed. Before returning to manage the Brimbago property 5 years ago, Harrison worked in the Mining industry and also the Civil/Construction industry. This variety has provided a range of different insights and learnings, but he has a strong passion for the agricultural industry and is keen to contribute in building the lucerne seed industry further.

Greg Excell, *Associate Member*
Contact: 0408 838 684

Greg has more than twenty eight years experience in the seed industry. He has performed various roles including seed cleaning, grain drying and engineering, and has now purchased his own seed processing site called Limestone Coast Seeds.
Greg works collaboratively with both growers and marketers to ensure that only Lucerne seed of the highest quality is exported. From working in the seed business for many years it is obvious to Greg the many benefits that Lucerne Australia can offer the industry.