



Upper North Farming Systems Newsletter

#### June 2018

## **Stubble Initiative project finishes**

On Monday 25<sup>th</sup> of June UNFS held an event in Wirrabrara to celebrate the conclusion of our GRDC-funded Stubble Initiative project. The project has been running since 2013 and has been a major source of funding for the group. Guest speakers on the night were Jeff Braun (The Agronomist), Trent Scholz (PIRSA) and Andrew Ewers (PIRSA). Joe Koch gave a presentation on the highlights of the project, while we also had a farmer panel to discuss the season. The event was attended by 46 people.

The project has allowed the UNFS to explore important issues around maintaining and improving profitability in retained stubble farming systems. Over the course of the last 5 years, UNFS has run a series of field days, demonstrations, trials, crop walks and workshops as part of the Stubble Initiative. We have also produced a set of locally specific guidelines focusing on the benefits and costs of retaining stubble, stubble management and monitoring, set-up and operation of machinery, nutrition and grazing management, sowing into stubble, and weeds, diseases, and pests common in stubble retained systems. The guidelines have all been compiled into a book that was officially launched on Monday. If you would like one, copies will be made available at future UNFS events.

Although the project officially concludes on the 30<sup>th</sup> of June, we have some leftover funds which we are using to run a pulse trial in Warnertown, looking at time of sowing, varieties, water rates, and effects of stubble

We would like to sincerely thank everyone who has been involved in the Stubble Initiative project. The delivery of the project would not have been possible without assistance from all the farmers and UNFS members and their valued contribution.

In this issue;

- Stubble Initiative project concludes
- UNFS soil acidity fact sheet launched
- **TOS update**
- Pulse check group update
- **Upcoming events**
- Pulse value chain guidance
- **Distinguishing canola aphids**
- One Biosecurity for the livestock industry

## **UNFS soil acidity factsheet**

As part of the event UNFS hosted on Monday night, Patrick Redden officially launched a soil acidity factsheet developed by the group. The factsheet was produced as part of a year-long project UNFS has been involved in, supported by Natural Resources Northern and Yorke, through funding form the Australian Government. The project's key aim was awareness raising around soil acidification in the Upper North.

More intensive and productive farming systems are accelerating the decline of soil pH. Because soil acidity has not traditionally been an issue in much of the region, many farmers may not realise that the problem is starting to develop on their properties. Acid soils have a range of negative outcomes for productivity and sustainability, including nutrient leaching, toxicity or deficiency, poor plant vigour, inhibition of legume nodulation and a decline in soil structure. Grazing pastures growing in acid soils can also cause issues such as grass tetany and milk fever in livestock.

Hard copies of the factsheet will be made available at future UNFS events. A digital version will also be made available through our website, www.unfs.com.au.



Google Maps image of the Upper North district split into seven geographical regions. The average pH (measured in calcium chloride) in the top 10cm has been displayed for each region. The higher rainfall regions are clearly the more acidic. Map developed by Matt Foulis, Northern Ag.



## **TOS update**



All plots for this year's Time of Sowing trial have now been sown.

Thank you to Todd Orrock, Joe Koch, and Toby Fisher for all their work getting the trial in.

## **UNFS Pulse Check Group**

UNFS ran its third pulse check group meeting on the 20<sup>th</sup> of June. The event was part of the GRDC Southern Pulse Extension Project, delivered by a consortium of organisations involved in the pulse industry across GRDC's Southern Region, with UNFS coordinating the Upper North area.

Presenters on the day were Matt Foulis (Northern Ag) and Daniel Hillebrand (YP AG). 23 people attended workshop, which included discussions around pre and post-emergence pulse crops and a look at the UNFS pulse trial site at Warnertown.



## **UPCOMING EVENTS**

8<sup>th</sup> August: GRDC Grains Research Update, Riverton.

17<sup>th</sup> August: GRDC Farm Business Update, Adelaide.

22<sup>nd</sup> August: South Australian Livestock Consultants (SALC) Livestock Advisor Update. To be held in Adelaide (venue TBD). To register, visit https://www.salivestockconsultants.com.au





## **Global Pulse State of Play**

~ Guidance notes for the Australian Value Chain for the 2018 season ~

This global pulse update has been initiated by Grains Industry Market Access Forum (GIMAF), Pulse Australia and Grain Producers Australia with the support of GRDC. Turmoil in the pulse market over the last 6 months has necessitated a greater focus on understanding the global supply and demand situation with a particular focus on India and the policy settings of their government as it impacts on the pulse industry. The information will provide growers with an independently sourced basis to assist in farm production decisions.

## **Global Demand Factors**

Fundamentals remain strong for pulses globally, with a number of factors underpinning a positive outlook, including:

- Indian economic growth (>7%) providing more disposable income for the poorer quartile, driving increased in-home and snacking pulse consumption. The long- term growth in demand for pulses continues unabated.
- Chinese demand for peas continues to grow, with imports now greater than 1mmt p.a, driven by their extensive and growing fractionation operations.
- North American (and to a lesser degree, domestic) growing demand for hummus impacting trade flows, with Canada reportedly importing kabuli chickpeas to meet burgeoning demand.
- Canadian demand for peas has switched to Canadian domestic stockfeed, providing a workable outlet (although at lower prices) for peas otherwise destined for India.
- Indian restrictions on imports of yellow peas will increase consumption of other pulses, particularly chickpeas thereby helping to reduce stocks of pulses in India.
- Domestically, feed shortages are presenting favourable positions for faba beans, lupins and peas.
- Pakistan remains in short supply of pulses and will require imports to meet demand in 2018, however Government interventions have impeded trade (reportedly due to a shortage of foreign exchange reserves).

## **Global Supply Factors**

India is reported to be sitting on large supplies of pulses. These are being reduced through domestic consumption, and significantly, by the quota restriction on peas driving dahl and flour production to utilise more of the chickpea supplies.

The 2018 Kharif season (summer) crop in India is forecast to produce up to 1.3 million tonnes less than the 2017 season (mainly pigeon peas) due to lower prices, ineffective minimum support prices mechanisms hence lower plantings.

The monsoon season in the Indian subcontinent is currently predicted to be close to normal although it should be noted that the regional distribution of rainfall can obviously have an impact on production outcomes for pulses.

Current low prices for chickpeas are likely to result in reduced plantings of this crop in the rabi (winter) season – late 2018. This follows two record production seasons in India and farmer planting decisions are heavily influenced by prices received in the previous season.

Season-starting dry conditions in Canada and Australia has the potential to limit pulse export supply, with seeding delayed in both countries. Lower prices for the major pulse crops traded to India are also influencing grower planting decisions in major producing countries.





## **Commodity specific**

### Chickpeas

Prices remain firm for kabuli chickpeas at this time, with reports that Canadian farmers plan to massively increase land in chickpeas this year. Statistics Canada report that area for chickpeas to be more than double the previous five-year average. Consequently, Canadian growers are being advised to quickly move their harvest during autumn to reduce their exposure to the risk of price declines in 2019.

For desi chickpeas, India remains the key driver, with current stocks in India at record levels. Indian analysts believe that the price in India is at the bottom of the cycle and prices should trend higher from now with quantitative restrictions on yellow pea imports forcing consumers towards chickpeas, lentils and other pulses grown in India.

Demand from Bangladesh remains stable with small growth opportunities (up to 250,000 tonnes total demand).

Pakistan consumes about 700,000 tonnes of desi chickpeas; their 2017/18 harvest fell short of this demand by 300-350,000 tonnes so will need to import another 250-300,000 tonnes before their 2019 harvest if their government allows the trade to proceed.



Decile pricing shows chickpeas to be in the middle ground area of decile 5-6.

Australia finished last season with an estimated 200,000 tonnes unsold, representing a stock/use level of 21%. In a typical year, stocks/use would be expected to be <10%.

#### Lentils

Canadian inventories of lentils remain very high, pushing global stock/use to a very high 21% or over 1 million metric tonnes. Lower prices are forecast to reduce plantings in Canada by up to 20% (along with current dry conditions).

Australia is reported to still be holding inventories of 2016 lentil season in addition to stocks from 2017 season.

Turkey is holding stocks of 100,000 tonnes, mostly bought at higher than current prices levels

Egypt consumes between 90-120,000 tonnes per year (20-25% imported from Australia), however devaluation of the Egyptian pound has resulted in a major decline in imports to around 75,000 tonnes.

India is estimated to have produced 1.2 million tonnes in 2017/18, about the average level of consumption however there is some scepticism about this production figure, so there may be an opportunity for imports if tariffs are reduced.

Despite the current global oversupply of lentils, the long-term outlook remains positive for sustainable lentil production in countries like Canada and Australia.



The global and local oversupply of lentils is driving domestic prices lower to decile 2-3.





#### Peas

Globally, peas in particular have returned to more typical price relativity to grains and oilseeds, with the Canadian system holding upwards of a million tonnes from last season.

There is a risk that India may not be a major buyer of peas until 2020, suggesting Canadian (and thus world) prices need to remain at levels which compete with other livestock feed ingredients to ensure Canada does not end up with almost one year's supply. There is a price point at which China will step in to buy peas for livestock (in addition to fractionation use).

Canadian area sown to peas is expected to fall significantly this season.

Russia produced 3.2 million tonnes in 2017 (a high production season) – much of this being consumed in animal feed. 2018 production is projected at 10-15% lower due to dry planting conditions and lower prices. Other Eastern European cropped areas are predicted to drop by 15% also.

France will maintain its cropped area and average production of around 600,000 tonnes with continuing strong local demand (no exports).

Australia and global pea balance sheets are relatively good, with year ending 2017 stocks to use at 8% and 12% respectively.

It is clear that the Indian government does not want desi chickpea replacement pulses entering India and eroding prices prior to the election due before May 2018 and yellow peas normally fill a major part of this trade.



Pea prices domestically remain subdued at decile 1.

### Faba Beans

Domestic Faba bean outlook remains reasonably positive driven by the demand for high protein feed in the light of feed shortages in drought impacted areas of NSW and Qld.

Australian supply to Egypt has softened as the Egyptian pound is weaker, with any potential domestic oversupply readily taken by the feed market.

The high protein level of faba beans is also gaining the attention of the pet food industry, which may further improve the long-term prospects for this pulse.

The relative strength of faba beans is holding prices to middle ground, decile 5-6.



#### Lupins

Similar to Faba beans, domestic lupin outlook remains reasonably positive driven by the demand for high protein feed in the light of feed shortages in drought impacted areas of NSW and Qld.

The feed demand is resulting in stronger prices, currently at decile 7-8 levels.







## ~ Global Pulse Production Calendars ~



Lentil production calenda								ar Profarme Australia				
Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
Ramadan '18 Harvest (India, Pikistan, Sith China)							Planting (India, Pakstan, Sth China)					
	Planting (Egypt, Canada)						vest Canada)					
				Harvest (Turkey, Syria)						nting y, Syna)		
Planting (EU spring, Nth China)					(E	Harvest U spring, Nth Chin	a)					
					Harvest (EU w inter)		(EU winter)					
			Planting (Australia)					Harvest (Australia)				
Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	







			Lupi	tion calendar				Profarme Australia		
Feb Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
			adan '18							
	Planti				Harvest					
	(Egyp	ņ			(Eg)	rpt)				
					Harvest			Planting		
	(EU w inter)				inter)		(EU winter)			
Planting	Harvest									
(EU spring, Nth Chin	a)				(8	J spring, Nth Chin	a)			
	Harvest							Planting		
	(Sth China)							(Sth China)		
	_		Planting			Harv			vest	
			(Australia)					(Aust	ralia)	
		-								
Feb Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan

This report has been compiled by GIMAF and Pulse Australia, with the support of GRDC. Decile pricing and global production calendar charts supplied by Australian Crop Forecasters.

Information has primarily been sourced from published reports and data presented at the Global Pulse Confederate Meeting, Colombo, 7-9 May 2018.



# Wax on, wax off: distinguishing canola aphids

(http://pir.sa.gov.au/research/services/reports\_and\_newsletters/pestfacts\_news letter/current\_issue/pestfacts\_issue\_4\_2018/wax\_on,\_wax\_off\_distinguishing\_ canola\_aphids)

Cabbage aphid, *Brevicoryne brassicae*, has been observed on volunteer canola at Kadina and near Cummins. Amongst them, some light green aphids can be found; are they green peach aphid (GPA), *Myzus persicae*?

DEVELOPMENT

PIRSA

Recently, we have received several queries related to identifying green peach aphid among other canola aphid species, which include the cabbage aphid, and the turnip aphid, *Lipaphis pseudobrassicae*. Green peach aphid rarely reaches densities high enough to cause direct economic damage, but can transmit plant viruses in some years, though climatic conditions suggest a low risk in 2018 (see PestFacts Issue 3 2018). Insecticide resistance is also widespread in Australian green peach aphid populations. For these reasons, correct identification of aphids is important when considering management.

Typically, cabbage aphids are very distinct with their heavy coating of whitish wax, however without this wax, they are green in colour and can look similar to GPA. Aphids typically undergo 3-4 moults during their lifecycle. Moulting removes the cabbage aphid's waxy coating and immediately after moulting, they appear noticeably green until covered in wax again (wax is produced by the cornicles, or `exhaust pipes`). While cabbage aphid colonises look greyish in colour, turnip aphid colonies have less wax and look greenish in colour. Cabbage aphid and turnip aphid do not typically occur together in the same colonies, but GPA can co-occur with either species.

The following features can be used to distinguish GPA from other `green-looking` canola aphids:

Tubercules are structures on the tip of the head, visible from above.GPA has distinctive, prominent `tubercules` that clearly point inwards, while cabbage and turnip aphids have less prominent, outward-facing tubercules. Cornicles (`exhaust pipes`) are wax-producing structures on the abdomen. GPA has relatively long cornicles that reach the tip of the abdomen, which are swollen with dark-coloured tips. Both cabbage and turnip aphid have shorter cornicles than GPA – in cabbage aphid they clearly do not reach the tip of the abdomen. Turnip aphid also has a difference in colour from the other species – the adults and later instars have dark-coloured bars across their abdomen.

Feel free to contact PestFacts to confirm identification of these aphid species or any pest or beneficial invertebrate.

Source of Reports: Zack Zweck (AW Vater & Co) and Nigel Myers (Landmark, Cummins).



Juvenile cabbage aphid shedding exoskeleton and waxy coating (Photo: R. Hamdorf, taken with GoMicro Field Scope)



Cabbage aphid colony



Turnip aphid colony (Photo: K Perry)



Distinguishing characteristics of cabbage aphid (Source: I SPY)



Distinguishing characteristics of green peach aphid (Source: I SPY)



Distinguishing characteristics of turnip aphid (Source: I SPY)

PestFacts is a free service designed to keep growers and advisors informed about invertebrate pest issues in grain crops during the winter growing season.

PestFacts relies on your reports of pest and beneficial invertebrate activity in grain crops. Please contact us directly to report an observation or ask a question.

SARDI provides a free insect diagnostic service for subscribers. Send multiple specimens in a non-crushable container along with collection details to: PestFacts, GPO box 397, Adelaide SA 5001.

Follow us on Twitter W@PestFactsSARDI

PestFacts map is an interactive tool that allows users to search and view historical pest reports from across south-eastern Australia.

PestFacts is provided by the South Australian Research Development Institute (SARDI) Entomology Unit with the support of the Grains Research and Development Corporation.

Previous PestFacts Editions

Contacts: Rebecca Hamdorf Phone: (08) 8429 0682 rebecca.hamdorf@sa.gov.au

Kym Perry Phone: (08) 8429 0738 Mobile: 0421 788 357 kym.perry@sa.gov.au









# **One Biosecurity**

One Biosecurity is a new state-wide approach to managing, protecting, and promoting South Australia's strong biosecurity regime across its livestock industry.

Primary Industries and Regions SA (PIRSA), through Biosecurity SA, has developed the program in collaboration with the livestock industry, in particular with the assistance and support of Livestock SA.

One Biosecurity will be voluntary but we want ALL of South Australia's sheep, beef and dairy cattle producers to register.

Once registered, producers will be able to quickly generate a government and industry endorsed biosecurity plan for their property. This can be downloaded and used not only for One Biosecurity, but for other programs that require a farm biosecurity plan.

The first release of the One Biosecurity program will target sheep, beef cattle and dairy cattle industries – and will be officially launched and open for registrations in mid-2018.

## Why do we need One Biosecurity?

One Biosecurity will help safeguard and promote the State's \$5.5 billion livestock sector.

It will assist South Australian livestock producers to make safer, more informed livestock purchasing decisions that will better protect their livestock and livelihood.

Agents, buyers and abattoirs can also register and use One Biosecurity to employ credible and transparent checks for good biosecurity practices and animal health management before and at point of purchase.

One Biosecurity will also help address the growing challenges of increased consumer demand for product traceability by increasing awareness that premium produce begins with credible and safe biosecurity practices in the paddock.

## How will One Biosecurity work?

One Biosecurity will feature a free, easy-to-use website allowing livestock producers to register, manage, check and declare their farm biosecurity status online.

This one-stop, online animal biosecurity management tool will provide best practice biosecurity assessment, management, response advice and guidelines for multiple livestock diseases in South Australia.

Producers seeking One Biosecurity status will be self-guided through the program's two core online components:

- Biosecurity Practices Questionnaire
- Endemic Disease Risk Rating modules.



**BIOSECURITY SA** 

PIRSA

Producers who complete a successful One Biosecurity registration will be able to print and/or make available an online summary of their status to use when selling, buying or promoting their livestock.

## What are the benefits?

- All producers in Australia must now have a farm biosecurity plan on record (MLA/LPA requirement) and One Biosecurity will generate an approved biosecurity plan in a simple, free, online process
- Generates an Animal Health Declaration (to accompany stock being transported)
- All records will be available on a single site and are easily updateable
- Will assist with purchasing decisions
- Will provide credible assurance to existing domestic and international markets and help us meet potential new market access requirements
- Improve government and industry disease surveillance and analysis capabilities, which is vital in maintaining the State's favourable animal health status and for the early detection of animal health emergencies.

## When will One Biosecurity begin?

The new One Biosecurity program is currently being trialled, and will be officially launched and open for registrations in mid-2018.

In preparation, producers are encouraged to pre-register their interest and be kept informed of One Biosecurity program developments, as well as receive the latest biosecurity tips and advice.

To pre-register for One Biosecurity: http://pir.sa.gov.au/1biosecurity

## Additional contact details

Biosecurity SA is the State Government's peak government agency to manage and control animal and plant pest invasions and diseases and agricultural and veterinary chemical use.

Producer claims regarding biosecurity and disease status will be verified through online and on-farm checks, to ensure the integrity of the system. These checks will be carried out by Biosecurity SA field officers.

Biosecurity SA's Animal Health Officers are available to help offer advice and practical information on how producers can improve their farm biosecurity practices. Find your local Biosecurity SA Animal Health Officer at <u>pir.sa.gov.au/biosecurity/animal\_health/contact\_us</u>

Producers are reminded to immediately contact the Emergency Animal Disease Watch Hotline on 1800 675 888, a Biosecurity SA staff member, or their private veterinarian if they suspect any form of exotic disease in their animals.



# Upper North Farming Systems

# **Contact Details**



#### **Strategic Board Members**

Matt McCallum Chairman - Booleroo/Willowie matthewmcag@bigpond.com 0438 895 167

Matt Nottle— Vice Chairman matt.nottle@hotmail.com 0428 810 811

Barry Mudge Board Member theoaks5@bigpond.com 0417 826 790

Joe Koch Financial Officer - Booleroo Centre breezyhillag@outlook.com 0428 672 161

Jim Kuerschner Board Member - Orroroo/Black Rock jimkuerschner@bigpond.com 0427 516 038

Chris Crouch Board Member crouch\_19@hotmail.com 0438 848 311

Ian Ellery Equipment Officer - Morchard elleryprops@hotmail.com 0400 272 206

Matt Foulis Project Development Officer - Willowie/Wilmington matt@northernag.com.au 0428 515 489

Patrick Redden Extension Review Officer PRedden@ruraldirections.com 0400 036 568

Andrew Kitto Board Member and Gladstone Hub Rep - Gladstone ajmkkitto@bigpond.com 0409 866 223

**Kym Fromm - Public Officer - Non-Committee Member** - Orroroo fromms@bigpond.com 0409 495 783

#### **Operations Committee Members**

Booleroo Tyson Christophersen tysonchrisso7@gmail.com 0407 040 602

#### Industry Representatives

Michael Richards michael.yp@bigpond.com 0427 547 052

#### Jamestown

Luke Clark clarkforestview@bigpond.com 0429 840 564

#### Ladies on the Land

Jess Koch Jessica.breezyhill@outlook.com 0419 982 125

Melrose Andrew Walter awalter@topcon.com

0428 356 511

#### Morchard/Orroroo/Pekina/ Black Rock

Gilmore Catford catclub8@bigpond.com 0400 865 994

#### **Nelshaby Hub**

Leighton Johns leightonjohns@hotmail.com 0400 804 876

#### Wilmington

John Carey maidavale1@bigpond.com 0428 675 210

#### **New Farmer Representatives**

Matt Dennis mattdennis96@outlook.com 0407 117 233

Nathan Crouch nathan.crouch3@hotmail.com 0407 634 528

## Executive Officer and Project Manager

Ruth Sommerville Spalding - Part-time (Currently on Maternity Leave) E: unfs@outlook.com M: 0401 042 223 Finance Officer

Mary Timms Part-time E: accounts@unfs.com.au M: 0428 580 583

#### Project Officer

Hannah Mikajlo Jamestown - Full-time E: projects@unfs.com.au M: 0449 676 024