



## ISSUE 19 - SEPTEMBER 2015

Welcome to the September issue of our BPS newsletter. We hope you find the articles contained in this issue informative.

# This issue contains:

Staff Changes
BPS Activities
Update from the Plots
AGM
Sugarcane Smut
Gypsum or Lime?
Smartcane BMP
Step-up Next Gen Update
Irrigation Information
Shed Meeting Dates and Topics
Minipans for Scheduling
Annual Crop Data Survey
Contact details



#### **STAFF CHANGES**



#### **Brendan Arboit**

We are pleased to welcome our new Field Officer for the Invicta mill area, Brendan Arboit. Brendan has previous experience in the position as he worked under the guidance of Rod Schultz from 2003-2006 as Field Officer for the Invicta Cane Pest & Disease Board. His family have been farmers in the Burdekin district for many years, so Brendan is accustomed to issues relating to growing cane.

Brendan can be contacted on 0427 372 124 if you need advice on pests, diseases or varieties.

### **BPS ACTIVITIES**

Since the last edition, staff have been heavily involved in seed cane distribution as well as hot water treatment of plant cane for the 2016 mother plots and distribution plots in all mill areas. All of the mother plot and distribution plots for 2016 have been planted and will be ready for inspection soon.

Many of our members have taken advantage of our plant source inspection service, with over 150 individual PSI's conducted during this period. Plant source inspections are conducted by BPS as a free service for members. It is imperative to source and propagate disease free cane.

#### **UPDATE FROM THE PLOTS**

As the planting season wraps up for the year, we would like to thank all growers who have opted to source clean seed cane from the various plots. The quality of the seed cane this year has been exceptional and although not being able to emulate the record sales of 2014, we have experienced a steady flow of orders from most areas.

Seed Cane Sales (tonnes) to 31 August, 2015

Plot	Inkerman	P & K	Invicta
Sales	1294	1476	939

Variety	Q240	Q252	KQ228	Q253	Q208
Sales	1210	558	660	572	526

The best-selling variety this year has been Q240, followed by an even distribution of Q252, KQ228, Q253 and Q208. We expect to continue selling cane through to the end of September. If members have any last minute orders, please contact your mill area field officer.

#### **AGM**

The BPS Annual General Meeting was held at the Ayr Showgrounds Hall on Tuesday afternoon of the 25<sup>th</sup> August, 2015. The meeting commenced with an informative address by Chairman Chris Hesp, during which he outlined the progress of the BPS strategic plan. This was followed by comprehensive management reports from Manager Rob Milla and Commercial Manager Mark Rickards. Chris' presentation focused on the 5 strategic goals of BPS:

- Minimise pest and disease pressure
- Deliver a wide ranging extension service
- Participate in industry and externally funded projects
- Sound corporate governance and fiscal planning
- IT systems and data storage to assist growers.

The board and management of BPS are pleased that the strategic direction of BPS is on track, and Chris also reported that the BPS levy has been unchanged from 2011, and is unlikely to be raised in the medium term. Chris also reported on the fact that BPS are working hard to meet the industry expectation of increased extension activities, and additional funding is being sought where possible to support these activities.

Rob's report detailed the hard work of all staff from BPS, noting increased pest and disease activities, particularly in relation to RSD testing and approved seed cane, YCS and smut. He also discussed the externally funded project work in response to grower priorities discussed at shed meetings. BPS extension staff have over 30 trials and demonstrations across all areas of the district in relation to:

- Variety management and performance
- Nitrogen management, rate and timing of application
- Gypsum and lime
- Legume management
- Harvester speed
- Potassium rates
- Irrigation.

Trials that are being harvested at the time of publication of this newsletter will be discussed at upcoming shed meetings in mid-October to early November.

Mark's presentation focused on the financial position at BPS. Due to increased external project work and strict control of expenditure, the 2014/2015 budget was underspent. The BPS board and management will strive to continue to run a cost effective operation while improving services to growers.

Annual Productivity Awards were presented next with Joe Sibson awarded 'Sugar Producer of the Year', Russell Hall awarded 'Highest average CCS (for a farm over 25ha)' and Angelo Loizou awarded 'Highest Tonnes per Hectare (for a plant crop over 4Ha). These 3 awards were sponsored by Wilmar Bio-Ethanol Ag

Services, QSL and Incitec-Pivot respectively. Thanks goes out to these generous sponsors for their valued support.

The event concluded with an interesting presentation by Dr. James Underwood from The University of Sydney whose topic was 'Robotics & Information Systems for Agriculture.'

The meeting presentation can be viewed on the BPS website (<a href="www.bps.net.au">www.bps.net.au</a>) by clicking the 'BPS News' tab and going to 'BPS Presentation AGM 2014-2015'. There is a lot of important information included in this presentation and members are encouraged to log on and read it.



### **SUGARCANE SMUT**

Sugarcane smut has recently been found in higher levels in a number of Burdekin cane blocks. So far it has been found in Tellus, Q252, Q208 and Q183.

High infection levels have been noted in some blocks of Tellus. In these blocks more than 5 whips per metre have been found. Significant infection levels have also been seen in some Q252, with lower levels of infection in Q183 and Q208.

Smut has been present in the Burdekin for a number of years but this year the seasonal conditions have been perfect for disease development and this has resulted in higher infection levels. SRA have advised that this is similar to the experience in the Ord where under ideal conditions high levels of infection were found in intermediate rated varieties such as Q183, Q208 and Q252.

Tellus is rated as susceptible to smut. It seems likely that Tellus has been the initial source of the infection which has then spread to nearby blocks of other varieties. The recommendation from SRA is that growers with Tellus should seriously consider removing it and planting varieties that are not smut susceptible to reduce the pressure on intermediate rated varieties.

When planting into blocks that have had smut, or are in close proximity to where smut has been found, it is recommended that Sinker fungicide is applied at planting as per the label directions. This will help to protect the germinating cane for three to six months from spores present in the soil or the air.

Growers should also be obtaining new stocks of approved seed cane to prevent smut build-up in plant sources and planting with Sinker fungicide.

SRA pathologists will be visiting the region soon after publication of this newsletter to give further advice on management of smut in the region.

If you find smut or have any questions please contact your BPS field officer.







Smut whip on Q183

#### **GYPSUM OR LIME?**

Now is the time of year when people are starting to consider amelioration (gypsum or lime) options for their soil.

You should consider applying gypsum or lime to your soil if you are experiencing issues with soakage, soil structure (hard setting and surface sealing), or sodicity (when Exchangeable Sodium Percentage, ESP, on a soil test is greater than 6%).

Ameliorants (gypsum or lime) can be applied in both ration and fallow blocks. Generally, in the Burdekin, gypsum is the recommended ameliorant. Where soil pH is less than 6.5, lime can be considered. Both gypsum and lime contain calcium, which can improve soil structure by replacing sodium and sometimes magnesium.

You can choose to have ameliorants applied as a blanket or a band. Blanketing achieves complete coverage across a block. Banding is the zonal placement of product, reducing the quantity of ameliorant needing to be applied and making this a cost effective option. Following application, light incorporation is recommended such as light cultivation with tines, hill up boards or bedforming.

BPS has established gypsum and lime rate demonstration sites around the Burdekin, which will be harvested in 2016. These sites have been established on a wide range of soil types. The results of these trials will determine the effectiveness of ameliorants where sodicity or soakage issues are limiting crop yield.

If you have any questions regarding soil amelioration please call the office. We can provide one on one advice for your specific situation.



Gypsum rate trial site

### SMARTCANE BMP NEEDS SUPPORT OR REEF REGULATIONS MAY BE IMPOSED

(Article submitted by Canegrowers Burdekin)

There's been a lot of talk in the media over the past couple of weeks about grower involvement in Smartcane BMP and the possibility of reef water quality regulations being imposed on farmers.

The Environment Minister Steven Miles said:

"We want more farmers to take it up and we want them to take it up not just because it's good for the reef but also because it's good for their farms.

"Ultimately that's why we've decided to continue to invest in these programs, because we think they're good for industry, good for farmers and good for the environment.

"Now if down the track the take up hasn't increased, then we will have to look at other options because we do have to improve water quality running into the reef."

Smartcane BMP is an industry developed series of seven modules covering a wide range of usual farm activities. The first three are seen as the key modules:

- Soil health and plant nutrition management (key).
- Pest, disease and weed management (key).
- Drainage and irrigation management (key).
- Crop production and harvest management.
- Natural systems management.
- Farm business management.
- Workplace health and safety management.

As you answer each question, the system tells you if you are 'below', 'at', or 'above' the industry standard for each practice. If any practice is below the industry standard, you are shown what would need to be done to reach that mark. If you need some extra help along the way, your local facilitator is there to help the grower every step of the way.

Terry Granshaw is the Smartcane Facilitator in the Burdekin. Terry can be contacted on 0437 553 149 for assistance.

The Smartcane program needs high grower participation. A robust system and a high level of adoption of this system by sugarcane growers is the key to winding back the regulation, and ensures the sustainability of the industry into the future.

Growers have experienced firsthand the enormous work involved in compliance with regulations - it is expected that sugarcane growers will sign-up to a practical, industry led and developed system.

The rate at which regulation will be wound back, is directly linked to the rate at which cane growers adopt the new industry-led system.



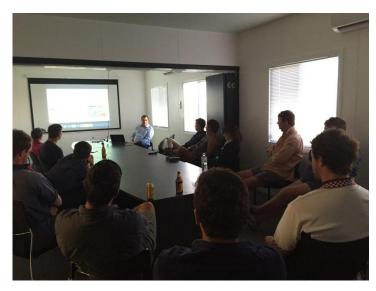
### STEP UP NEXT GEN BURDEKIN YOUNG GROWERS GROUP UPDATE

The Step Up Next Gen Burdekin Young Growers group had an evening information session at the BPS shed on Thursday September 10. The group heard presentations from Michael Munroe (BMS Lasersat) 'How to get the best from your GPS' and Natalie Williams 'Succession Planning: experiences, processes and how to start the conversation'.

Michael walked the group through how to set up your GPS, how to use it as a record keeping tool and how to extract information from the unit. Natalie discussed her own succession planning experiences, the process to expect and how to start having the conversation within the family business. It was a good night and we appreciate the effort made by the speakers to talk to the group.

The idea of this group is to provide a forum for young, or young at heart, growers to learn from each other and discuss ideas. Future plans for the group include more detailed training sessions as well as tours to other regions and industries.

The group would like to thank BPS, Step Up Next Gen, Case IH and NAB for contributing to the event. Any young growers or industry participants who would like to be a part of the group's future activities should let Tiffany know on 0447 069 887 so she can add you to the group email/text list.



Above: Michael Munroe talks 'Getting the best from your GPS'

Right: Young growers field walk earlier in 2015



### **IRRIGATION INFORMATION ON THE BPS WEBSITE**

The BPS website (<a href="http://bps.net.au">http://bps.net.au</a>) has a wealth of information on the services BPS provides and improving productivity. Information on irrigation issues is filed under the Irrigation Information and Improve Productivity tabs.

#### **IRRIGATION INFORMATION PAGE**

## **Crop water use information**

Here you can find weekly crop water use information for representative crops growing at Ayr and Clare. The data is updated weekly (on a Friday) and shows how

crops of different ages are using water and how frequently they need to be irrigated.



#### Information sheets

Water allocation information sheet with options for managing limited water allocations. Electrical conductivity conversion chart to quickly convert between different EC readings eg mS/cm to grains per gallon

#### **Calculators**

Irrigation application calculator - this excel spreadsheet based calculator can be used to calculate the volume of water being applied during irrigation using either the flow rate from the pump or the output of cups.

EC conversion calculator – interactive conversion of EC units.

Minipan calibration sheet – for recording and automatically calculating changes in crop growth measurements.

## **IMPROVE PRODUCTIVITY (CROP NEEDS) PAGE**

Here you will find links to a range of information sheets from SRA covering the areas of irrigation, nutrition and weeds.

## **COMING SOON**

## Soil moisture monitoring probe data

Growers will soon be able to access real time soil moisture monitoring data. Two probes (with another to follow) have been installed on local farms. One of these is on a Barratta clay and the other is on a delta clay loam with sandy subsoil. These probes will show the extraction of water at different depths in the soil profile and the effect of irrigation and rainfall on soil moisture levels. Soil temperature readings will also be available.



Example of soil moisture graphs that will soon be available

## **SHED MEETING DATES AND TOPICS**

Date	Time	Group	Venue		
Wed 14 Oct	8:30	Leichhardt	P Brotto		
Wed 14 Oct	1:00	Darvenezia/Groper Creek/Marshalls	B Santarossa		
Thurs 15 Oct	8:30	Osborne/Causeway/Iona	R Piva		
Thurs 15 Oct	1:00	Down River/Ramsdens	N Pitris		
Fri 16 Oct	8:30	Inkerman/Fredericksfield/Koolkuna	G MacElroy		
Mon 19 Oct	8:30	Giru/Shirbourne	D Polletto		
Mon 19 Oct	1:00	Selkirk/Haughton/Bartlett/Upper Haughton	SISL		
Tue 20 Oct	8:30	Millaroo/Dalbeg	J Cambruzzi		
Tue 20 Oct	1:00	Jardine/Mona Park/Barratta	L Smith		
Wed 21 Oct	8:30	Clare/Mulgrave	Clare Club		
Thurs 22 Oct	8:30	Rita Island	SES Shed		
Thurs 22 Oct	1:00	Jarvisfield/Kilrie	Quartermaine		
Mon 2 Nov	8:30	Aerodrome/Colevale/Town/Pioneer Mill	B Lago		
Mon 2 Nov	1:00	Waterview/Sextons	E Pearce		
Tue 3 Nov	8:30	Airdmillan/Burstalls N Formali			
Wed 4 Nov	8:30	Airville/Dicks Bank/McDesme BPS Shed			

# Topics

- Herbicide management and weed control
- Irrigation management, including limited water options
- Fallow management
- Nitrogen and variety trial results
- Funding opportunity Burdekin Reverse Tender





#### MINIPANS - A SIMPLE IRRIGATION SCHEDULING TOOL

Early plant crops are now reaching full canopy and starting to make cane. As the weather warms up they will enter their peak water use phase when irrigation scheduling becomes critical. Minipans are one of the simplest irrigation scheduling tools available to furrow irrigators and now is the ideal time to start calibrating them.



A minipan is simply a container from which water evaporates. After it has been calibrated to crop growth measurements (see SRA Information sheet IS13022) it provides an easy method of irrigation scheduling. Minipans are particularly suited to furrow irrigation because the soil profile is refilled with each irrigation and all of the soil moisture used by the crop is replaced. With other irrigation systems the amount of moisture that has been removed by the crop may be greater than the amount replaced by irrigation.

The minipan can be calibrated using crop growth measurements once the crop reaches full canopy. Following an irrigation the crop will grow rapidly and then gradually the daily growth rate will decrease. The irrigation trigger point occurs when the daily growth drops to 50% of the maximum growth.

The minipan is refilled when irrigation occurs. When the irrigation trigger point is reached a note is made of the minipan deficit. For subsequent irrigations the minipan is monitored and when it reaches the trigger point the crop should be irrigated.

The minipan deficit is not the same as the soil moisture deficit. So, unfortunately, a minipan cannot tell you how much soil moisture your crop has used or how much irrigation you need to apply.

All that a minipan measures is the evaporation of water from that pan's surface. The irrigation trigger point for one pan will not be the same as another pan because of different surface areas and pan designs. It is also very important to remember that minipan evaporation is not the same as the evaporation from an A-class pan, or calculated evapotranspiration figures.

The confusion over what a minipan measures has occurred because a ruler is used to record the irrigation trigger point. A ruler is used simply because it is the easiest way to record the irrigation trigger point. Because the number on the ruler has no relationship to soil moisture it could just as easily be recorded as a, b, c, d, e.

Minipan calibration sheets and instructions on making and calibrating a minipan (SRA Information Sheet IS13022 - Irrigation scheduling with minipans) are available on the BPS website.

For assistance with calibrating a minipan please contact Marian Davis (RWUE extension officer) on 0428 927 079.

# **MINIPAN CALIBRATION SHEET**

Grower				Block										
Farm no.								Var	iety					
Date														
Time														
Stalk no.	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
Total														
Average														
Daily growth														

This calibration sheet is also available as an interactive tool on the BPS website.

## **ANNUAL CROP DATA SURVEY**

The annual BPS crop data survey has commenced. Over the next few months field officers will be contacting all growers to check that the mill maps are correct and to collect:

- Planting details including contractor & chemicals used
- Grub control details
- varieties and areas
- Seed sources
- Nutrient rates applied to plant and ratoons
- Pest and disease occurrence and damage caused
- Fallow management



## **STAFF CONTACTS**

Contact	Title	Contact	Email		
		Number			
Office		(07) 4783 1101	reception@bps.net.au		
Fax		(07) 4783 5327			
210 Old Clare Road, Ayr	QLD, 4807				
PO Box 237, Ayr QLD, 48	07				
Rob Milla	Manager	0490 036 329	rmilla@bps.net.au		
Mark Rickards	Commercial Manager	0427 834 800	mrickards@bps.net.au		
Marian Davis	Extension Agronomist	0428 927 079	mdavis@bps.net.au		
Tiffany Hunt	Extension Agronomist	0447 069 887	thunt@bps.net.au		
Raymond Hildebrandt	Field Officer – Inkerman	0409 831 863	rhildebrandt@bps.net.au		
David Paine	Field Officer – Kalamia/Pioneer	0427 167 159	dpaine@bps.net.au		
Brendan Arboit	Field Officer – Invicta	0427 372 124	wsquires@bps.net.au		
Brendan Montafia	Trainee Agronomist	0407 167 159	bmontafia@bps.net.au		
Ashley Wheeler	Field Officer	0407 960 057	awheeler@bps.net.au		
Terry Granshaw	Extension Officer	0437 553 149	tgranshaw@bps.net.au		