



ISSUE 17 – MARCH 2015

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

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MESSAGE FROM THE BPS CHAIR

With planting well underway at the time of publication, and crops needing plenty of irrigation, no doubt all growers are very busy. BPS is committed to providing high quality services to its growers with supply of clean seed cane, pest and disease support as well as extension services. I urge all growers to use these services and feel free to call any of the staff for assistance with plant source inspections, irrigation or weed control advice, pest or disease identification or variety selection for your farm. BPS staff are a resource for our local industry, whose focus is on improving all members' productivity and profitability. BPS has undergone expansion in the number of extension staff over the last 12 months, which was largely in response to industry requests to fill the gap in extension with the restructure of BSES to SRA.

BPS released their 3 year strategic plan at last years' AGM, which highlighted the need to provide quality extension services to the region in line with BPS priorities. BPS management staff and directors also met with all local grower collectives to discuss plans on addressing some of the gaps in the region, while ensuring that provision of clean seed cane and pest and disease services were not compromised.

We have been fortunate that the management team have been proactive in seeking external funding to support the additional positions within the BPS extension team out until 2018 in some cases. This funding has come from a range of organisations including NQ Dry Tropics, QCGO, SRA and DNRM. These programs are aligned with BPS' strategic plan with an ultimate aim to improve productivity and profitability of growers.

Collectively as a board of directors, and after discussions with all local grower collectives, we have agreed that BPS was best placed to be involved in the delivery of Smartcane BMP. This program is the industry's opportunity to maintain self-regulation, demonstrate to government and community that we are farming sustainably, and an opportunity to document the good practices many of us have adopted over the years. With increasing pressure from government, green groups and purchasers of our sugar (eg: Coca Cola, Nestle) to have a demonstrated focus on sustainability, BPS sees the BMP program as critical to the future success of our industry.

That said, BPS does not view BMP as a 'tick the box' exercise that should be done to justify our actions, but rather as a tool that will allow us world market access and ultimately have productivity and profitability outcomes for growers. For this reason, we have employed Terry Granshaw as an extension officer to assist growers through the BMP process, and with the support of other BPS staff, assist all growers in the region in improving productivity and profitability. Terry is available to work one on one with growers who wish to be involved in the BMP program and will assist in getting growers to the point of accreditation.

There have been some misconceptions that the BMP program is a set of specific practices that have to occur on each farm. BPS recognises that every farm is different, and the Smartcane BMP program has the flexibility for growers to document their individual practices and make changes if required. This system of self-regulation is far more preferable than an alternative of external regulation which may dictate a series of prescriptive practices that may not be suitable for many farms.

BPS is committed to continually improving the productivity and profitability of its members. BPS obviously cannot do everything, but where opportunities exist to add value for our member base, rest assured that we will deliver these opportunities in the most cost effective manner.

The BPS levy has remained at 7c/tonne for the last three years, and I am pleased to report that this year's levy will remain at 7c/tonne with extra services able to be delivered. We appreciate your membership and encourage feedback from all levy payers on how BPS can better serve our members.

Regards
Chris Hesp

STAFF CHANGES

Kristine Patti

After three years as field officer for the Pioneer Mill area, a heavily pregnant Kristine is about to start a family so she will be on maternity leave for some time. We all wish Kristine the very best of luck as she pursues a new career in motherhood. But, is it a boy or a girl?

In the meantime, Dave Paine will take trainee agronomist, Brendan Montafia, under his wing to assist in servicing the requirements of both Kalamia and Pioneer growers. Brendan will have Kristine's phone number, so expect a male voice to answer from now on.

Terry Granshaw – Extension Officer

The board and management of BPS are pleased to announce the employment of an extension officer to drive the SmartCane BMP program in the Burdekin. Terry grew up on the family farm at Dalbeg and comes on board with 25 plus years of experience in all aspects of sugarcane farming from planting right through to contract harvesting. Known as an innovator, he has experimented with different farming systems and harvesting procedures during that time. He is also well versed in farm data recording, GPS setup and use, irrigation and spray application practices. This experience will prove vital in the new role, please contact Terry if you wish to get involved in the Smartcane BMP program.



Terry's position will be funded by the Queensland Government through CANEGROWERS Queensland and the SmartCane BMP program.

BPS ACTIVITIES

After the Christmas break, staff have been collecting crop data for every block on each cane farm in the district. This information is then recorded in our central computer system for future reference. Data collection and entry is very time consuming but it is essential for tracking information at a later date.

The dry weather has been very frustrating for growers, but it has allowed more time for itch grass rogueing. Casual employee, Robert Walsh has pulled out and then destroyed thousands of immature and seeded plants. These have been found predominately in the Airville area. Growers are reminded to stay vigilant and report any discovery of itch grass to BPS, whether it is one plant or a larger outbreak, so that a management plan can be activated. One itch grass plant can produce hundreds of seeds that either germinate immediately, or lie dormant in the soil before germinating when environmental conditions are more suitable.

Growers with itch grass on their farm must clean down harvesting and planting equipment before moving between farms. This is a good practice to get into as it will stop the spread of pests and disease.

Field staff have also conducted numerous plant source inspections for members who have decided to plant due to favourable weather conditions.

In the next month, staff will be sampling blocks of ratoon cane for RSD (Ratoon Stunting Disease) throughout the Inkerman and Kalamia milling areas. Sticks of cane will be cut at random and the juice extracted into small vials. These samples are then sent to the SRA laboratory in Brisbane for analysis. RSD surveys are completed annually during March and April.



Collecting juice samples for RSD testing

UPDATE FROM THE PLOTS

All of the seed cane distribution plots and mother plots throughout the district are in excellent condition primarily due to the great work of the plot managers. Our thanks are extended to Jim Richardson, Paul Pegoraro, Shane McNee, Sib, John and Michael Rapisarda, Keith and Gary Lyons, Eddie and John Minuzzo, Bill Christensen and Michael Cervoni. These men have worked very hard to provide an invaluable product for the benefit of all growers. Please make a point of congratulating these guys for a job well done, next time you meet.

Last year was a record for cane sold from the plots and this year a good quantity of seed cane orders have been placed with the field staff during the crop data collection process. These orders are collated then confirmed against the crop estimate for the respective plots. If there is insufficient availability, pro-rata rationing occurs.

So far, orders are less than last year's record, so there is availability in certain varieties. Members can also order 1st ratoon or commercial cane from the plots to supplement their

allocation for planting. Although not classed as disease free seed cane, commercial cane from the plots is an excellent plant source being only 2 years off hot water treatment.

P and K growers who wish to place or change their seed cane orders are urged to contact David Paine or Brendan Montafia as most varieties are in demand. P and K (Whitson's) plot will be open on the 20th April 2015, weather permitting.

Invicta plots will be open from 27th April, 2015. Wayne Squires will be assisted by Ash Wheeler in the sale of seed cane and commercial cane from the plots at Giru, Brock Road, Rapisarda's and Millaroo. Place your orders through Wayne as usual and he will organise dispatch from the plot.

When selecting varieties to plant, remember to order cane that suits your soil type - e.g. Q253 and Q232 are better suited to poorer soils - and always maintain a good mix throughout your farm in case of a disease breakout in a particular variety. Also, each variety has different requirements with regards to water and nutrient uptake. Your field officer or one of the BPS agronomy team can assist with advice on crop management.

For more variety information, refer to the variety guide from QCaneSelect on the next page.



PLANT SOURCE INSPECTIONS

With planting in full swing, it is important to ensure that your plant source is free of disease. BPS field officers are available to inspect cane that is intended for use as a plant source. This is a **free service** that is provided to all members of Burdekin Productivity Services Ltd. **Take advantage** of this opportunity and eliminate the chance of propagating diseased or unsuitable cane on your farm.



Brendan Montafia conducting a plant source inspection

VARIETY GUIDE from QCaneSelect

Variety	Suited soils	Productivity		Fast and reliable germination	Seasonal sugar:		
		Yield	CCS		Early	Mid	Late
Q253	Sodic/Sand/Saline.	Moderate-High	Low	Good	TBA	TBA	TBA
Q252	Silty Loam.	Moderate	Moderate-High	Average	TBA	TBA	TBA
Q247	Cracking clay, Non-Sodic Duplex, Silty Loam, Sodic Duplex, Sodic/Sand/Saline. <i>Note: Better varieties are available for these soil(s).</i>	Moderate	Low-Moderate	Average	Average	Average	Average
Q240	Cracking clay, Non-Sodic Duplex, Silty Loam.	High	Moderate	Good	Average	Average	Average
Q232	Cracking clay, Sodic Duplex. <i>Note: Better varieties are available for these soil(s).</i>	Moderate-High	Moderate-High	Average	Poor	Poor	Poor
KQ228	Non-Sodic Duplex, Silty Loam, Cracking clay.	High	Moderate	Good	Good	Average	Poor
Q208	Sodic Duplex, Silty Loam, Sodic/Sand/Saline, Non-Sodic Duplex, Cracking clay.	High	Moderate	Average	Average	Good	Good
Q200	Cracking clay, Non-Sodic Duplex, Silty Loam. <i>Note: Better varieties are available for these soil(s).</i>	Moderate	High	Average	Poor	Average	Good
Q183	Cracking clay, Non-Sodic Duplex, Sodic Duplex, Silty Loam.	High	Moderate	Good	Average	Average	Average

*TBA- To be advised.

BIOSECURITY

Benefits of Clean Seed Cane and Variety Selection

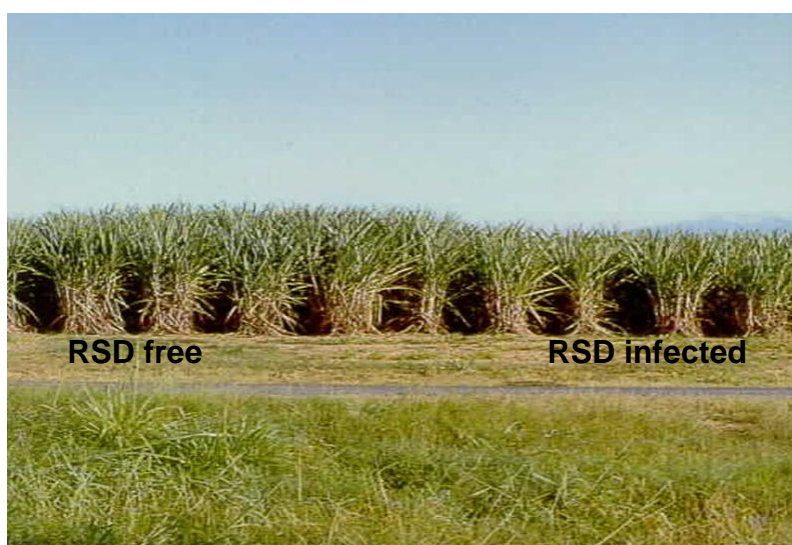
Clean seed cane is a critical step in maximising productivity and minimising the risk of disease spread. The widespread distribution of approved seed cane is a core part of BPS' service to growers as it provides them with the best available plant source in a cost effective manner. Tissue culture is another option as a source of clean planting material, however it is significantly more expensive to purchase and takes longer to propagate into the quantities of material that growers are used to having available from the approved seed plots in the region.

'Treated' cane is planting material that has been either 'long hot water treated' or 'cold soak - long hot water treated'. 'Long hot water treatment' requires submersing the cane for 3 hours in water at 50°C ($\pm 0.2^\circ\text{C}$) whereas 'cold soak – long hot water treatment' involves soaking the cane in cold water for 40-48 hours, followed by submersing the cane for 3 hours in water at 50°C ($\pm 0.2^\circ\text{C}$). All cane supplied to BPS by SRA is treated once before being planted into the isolation plot, then treated again before being planted into our mother plots.

The main reason for treatment of cane is to minimise the risk of ratoon stunting disease (RSD) and other diseases such as smut, chlorotic streak disease and leaf scald.

RSD is a bacteria spread by planting material or contaminated equipment and can cause yield losses of up to 60%. BPS staff sample around 1500 fields each year for RSD. It is pleasing to report that RSD is not often detected in the region, however this does not mean farm hygiene is any less important.

Farm hygiene involves sterilisation and clean down of machinery including planters, plant cutters, harvesters, stool splitters or any other machine that can spread plant material or soil. Also ensure that clean seed cane is planted into fallow blocks (no volunteers) and call a BPS field officer for a plant source inspection prior to planting.



Above: a farm that has a block severely affected by RSD.

SRA plant pathologists have stated that historical records clearly indicate when a single variety comprises over 60% of a region's crop, it is highly likely that a disease will severely affect this dominant variety. BPS recommends growers spread their individual risk by ensuring that a selection of varieties are grown on the farm. Contact the BPS staff for more specific advice on variety selection for your farm.

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Variety Strip Trials

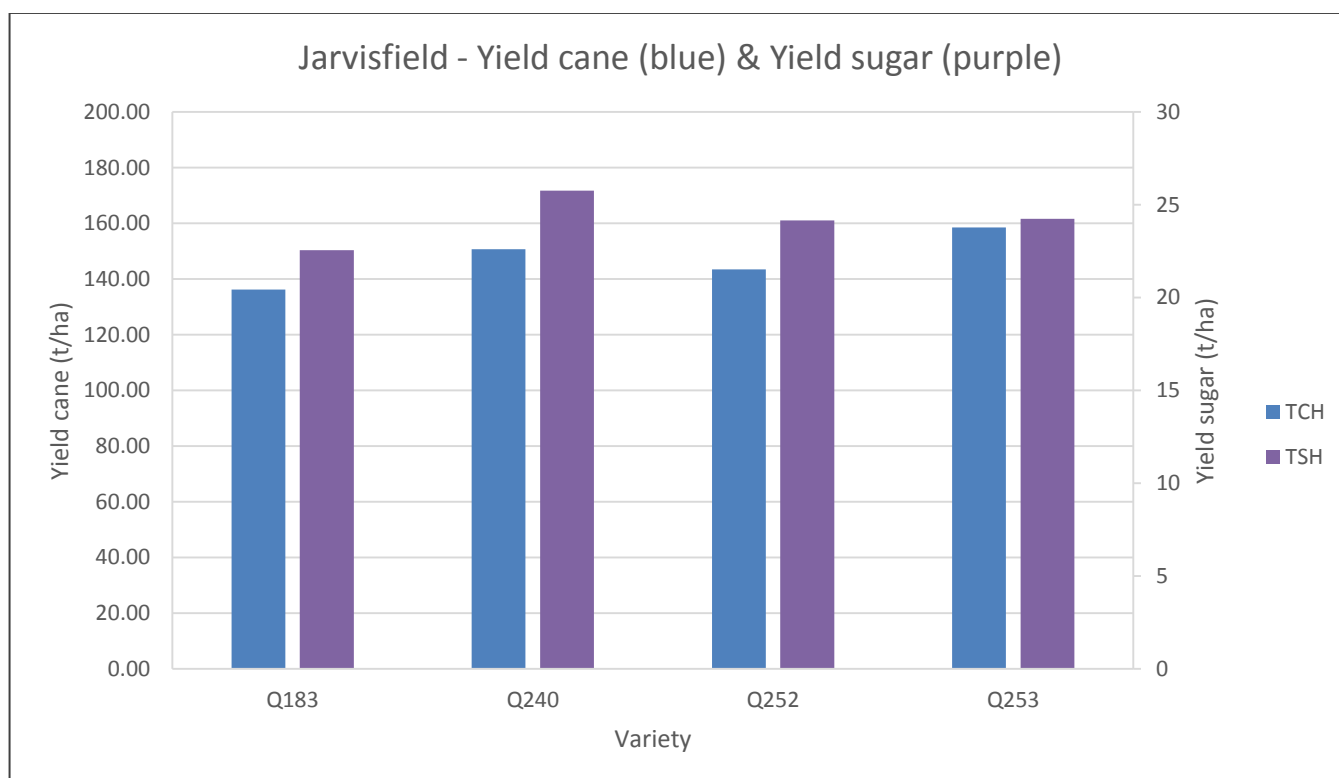
The following graphs represent the results of variety strip trials of plant cane that were harvested last year. Updated results from the 1st ratoon (and new plant trials) will be reported in upcoming newsletters once harvested in 2015.

Three variety strip trials were established across the district in 2013 by BPS and Farmacist. These are replicated, commercial sized strips managed by growers. Each trial comprises the 3 newer varieties (Q240, Q252, Q253) and a grower standard. Results are summarised below, although it should be noted that these are plant cane results only, and the trials will be continued for the crop cycle. Note that Q183 is the standard for Jarvisfield and Selkirk, with Q208 the standard for Jardine – this site also had Q247 for comparison.

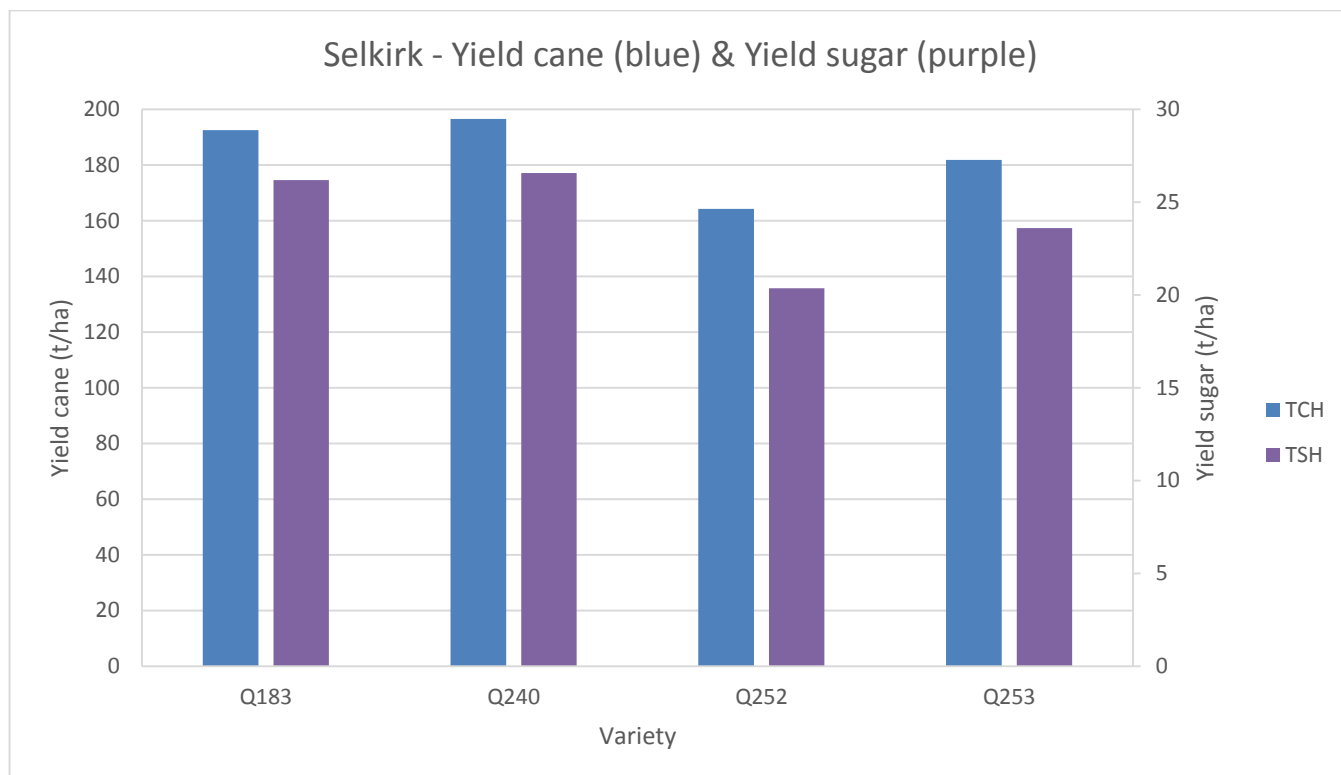
Of the newer varieties, Q240 is performing well on most soils, with Q253 also performing well with tonnes/ha although CCS is lower. The Jarvisfield yield results are lower than expected due to irrigation soakage issues. It is still too early to draw any major conclusions until we obtain data over a few years.

Give one of the BPS staff members a call to discuss these results or variety selection on your farm in more detail.

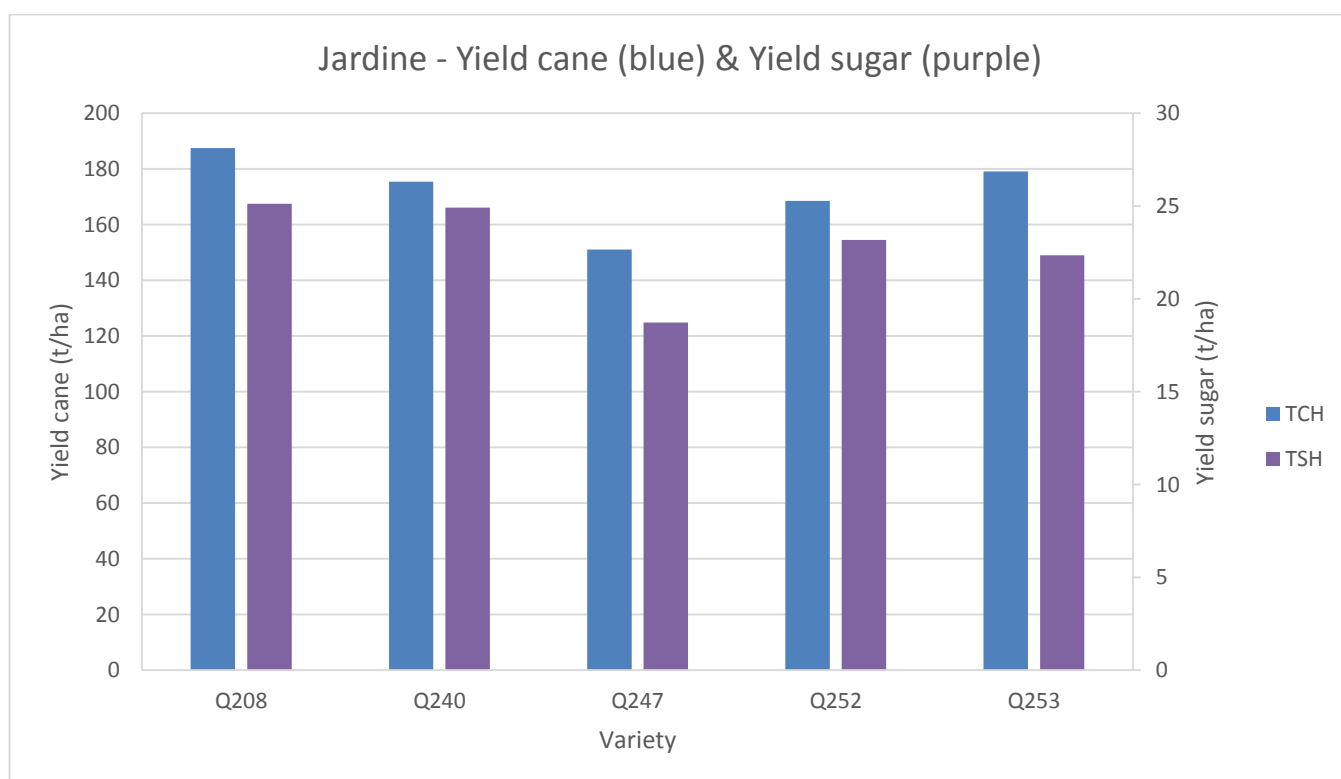
Jarvisfield - Planted late April 2013



Selkirk – Mill Mud applied in fallow, planted late March 2013



Jardine – Planted Early May 2013



SHED MEETINGS

The next round of shed meetings will be held during April and May. Topics that will be covered include:

- Nitrogen management
- Harvesting trials
- Sorghum and guinea grass management
- Herbicide management
- Clean seed cane
- Irrigation

Date	Time	Group	Venue
Fri April 17	8.30	Leichhardt	P Brotto
Mon April 27	8.30	Giru/Shirbourne	D Polletto
Tue April 28	8.30	Millaroo/Dalbeg	J Cambruzzi
Tue April 28	1.00	Inkerman/Fredericksfield/Koolkuna	G MacElroy
Wed April 29	8.30	Aerodrome/Colevale/Town/Pioneer Mill	B Lago
Wed April 29	1.00	Upper Haughton/Stockham Road	Mio
Thur April 30	8.30	Selkirk/Haughton/Bartlett	T Pontarelli
Fri May 1	8.30	Clare/Mulgrave	Clare Club
Mon May 11	8.30	Airdmillan/Burstalls	N Formalin
Mon May 11	1.00	Waterview/Sextons	E Pearce
Tue May 12	8.30	Down River/Ramsdens	N Pitris
Wed May 13	8.30	Jardine/Mona Park/Barratta	L Smith
Thurs May 14	8.30	Rita Island	SES Shed
Mon May 18	8.30	Osborne/Causeway/Iona	R Piva
Mon May 18	1.00	Airville/Dicks Bank/McDesme	BPS Shed
Tues May 19	1.00	Darveniza/Groper Creek/Marshalls	B Santarossa
Wed May 20	1.00	Jarvisfield/Kilrie	Quartermaine Shed

BPS/SRA GROWER RESEARCH UPDATE

The annual BPS/SRA Grower Research Update was held at the Ayr Showgrounds on March 10. Approximately 65 growers and industry personnel attended and heard presentations from a range of speakers. For those who couldn't attend, the presentations from the day are now available on the BPS website (<http://bps.net.au>).

Speakers

Marian Davis (BPS) – *Harvesting Project Update*

At shed meetings in 2013, harvester damage was identified as a major constraint to productivity. In 2014 six trial sites were established to monitor the effect of harvester speed on ratooning and yield over a 3 year period.

Ryan Turner (DSITIA) - *Water Quality Results from the Burdekin Catchment*

Water quality is a topical subject and Ryan provided an update on the water quality monitoring that is occurring across the sugar industry. In the Burdekin the Barratta Creek system is the major waterway that receives farm run-off and this is where most of the pesticide detections occur.

Rob Magarey (SRA) – *Biosecurity Research – Protecting our Future*

Biosecurity research is vital to protect Australia's sugarcane industry from a range of exotic pests and diseases. Many of these exotic pests are on our doorstep in Papua New Guinea and Indonesia. SRA is collaborating with researchers in Papua New Guinea and Indonesia to detect and identify exotic threats, develop management strategies, and test the resistance of current commercial varieties.

Julian Connellan (SRA) - *Nitrogen fertiliser requirements for representative soils of the Lower Burdekin cane growing district*

Since 2011, 19 trials aimed at determining the optimum nitrogen rate have been established across the Burdekin region. Fourteen trials were harvested in 2014 consisting of plant to third ratoon blocks. Nitrogen rates ranged from 150 – 230 kg/ha in plant cane to 170-290 kg/ha in ratoons.

George Piperidis (SRA) – *Introgression Research*

Commercial cane cultivars in Australia are based on a narrow genetic base. Introgression is the process of breeding with wild and unimproved relatives of sugarcane to introduce new traits such as disease resistance. Current research is focussing on identifying and exploiting new sources of genes for better ratooning and resistance to diseases like nematodes and pachymetra root rot.

Barry Salter (SRA) – *Complementary Cropping in Burdekin Sugarcane Farming Systems*

The benefits of having a fallow break are well documented. However, in the Burdekin, growing a legume crop through to yield will result in a delayed cane planting. This trial compared a range of planting dates and fallow management strategies to determine the effect on yield. Delaying planting from April to August reduced yield, but the yield following a fallow crop was greater than a plough-out replant crop planted in August. A second trial at the same site is examining the effect of fallow crops and crop rotation sequences on sugarcane production.

LEVY FOR 2015

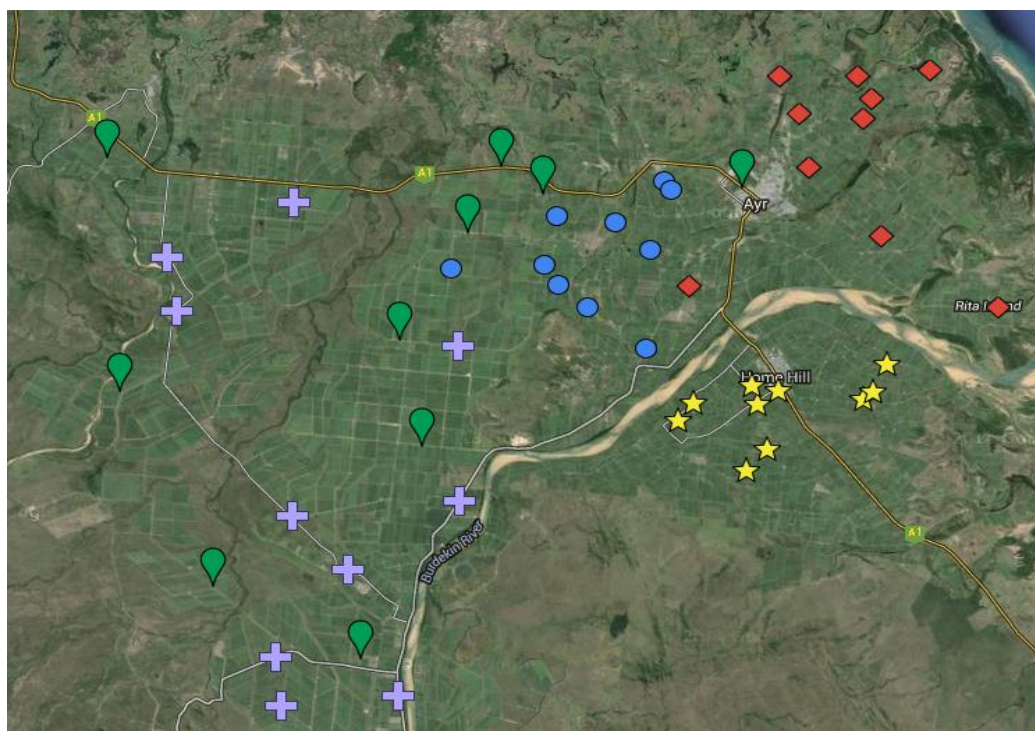
Good news for members of BPS, as the board has agreed to maintain the levy for 2015 at 7 cents per tonne. All board members, management and staff are very conscious of grower's escalating costs and every effort possible will be made to source funding from alternative sources.

YCS MONITORING

In December 2014, SRA implemented new YCS inspection protocols for BPS officers. Over 50 blocks of one variety (KQ228), from plant through to 2nd ratoon, have been monitored every second week. Field officers have identified if the block has YCS symptoms, then rated the severity on a scale of 1 to 3 with 1 being slightly affected, 2 moderately affected and 3 severely affected. They have recorded their findings then sent a detailed report of each block inspection to SRA, along with a summary of the overall damage in each mill area. This inspection regime has continued for the last 4 months.

This approach has been beneficial in assessing the outside of the crop from ground level, however the centre of the crop cannot be examined by this method. To address this, BPS staff have also conducted an aerial survey of the Kalamia area to assess the extent of YCS damage within blocks of cane. GPS was used to record damaged areas and a series of photographs were taken. This information was then forwarded to SRA for examination.

At this stage, no consistent pattern has occurred with regards YCS affected blocks. However, our advice to growers is that they maintain a regular irrigation schedule, ensure adequate nutrition and weed control, and use the best available plant source.



A map of the sites being monitored for YCS

STEP UP NEXT GEN ACTIVITIES

In mid-March a group of young Burdekin growers went to the Step Up Next Generation conference. About 170 growers from right across Australia's cane growing regions attended, providing a great opportunity to talk about the practices and issues being experienced across the industry.

The two day conference featured speakers who covered a range of topics including future farming practices, machinery innovations, sugar marketing, farm finance and succession planning. These sessions included findings from recent SRA research into how to reduce losses at harvest (Harvesting Best Management Practice manual available from SRA website or contact BPS) and a presentation by Greg Shannon which highlighted the importance of getting the basics right (management of soil, nutrition, weeds, pests and water).

Conference goers also had the opportunity to visit the Puglisi cane and cocoa farm and Cairns Sugar Terminal. On the way home, the Burdekin group also toured the Tully sugar mill and made a stopover at Chris Condon's farm, who discussed why he chooses to farm on 1.8 metre controlled traffic beds and the benefits he has seen. He also explained that they had been unaware that RSD was a problem on their farm and, since using tissue culture as a clean seed source to propagate disease free cane on his farm, he had seen an improvement in their production; demonstrating the importance of using clean seed cane. Overall, the conference was a great opportunity for some of the younger people in our industry to get together and exchange information.

We are keen to continue getting our Burdekin young growers together. If you or someone you know is young or young at heart and is interested in getting involved with the group for field walks, demonstrations and farming practice trials please give Tiffany a call on 0447 069 887.

BPS is grateful for funding provided by NQ Dry Tropics that subsidised the costs of the conference for Burdekin growers who attended.



Burdekin growers talk to Chris Condon about his sugarcane production system



Reducing IRRIGATION energy costs

Come along to our **Technical Information Sessions** to find out how you can reduce your irrigation energy costs

BBIFMAC and the "Energy Efficiency Gains for Australian Irrigators" project team are hosting a series of **Energy Efficiency Technical Information sessions** for sugarcane growers.

These will provide farmers with practical information and advice on how to reduce the energy costs associated with irrigation on their enterprise.

Thursday 9th April and Friday 10th April

8:30am - 1:30pm daily

PCYC, Corner of MacMillan and Little Drysdale St, Ayr

Topics to be covered over the two days are:

Thursday 9th April

What is an efficient pumping system

- Examples of good and bad systems
- Fundamentals of pumping
- What is total dynamic head and how to measure it

System configuration and design for maximum efficiency

- Cylinder/risers and delivery pipe design and configuration
- Elbows and bends, joins and connections
- Pipe line material and diameter
- Typical efficiencies/running costs of submersibles vs turbines vs centrifugals
- Restricting flow and bypass systems

Friday 10th April

Bore and screen designs to optimise efficiency

- Bore construction and maintenance
- Impact of length, diameter and slot size on water flow
- Treating iron oxide residue
- Well design

Energy efficient technologies

- Next generation pumps
- Variable Frequency/Speed Drives
- Solar pumps
- Automation options

A **free** morning tea and lunch will be provided each day between the session times.

Numbers are strictly limited - RSVP essential by Thursday 2nd April!



For more information, or to RSVP, please contact Arwen Rickert on 0417429586 or BBIFMAC on 47834344 or email: secretary@bbifmac.org.au

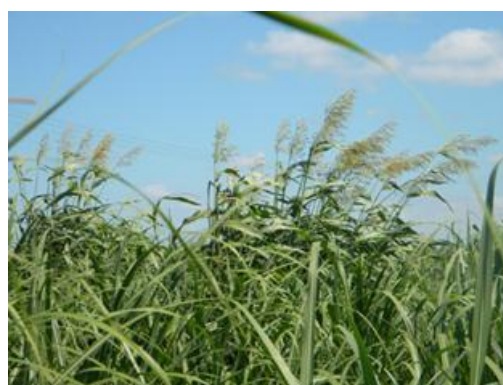


Australian Government
Department of Industry and Science

MANAGING WILD SORGHUM

Wild sorghum is a pest that BPS would love to eradicate. It can be controlled by rogueing and spraying. Summer fallow provides the best opportunity to control wild sorghum with chemical spray applications. Irrigate to allow the seed to germinate then follow with an appropriate chemical application. Repeat the exercise, then a light cultivation will allow further germination of dormant seeds. Irrigate, then spray again. Contact your field officer for a spray control program.

Wild sorghum rogueing is an effective means of controlling the grass in a cane crop. This involves walking each drill and pulling the plants by hand. If the wild sorghum has seeded, the seed head has to be removed first and safely stored in a bag or container. The heads can be burnt at a later date. It is important to keep the seeds contained without any spillage.



Staff Contacts

Contact	Title	Contact Number	Email
Office		(07) 4783 1101	reception@bps.net.au
Fax		(07) 4783 5327	
Post		PO Box 237, Ayr QLD 4807	
Rob Milla	Manager	0490 036 329	milla@bps.net.au
Mark Rickards	Commercial Manager	0427 834 800	mricksards@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
Wayne Squires	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