



ISSUE 9 - DECEMBER
2012



John's Corner

Staff are at present visiting all growers to collect their farm data in relation to Pests, Diseases and the treatments they used for controlling the pests & diseases. Other information being collected is data on seed cane planted and that will be propagated for future use, they are also collecting seed cane orders for next year. We are aware that some farm maps are incorrect regarding varieties and age. If this is the case on your farm please notify our staff so we can pass this information onto Sucrogen for correction. It is important to have accurate maps so accurate reports can be generated. Recently I held Grower Information Meetings at Jarvisfield on the 1st of November and the 9th of November at Clare. At the Jarvisfield meeting 30 growers attended to listen to several guest speakers, of interest was a talk on Confidor presented by Tim Murphy (Bayer Crop Science) and Rob Dwyer (Incitec Pivot) who gave a presentation on Entec a slow release fertilizer currently being trialled. Rob highlighted that there are 3 trials in the Burdekin including the one being done by BPS. Please find at the back of the newsletter an article on Entec product. The Clare meeting attracted 36 growers, 10 guests and 8 speakers where Aaron Davies presented his pesticide data collected from water samples in the Barattas, Haughton & Burdekin Rivers. Aaron will present the latest data collected at our meeting on March 21st 2013 at the Ayr Showgrounds. I gave a talk on gypsum quality and I have the results of lime and gypsum quality samples. The results are published in a later section of this publication. Good discussion was generated after Tim Murphy again presented on correct timing and placement of Confidor, as well as the use of Balance/Soccer herbicides. It is worth noting that Soccer has a very short half-life in water which means it breaks down in water suspension. Quote of the year – Marc Nesbitt (pictured below) and his Dad (new Pioneer growers) who attended the Clare meeting and I quote said "It appears farmers from all around the world face the same issues." Previously the Nesbitt's were large grain growers and harvester contractors in Canada.



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*"It appears that farmers
from all around the
world face the same
issues"*

Quote – Marc Nesbitt
(New Grower)



Q183 – 2013 Inkerman Mother Plot



Q208 – 2013 Inkerman Mother Plot

Plot News

All Mother Plots/Distribution Plots have been inspected for any diseased cane and are currently clear of any visible signs of infection/disease, they will get their final inspection in December. We intend to walk the P&K farm blocks after their final hill up to continue checking for Itch Grass and ensure every effort has been carried out to ensure the plot remains Itch Grass and Sorghum free. A total of 6 inspections will be carried out on this plot

Whitson's plot has a small area that is affected by nematodes. We sampled this soil on 12/11/12 and sent it to the Tully Soil Assay Laboratory for analysis, and the results received back from the lab will indicate Plant Pathogenic Nematodes (PPN) and Free Living Nematodes (FLN). FLN are beneficial to soil health. Lesion nematode (*Pratylenchus*) and Root knot nematode (*Meloidogyne*) are the two most important pathogenic nematode pests of sugarcane. I will ensure the results are published in the next newsletter. If any growers want to have their soil sampled for nematodes please get in contact with your Field Officer. Jim Richardson has recently applied 125kg/ha of sulphate to help the crop along, this was also applied to the Mother Plot. We only intend to apply a total 375kg/ha of sulphate which will give a total Nitrogen application of approximately 75kg/ha.

Next year we intend to sample 1200 blocks of cane in the Inkerman & Kalamia areas for RSD

Pest & Diseases News

As the field staff are visiting growers for their crop data there have been several reports of grubs, pigs, rats, wallabies and damage from coots becoming an increasing problem. Keeping your fields grass free and headlands slashed in the wet season will prevent the rats from multiplying. Rats need the protein from grass seeds to breed. We have identified smut in a block of Q208 early plant in the Invicta area. This grower had a block of Tellus on his farm which will be ploughed out this year, so I ask growers when they are doing their final spraying etc to be vigilant and check for smut whips. If any are observed please contact myself or the field staff because we want to keep a control of smut and record any outbreaks. Next year we intend to sample 1200 blocks of cane in the Inkerman/Kalamia areas for RSD and we will also be retesting the harvesting groups who had growers with positive results to RSD. This will indicate to growers in these harvesting groups if RSD has been spread. RSD can easily be controlled by purchasing approved Seed Cane every year and maintaining machinery hygiene.

ITCH GRASS/ROGUE CANE

Itch grass rogueing commenced late in October and early indications show there is less Itch Grass infestations in the fields that have been walked so far. This means that the spraying programmes growers undertook last year are definitely working. I remind growers that Itch Grass seeds can remain dormant (buried in the ground) for 7 years and still germinate when cultivated, so I encourage all growers who have Itch Grass to continue to be pro-active to assist BPS's efforts to control Itch Grass. It is pleasing to see as I drive around that harvester owners/operators are cleaning down when leaving an Itch Grass farm. It is just as important that all growers are vigilant as they drive around to report any sightings of Itch Grass to the BPS staff so we can immediately follow this up. Under the local council by-laws Itch Grass has been declared a noxious weed in the entire local government area and if Itch Grass is on your property it is your responsibility to remove, destroy and prevent its germination. BPS staff are very willing to assist any grower who has Itch Grass as we are here to help growers eradicate this noxious weed.

SMUT

BPS field staff continue to monitor the Smut trial at Jarvisfield that was planted in 2009 by Dr Rob Magarey from BSES (Tully). The number of smut whips are counted, recorded then the results are passed onto Dr Magarey for analysis. The results for 2011 and 2012 are self-explanatory. It is interesting to note that there was an increase in smut whips counted in the Q247. This coincided with what we observed in the 1st ratoons in the P & K Mother Plot while we were assessing the photo-toxicity trials. It was found in Q247 and there were no visible signs of smut whips in any of the other varieties. Q183 has a significant increase in the number of smut whips, however it must be remembered there are a phenomenal amount of spores in this location from Q117 and Tellus.

2012

	27/09/2012	15/11/2012	30/11/2012
Tellus	182	317	338
KQ228	0	0	0
Q117	>90%	>90%	>90%
Q171	0	0	0
Q183	5	23	31
Q200	0	0	0
Q208	15	20	23
Q232	2	2	2
Q247	0	41	42

2011

	26/09/2011	27/10/2011	18/11/2011
Tellus	41	182	182
KQ228	1	3	9
Q117	>50%	>90%	>90%
Q171	0	0	0
Q183	0	0	0
Q200	0	0	1
Q208	2	13	16
Q232	0	1	1
Q247	0	2	2



PIGS

Pigs are very elusive creatures and require enormous time and effort to control their numbers, unfortunately there is no silver bullet. Growers must employ a range of activities to reduce their numbers, and remember that the Burdekin Shire Council offers a free 1080 baiting programme. For further information on this programme please contact Tony on 0407168048. The Selkirk Productivity Group led by Shane Butler (manager SISL) has commenced aerial shooting of pigs. This group is made up of 15 growers and so far results have been quite promising with 47 pigs shot in 3 flights. BPS will contribute to the cost of aerial shooting where growers form productivity groups, this must be matched or exceeded by the group who is undertaking the shooting.

Field News

As all growers are aware our Mother Plots are disced out every year when the excess cane is harvested and sent to the mill, however this year I asked Jim not to disc out the P&K Mother Plot so we could do some Herbicide demonstration trials. The varieties that we sprayed included Q183, Q200, Q208, KQ228, Q232, Q240, Q247, QA00-3093, QA01-5153.

A Hardie MD-03 nozzle was used and the chemicals applied with a water rate of 300lt per hectare (course spray)

Time off application	7.35am	Wind chill	28.4
Wind from East	East	Humidity	65%
Gust up to	7.5 klm	Wet bulb	23.1
Average wind speed	4.0 klm	Dew point	21.1
Temperature	28.2°C	Delta T	6

Chemicals used

Rattler	8.0lts/ha	Actril	1.5lts/ha	Soccer	2.0kgs/ha	Ametrex	2.0kgs/ha
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The products were sprayed on their own over a 50m distance applied to all of the varieties listed above. These were all sprayed broad acre, and had activator surfactant added at the rate of 100ml/per 100 litres of water. **The products were sprayed for photo toxicity tolerance only and not for weed control.** We will monitor the effects over the next 4-6 weeks and if there is any severe damage we will at least be able to pass the information on.



Application of herbicide at demonstration site

ENTEC Trial

Rob Dwyer, Agronomist - IPL blended 2 tonnes of Mulgrave Ratooners, so a trial could be laid down. Only the Urea component is treated with the Entec coating. The fertilizer was applied at full rate using the 6 EASY STEPS calculation and replicated 3 times. When harvested next year the results will be published.

Rob offered the following comments:

Replicated small plot nitrogen trials:

Incitec Pivot Fertilisers (IPF) have independently engaged Farmacist to conduct two nitrogen trials in the Burdekin. Each will investigate various nitrogen products - applied at different timings, rates & placements.

The products being evaluated are comparing conventional urea against Entec, Easy N, Gran-Am and a polymer coated urea (without elemental sulfur). One trial was established 'mid-season'. The other will be established towards the end of the crush & closer to the on-set of the "wet". This has been done intentionally to investigate how the various products perform under wet season conditions. Entec has the potential to reduce both leaching & denitrification potentials and each of these are influenced by irrigation & rainfall.

These trials will continue for at least two seasons & have commenced in first ratoon crops.

As alternative nitrogen products are typically more expensive than conventional urea, a key consideration with these trials will be an economic analysis of the various treatments.

Two similar trials have also been initiated in the Mackay Whitsunday region.

Entec availability:

Statistically significant yield responses have been documented, when using Entec in various crops. Research findings have also documented how Entec can reduce nitrogen losses & thus potentially improve nitrogen use efficiency (NUE) - in various crops, including sugarcane. IPF is still investigating yield response potentials with Entec use in sugarcane.

Entec will be recommended for use in sugarcane when statistically significant yield responses are measured.

Rob Dwyer

Technical Agronomist

Incitec Pivot Fertilisers

I have included a small brochure on ENTEC for your perusal.

Industry News

This information below was produced by the Maryborough Cane Productivity Services. Of interest is the CCS of Q240 which we will be releasing from our plots next year. Remember this is only a small sample. Q238 is in our Mother Plots and the decision taken at the beginning of 2012 by the variety adoption committee was to withhold Q238 for another year, it is susceptible to Chlorotic Streak and should not be planted in prone areas.

Variety	Plant ccs	Plant %	Ratoon ccs	Ratoon %	Stand-over CCS	Stand-over %	Average ccs	% of crop
Q208	14.9	48	14.68	33	14.43	22	14.73	35
Q232	14.5	14	14.09	17	13.66	6	14.15	15
KQ228	14.38	23	14.13	10	13.55	3	14.21	12
Q138	14.26	7	14.08	8	13.94	15	14.09	8
Q155	14.86	1	14.24	5	14.26	3	14.27	4
Q240	14.83	2					14.83	2327t
Q238	14.94	2	14.28				14.88	2335t

TISSUE CULTURE

The following is an extract from the BSES Bulletin

"Tissue Culture is an exciting new way to deliver new varieties to the sugarcane industry and to supply disease-free seedcane of existing commercial varieties. When changing to a new system it is important to ensure that the system is set up to meet the primary purpose of the scheme:

- Rapid multiplication and distribution of disease-free seed of new varieties
- Supply of disease-free seed of all commercial varieties to meet grower's requirements for commercial planting.

Both these objectives are essential to maximise industry yields by rapid adoption of new varieties and managing serious diseases that are spread in seed cane like RSD, leaf scald, chlorotic streak, mosaic and Fiji leaf gall."

The basic steps are as follows:

1. Mother Stock of ordered variety is developed
2. BSES delivers sufficient quantities of Mother Stock to Tissue Culture Laboratory to multiply the plantlets to required numbers
3. Tissue Culture Laboratory supplies nursery the plantlets to plant out and harden off.

BPS ordered 4400-Q208 and 4400-Q183 tissue culture plants this year. The purpose of this exercise was to showcase this technology to the Burdekin growers. The cost per plant was \$1.70. Planted at .75m spacing you need 8700 plants per hectare, obviously very expensive. With our large distribution plots, the present system is still the most efficient way to distribute approved seed cane to the district. This is not the case in the Maryborough area where growers receive all the approved seed cane from tissue culture, and they distribute up to 30 000 plants per year. Tissue culture is also becoming popular in the Bundaberg region with 20 000 plants distributed this year. The issue with Maryborough & Bundaberg is they have been getting poor germination with their treated cane and as a result have gone down the path of tissue culture. Growers in these areas order approx. 300 plants then propagate the plants up for 3 years, so they have sufficient seed cane to plant out. Please read the BSES brochure for additional information. BPS and Sucrogen TFD at Kalamia have joined forces to propagate the tissue culture plants on their Kalamia farm. TFD manager Ross Bonato has had several years of experience in propagating these plants, and the majority of their clones are propagated this way. In the quieter period BPS and TFD intend to put on a Field Day for growers to view and to ask questions about this process. Ross Bonato will give growers an update on their variety breeding programme and other work carried out by TFD.



Tissue Culture being planted on Sucrogen land under management of their Technical Field Department (TFD)

As time progresses and costs continue to rise BPS may look to use this technology as an alternative to Cold Soak and Hot Water treating for some varieties

BIOSECURITY

In the latest BSES bulletin, Issue 35, there is an article written by James Ogden-Brown titled "The Impact of Sesamia Borer on our Industry". Over 100 000 tourists visit Cape York each year and it will only take one backpacker to transport a plant with the Sesamia Borer and the impact on our industry would be devastating. In January/February the BPS staff will again be spraying out rogue stools of cane along culverts, drains, riparian lands etc. and from a disease control point of view it is important to have all areas free of rogue cane. The article highlights why all growers should take biosecurity seriously. BPS staff will be trained as qualified machinery inspectors next year. This will allow the staff to inspect machinery and if the machinery is clean and passes all the checks the staff will be able to issue a certificate so the machinery can be moved.

Director Elections

With the current board nearing the end of their 3 year term, I would like to remind growers that elections for the Grower Members on the BPS board will start with nominations in late February/early March. Growers who feel they have something to contribute should nominate. Nominations are also most welcome from grower's wives. BPS welcomes board diversity and is of the belief that it can only strengthen a board not diminish it's capacity to operate effectively. Lance did a presentation on this subject at the Women in Sugar meeting on the 14th of November. Any member who is sole owner, a partner in a partnership or any authorised representative of a corporate member can nominate for a position. The nomination must be seconded by another member who is sole owner, a partner in a partnership, or an authorised representative of a corporate member.

BPS is a progressive organisation and is in the infancy of rolling out field technologies that will enable our field officers to be more mobile, have access to a larger range of information at their fingertips and most importantly serve you, our growers better.

Keep your eyes peeled and sign up to become part of a board that will to continue to drive productivity, profitability and sustainability of the sugar industry in the Burdekin.

Understanding Cane

The importance of Gypsum quality

Laboratory analysis can provide accurate information on gypsum quality. If the gypsum material contains more than 1% Sodium Chloride (Salt) do not use. A simple test using an EC meter can provide an approximate assessment of the salt content of gypsum samples.

- A. – Measure EC using a suspension of gypsum sample and water in the ratio 1:2.
- B. – Measure EC using a suspension of gypsum sample and water in the ratio 1:5.

If the ratio of the values A/B is more than 1.3 the sample contains greater than 1% Sodium Chloride and should not be used. If less than 1.3 the sample is mainly gypsum. I have sent 5 samples that have been analysed by a laboratory.

In my opinion the quality of these gypsum samples are average except for the fifth sample. Good quality gypsum should be close to 85%. Also tabled is an analysis of Agricultural Lime and Pulverised Lime. There is a presence of Magnesium in Earth Lime. Particle size is an important parameter in both lime & gypsum as it indicates the rate of reaction of lime/gypsum. Liming products should have a neutralising value of greater than 80. I believe if a grower spends a lot of money it is important to know what they are buying.

Please see the results on the next page

No.1 and No.2 samples are from the same supplier and the No.3, 4 & 5 are from a different supplier as can be seen by the noticeable difference in moisture content. Samples 4 & 5 were stockpiled in the open and have absorbed some moisture. Sample 5 is approx. 80% gypsum

Caution: When a recommendation is given for a gypsum application, the recommendation is for gypsum that is 100% pure, an adjusted rate has to be made for lower quality gypsum



Phosyn Analytical Pty Ltd
 1/60 Junction Road PO Box 2594, Andrews,
 Queensland 4220
 Tel: (07) 5568 8700 Fax: (07) 5522 0720
 Email: phosynanalytical@phosyn.com.au
 Website: www.phosynanalytical.com.au

Analysis Report

Name:	John Deambrosis
Organisation:	Burdekin Productivity Services
Phone	0428 927 079
Email	jdeambrosis@bps.net.au

Date Received	7/11/2012
Date Reported	8/11/2012

Your Ref		P Lime	Ag Lime
Analysis Request # / Lab # :		B063320A	B063320B
Ca	% (m/m)	38.61	19.92
Mg	% (m/m)	0.09	2.88
Na	% (m/m)	0.26	0.15
Moisture	% (m/m)	1.8	5.7
Bulk NV	%	95.28	54.38

Analysis Report

Name:	John Deambrosis
Organisation:	Burdekin Productivity Services
Phone	0428 927 079
Email	jdeambrosis@bps.net.au

Date Received	25/10/2012
Date Reported	26/10/2012

Your Ref		No. 1	No.2	No.3	No.4	No.5
Analysis Request # / Lab # :		B063317A	B063317B	B063320C	B063890A	B063890B
Ca	% (m/m)	17.05	15.42	16.39	15.44	20.25
Fe	% (m/m)	0.25	0.41	0.27	1.10	0.15
K	% (m/m)	0.12	0.13	0.05		
Mg	% (m/m)	0.14	0.16	0.15	0.11	0.08
Na	% (m/m)	0.22	0.19	0.15	0.12	0.17
S	% (m/m)	11.82	10.49	13.82	9.35	14.44
Moisture	% (m/m)	6.3	8.1	15.5	13.4	16.9
CaSO ₄		67.10%	60.70%	64.50%	60.80%	79.70%

Element Name	Element Symbol
Calcium	Ca
Iron	Fe
Potassium	K
Magnesium	Mg
Sodium	Na
Sulphur	S
Gypsum	CaSO ₄

If the gypsum sample contains some lime you will get an inflated CaSO₄ result because the percentage of gypsum here is calculated out on the calcium content. Some laboratories calculate the CaSO₄ on the S result. In theory the ratio of Ca to S should be 1.27

IRRIGATION TOUR

DAFF Queensland will be running an Irrigation bus tour in the new year which will travel through the wet tropics and up to the atherton tablelands. The tour will be run by Evan Shannon and will focus on Irrigation systems primarily as well as looking at sustainable farming practices, experimental herbicide application technology and other agricultural crops. The 3 day tour will be commencing around February so if you are interested in attending please contact Brock Dembowski (DAFF) on 0467 819 592 or John Deambrosis on 0428 927 079.



MERRY XMAS

The board and staff wish all growers a merry Christmas and a happy new year.



Our office will be closed from noon on 21st December and will re-open on the 7th January 2013

Staff Contacts

Contact	Title	Contact Number	Email
Office		(07) 4783 1101	reception@bps.net.au
Fax		(07) 4783 5327	
210 Old Clare Road, Ayr QLD 4807			
PO Box 237, Ayr QLD 4807			
John Deambrosis	Manager	0428 927 079	jdeambrosis@bps.net.au
Lance Wassmuth	Business Services Co-ordinator	0427 834 800	lance.wassmuth@bps.net.au
Raymond Hildebrandt	Field Officer - Inkerman	0409 831 863	rhildebrandt@bps.net.au
David Paine	Field Officer - Kalamia	0427 167 159	dpaine@bps.net.au
Wayne Squires	Field Officer - Invicta	0427 372 124	wsquires@bps.net.au
Kristine Grasso	Field Officer - Pioneer	0407 167 159	kgrasso@bps.net.au
Joe Savorgnan	Trainee Field Officer - Inkerman	0407 960 057	jsavorgnan@bps.net.au

Upcoming Events

XMAS Shutdown

21st Dec 2012 – 7th Jan 2013

Carbon Farming Information Day

Feb 6 2013

Ayr Showgrounds

Grower Information Meeting

Mar 21 2013

Ayr Showgrounds

If you would like any further information or like to list an important grower event then please contact Lance or Margaret to have it added