



Burdekin Productivity Services Grower Update

OCTOBER 2011 - PEST & DISEASE SPECIAL EDITION

At the time of writing this special edition, seed plots are beginning their journey for distribution after planting was finished in August. Seed plots were all but finished at the beginning of September and are now closed.

On the staff front, Mindi McNiven has decided to move on after working at BPS for a little over 5 years and we wish her well for the future. The new field officer replacing Mindi in the Invicta area will be Wayne Squires. Wayne is no stranger to BPS having worked here previously, and growers may know Wayne from his time at Burdekin Grower Services and Elders. Wayne brings a wealth of knowledge and experience about herbicides and weed control in Sugar Cane and Soya Bean. Also enclosed is a timetable for the CPI meetings being conducted next week with Avril Robinson and Craig Cruickshank (DERM), Merv Pyott and Chris Gaschk (Burdekin Shire Council) along with BSES and BPS staff presenting. The guest speakers will be attending as many meetings as possible.

HOT TOPICS

RATOON STUNTING DISEASE (RSD)

RSD is difficult to identify, but stunting and reduced cane yield is an indication of infection. A RSD survey is conducted each year on a rotating basis over the four mill areas. Juice is collected from 4 sticks of cane then viewed through a phase 3 microscope for immediate results at our office. RSD can also be confirmed by

collecting a juice sample that is sent to Mackay for Eliza testing.

The two primary methods of the disease spreading are by planting infected material and through contaminated cutting instruments. Any implement which cuts the stalk or comes into contact with the freshly cut end of the sett or billet readily spreads RSD. Common implements which fit this description include cane knives, whole stick and billet planters, harvesters, stool splitters, and transporters used to cart plants to planters.

RSD is a serious disease with yield losses from 50% to 60 % depending on the susceptibility of the variety and prevailing weather conditions. Yield losses will increase when cane is suffering from moisture stress. RSD is easy to control, the key factors to controlling the disease are planting approved seed, and preventing re-infection and spreading by sterilising all equipment that comes into contact with ends of billets. Remove all soil and plant material with water and detergent under high pressure. Knives and parts of machines that come into contact with cut surfaces should be treated with a registered product such as Sterimax. Disinfectant should be left in contact with the equipment for 5 minutes before use. By obtaining approved seed cane, sterilising equipment prior to use and with BPS conducting regular plant source inspections the chances of RSD appearing on your farm reduce dramatically. With RSD posing such a threat to yield it is important to ensure that all members of your harvesting group and your planting contractor sterilise before moving between farms.

BE WISE AND STERILISE

ITCH GRASS

To help contain the spread of Itch Grass from known problem areas we are encouraging growers and their contractors to thoroughly clean down all equipment before moving that equipment off the infected farm or area. Harvesters, Break pushers, planters, levelling equipment and any other land preparation implements such as discs, hoes, rippers and bed formers unless properly cleaned down can spread the Itch Grass seeds. Also remember that Itch Grass seeds can be caught in Radiators.

In the last quarter of the year BPS will be assisting Bayer Crop Science to complete herbicide screening work for the control of Itch Grass in Sugar Cane. As the current control herbicide may be in question, alternatives need to be screened for their ability to provide long term control of Itch Grass. If the trials are successful then the information gathered will have the potential to gain registration of the product for release to Sugar Cane growers.

LOCAL LAW DEVELOPMENT (Itch Grass) (Merv Pyott (Burdekin Shire Council))

Burdekin Shire Council has developed a suite of proposed local laws and subordinate local laws for the Burdekin region and a review is being undertaken in accordance with Section 29 of the Local Government Act 2009.

The proposed new laws govern areas such as: administration, animal management, community and environmental management, local government controlled areas, facilities and raids, parking, bathing reserves and aerodromes.

Consultation has commenced in the form of:

- State Government interest checks-community consultation, and:
- Public interest testing for anti-competitive provisions

Draft documents have been made publicly available to engage the residents of the Burdekin Shire in the review of the proposed new laws. Public Interest Test (PIT) plans identifying possible anti-competitive provisions are also available for residents and business operators who may be affected by these provisions.

Subordinate local law No.3 covers pest plant species (including Itch Grass) that are listed for local law declaration. Final public submissions have closed and council will consider all public submissions before advancing through a number of legislative protocols in preparation for lodging with the relevant State Government Minister. Further information is also available at:

<https://www.burdekin.qld.gov.au/council/publications/locallaws/>.

PIG BAITING SEASON GEARS UP (Chris Gaschk - BSC Declared Pest Officer)

Every year as the months draw closer to Christmas and at the end of the crush, the opportunity arises once again to put a large dint in the feral pig numbers for the year to come. Due to the nature of minimal cover and a readily available bait substrate, the November-December period remains as a crucial time to undertake pig control activities. With the previous years' above average rainfall it is crucial that landholders take full advantage of this annual event. If numbers are not reduced by up to and above 70% next years numbers will be higher than the current ones, resulting in subsequent impacts increasing (cane and drill damage) Aerial Shooting and baiting are the two most cost effective methods at this time of year.

Aerial Shooting can reduce large densities of pig numbers, however there is only a small window of opportunity generally towards the end of the crush when cover is minimal. Aerial shooting generally equates to around \$30 per pig. Combined aerial shoots with neighbours remains the most effective as you are covering a larger area with your control.

Baiting is a key method at this time due to the lack of alternative food sources. Pigs consume a large amount of ripe mangoes that fall to the ground, therefore baiting is simple, by cutting the mangoes in half and then having them baited by local officer (Merv Pyott) on request. No effort is really required to get the pigs to begin feeding. Landholders should begin thinking of buying rejected mangoes or identifying possible wild mango trees on their property they can bait. This method generally works out to cost less than \$5 per pig.

The cost of the above control methods are reasonably cheap in comparison to the cost of their impacts. Estimates in other cane growing regions suggest that on average growers lose around 5% (10,000t crop = \$20,000 loss) of cane production to feral pig damage. Landholders should be crunching the numbers on what cost impact pigs will have on their farm against what control methods cost and put the figure into their yearly budget like they do for weeds and grubs, For more information on control options contact the Burdekin Shire Council and talk to Chris Gaschk or Merv Pyott

ROGUE STOOLS—VOLUNTEER CANE

Australia's geographic isolation and quarantine systems have meant that we have remained relatively free of many pests that cause significant issues for sugar production overseas. Freedom from exotic pests provides both a yield advantage and ensure the future viability and sustainability of the industry.

Although we remain relatively free of diseases it is important that we don't relax. Growers should always be vigilant and also destroy rogue stools of volunteer cane growing in drains, culverts, riparian zones, river banks etc. . These rogue stools are perfect breeding grounds for pest and diseases, a quick spray with Roundup will kill any rogue stool. BPS has sent letters to industry organisations where there is volunteer cane growing on government land, privately owned land with cane infrastructure and had contact with some individual growers.

SMUT TRIALS

Recently David Paine, Ray Hildebrandt and John Deambrosis walked the Smut Trials at Jarvisfield. Last year BSES in conjunction with BPS planted KQ228, Q247, Q208, Q200, Q183, Q171, Tellus and Q117 in a known smut area. Q117 was approximately 60% infected and Tellus was 40% infected. Q200, Q183, Q171 and Q247 did not have any infected stools. Of interest, one stool of KQ228 and Q208 were detected. These trials will be walked again in October, November and December. The results are collated and sent on to Rob Magarey at BSES.

MINOR VARIETIES

BPS staff will be visiting each grower during the Annual Crop Data Survey over the next few months. With minor varieties such as Q133, and Q171 we may decide to plant these in one area to allow increased propagation on seed distribution plot of the more popular varieties. We ask if growers could give some thought if they still require those varieties to let the field officer know early. New variety Q232 (being released 2012) has shown good salt tolerance in trials in Maryborough so it may provide a good alternative to Q133.

LATE PLANTING

This year there has been a large amount of late planting done. Unfortunately we have also experienced one of our longest and coldest (for some time) winter on record. We all know this results in slow germination and this has been experienced all over the district. Andrew Burrows, Agronomist from Sucrogen has been monitoring ground temperature this year and here is some of the data collected.

Ground Temperature at 10am in degrees celsius.

11th June	17.6	12th June	16.9	13th June	15.3	14th June	14.6	15th June	14.4
16th June	14.4	17th June	14.8	18th June	14.2	19th June	13.5	20th June	14.1
21st June	14.9	22nd June	15.1	23rd June	14.7	24th June	14.5	25th June	15.7
26th June	16.1	27th June	16.9	28th June	17.8	29th June	18.2	30th June	18.2
1st July	17.6	2nd July	16.9	3rd July	17.4	4th July	17.4	5th July	17.2
6th July	17.0	7th July	18.2	8th July	17.6	9th July	17.9		

Several days the ground temperature barely rose above 18 degrees and on those days it was above 18 for three to five hours only.

The following should be considered when late planting:

1. Weather - When daily min. Air temp averages 18°C, germination is slowed dramatically
2. Soil Type - Clay soils which retain moisture remain cooler longer
3. Depth of Cover - As the cover is increased, generally the temperature will decrease due to greater moisture levels. This is then related to soil type.
4. Moisture around set - Moist soils will stay cooler longer. Irrigation needs to be timed so as not too keep the set in a wet, cold environment
5. Furrow Shape - A wide open furrow will collect more radiation than a narrow furrow with steep walls, hence tend to be warmer.
6. Row Orientation - An East-West orientation helps maximise radiation along the row. Although this is a desirable situation, it is not a management option due to the expense in achieving this if the natural slope of the land does not allow for it.