



Grower Update

ISSUE 57 – OCTOBER 2026

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

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BPS AGM AND PRODUCTIVITY AWARD WINNERS

The BPS Annual General Meeting was held Friday 21st August and was well attended by members and local industry representatives. Kevin Powell, SRA Entomology Lead, was the guest speaker. Kevin presented a very thorough series of slides on all the work SRA has been conducting in relation to canegrub research for alternatives to imidacloprid. There has been a large volume of work undertaken over many years by the whole entomology team. Kevin showed data regarding three potential alternative products that are showing similar grub control efficacy as imidacloprid in both field and pot trials. Ongoing field trials will investigate their efficacy over more sites and application requirements.



An overview of activities undertaken by BPS staff was presented, along with regional data on variety performance, local pest and disease issues and grower support activities. Chris Hesp (Chair) and Elliott Gullotta (Commercial Manager) also presented data on the financial position of BPS. While our current cash reserves are healthy, these will diminish over the next few years. BPS has not had a levy increase for 14 years, and during that time has absorbed cumulative inflation of around 35%. It was flagged that a stepped levy increase over the next few years is likely. The BPS Board does not take this decision lightly and all efforts will be made to ensure levy increases are minimal with the aim of ensuring BPS remains financially sustainable while continuing to provide strong value and support to members.

BPS would also like to congratulate the 2026 Productivity Award Winners.

Highest Farm Average CCS

Inkerman	Ben Pontifex	16.1 CCS
Invicta	Gary Stockham	17.4 CCS
Kalamia	Sib and Frank Grasso	15.8 CCS
Pioneer	Mark and Andrew Castelanelli	16.0 CCS

Highest Farm Average Tonnes of Cane per hectare

Inkerman	Jason and Amanda Bonanno	153 t/ha
Invicta	Greg and Mario Barbagello	136 t/ha
Kalamia	Rob Marano	139 t/ha
Pioneer	Raymond Musumeci	137 t/ha

Sugar Producer of the Year – Highest Farm Average Tonnes of Sugar per hectare

Andrew Fiamingo	20.7 t/ha
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PLOT UPDATES

With all plots now harvested and planted, we will begin conducting our annual plot inspections. This gives us the opportunity to inspect for smut and other diseases, as well as assess plant quality at a young age.

BPS and SRA have organised a large amount of tissue culture material to be planted at an isolation plot next year. QA14-2648 (yet to be named) has shown promising results through the FAT trials at SRA, continuing through to the BPS Strip Trials. More in-depth data from these trials will be available at all shed meetings. The variety is expected to be available for distribution in 2029.

We will begin collecting seed cane orders for next year while we are out collecting crop data.

CROP DATA

The crop data season has started. Field officers will be coming around to collect this year's planting, fallow, pest, and disease data from each BPS member. We use this data mainly for Burdekin productivity reports that are presented at our AGM and shed meetings. From this collection we can present statistics like, the percentage of each variety planted in the area, or how much damage was caused by canegrubs this year. We also have the ability to trace back to where a disease may have come from in the case of a disease outbreak. The data we receive is for internal use only and only presented as consolidated data. So, expect a call from your local field officer soon.

LOCUSTS

BPS has been receiving reports of locust damage, mainly from the Clare and Mona Park areas. The current reports are that the damage is relatively minor with small areas of chewed leaves. We had a few small swarms around this time last year as well and they dissipated quite quickly without control measures.

Keep an eye out for locusts and report them to your field officer. If there are enough swarms/damage reported there may be grounds to apply for an emergency use permit to control them.

Locusts can also be reported to the Australian Plague Locust Commission on 1800 635 962 or online at https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/locusts/landholders/reporting_locusts



Migratory locust nymph and damage

MAKE THE FALLOW COUNT – BUILDING SOIL HEALTH BETWEEN CANE CROPS

“Improving soil health” has become one of the most commonly used phrases in agriculture. It can mean cover crops, biological products, reduced tillage, composts, diverse rotations, and a long list of other practices. With so many options, it can become difficult to separate the practices that genuinely make a difference from those that simply sound good.

For most cropping soils, one of the biggest drivers of soil health is organic matter. Organic matter is made up of living and dead plant and animal material such as roots, stubble, microbes, earthworms and much more. It is important because it influences soil structure, water infiltration, nutrient cycling, biological activity and the ability of soil to resist degradation. If we want to maintain or improve soil organic matter, we need to maximise the amount of plant material entering the system while minimising the practices that accelerate its loss. This can be summarised as maximise photosynthesis (use sunlight energy) and minimise tillage (don’t destroy soil carbon). For Burdekin cane growers, the fallow provides an excellent opportunity to do both.

Maximising photosynthesis

During a cane crop, a large proportion of the sunlight falling on a paddock is captured by the crop and used for photosynthesis. Some of the carbon from the photosynthesis process eventually returns to the soil through roots, root exudates and crop residues. However, a bare fallow stops that process. Without plants to capture the sunlight there is very little new carbon being captured and returned to the soil. Meanwhile soil organic matter continues to be broken down by soil microbes.



Instead of leaving a paddock largely inactive for several months, a fallow crop converts sunlight, water, and nutrients into roots and above-ground biomass. That biomass becomes food for the soil biological community and ultimately contributes to maintaining soil organic matter. This is one reason why the traditional legume fallow between cane cycles can be valuable for much more than nitrogen fixation.

A well grown and vigorous fallow crop captures more sunlight, suppresses weeds, protects the soil surface and returns considerably more organic material to the paddock than a bare fallow. The best results come from selecting the right plant/crop, planting at the right time, establishing a suitable population and managing major nutrient, pest, or soil constraints.

In recent years there has been a lot of talk about multi-species fallows. While these can have benefits because the different species have different root systems and growth patterns, they are not guaranteed to improve soil health. Before committing to any fallow, it is useful to consider what the purpose of the fallow is and choose mixtures or plants that

are likely to achieve that objective reliably under Burdekin conditions. For example growers with a grass weed problem would be better looking at broadleaf crops that will allow them to tackle the weed problem.

Growing biomass is only half the equation, what happens to it afterwards also matters. Crop residues should be retained on the surface for as long as possible. Surface residues have immediate benefits. They shield the soil from heavy rainfall, reduce surface crusting, slow evaporation, moderate soil temperature and can improve water infiltration. Importantly, these benefits can be seen without having a measurable change in organic matter. Most plant material is eventually decomposed and recycled rather than becoming permanent soil organic matter. During decomposition it has fed soil organisms, cycled nutrients, protected the soil and contributed to aggregation and other important soil processes.

A fallow crop can therefore provide useful benefits, even if a soil test five years later doesn't show a dramatic increase in soil organic carbon.

Minimising tillage

Tillage has several important jobs in a cane farming system, and eliminating it entirely may be neither practical nor desirable; but every cultivation should have a purpose. Tillage breaks up aggregates, exposes previously protected organic matter to decomposition, and removes or incorporates protective surface residues.

Where cultivation is required for stool destruction, compaction management, land preparation or another specific purpose, it should be targeted at that problem rather than undertaken automatically. Reducing the number or intensity of unnecessary operations may allow more of the benefits created during the fallow to carry through into the next cane crop.

Is there a quicker way?

There is enormous interest in soil microbes and biological soil products. Unfortunately, poor soil function can't be fixed simply by adding microorganisms from a container. All soils contain enormous and highly competitive microbial populations and introduced organisms often struggle to establish or persist. Growing plants is the best way to increase microbial activity. Living roots provide carbon compounds directly into the rhizosphere, while crop residues provide additional food as they decompose. This feeds the existing/native microbial populations, that are suited to our climate, and allows them to thrive.



Costs

Soil health practices also need to make agronomic and economic sense. A healthy farming system still needs to produce profitable crops.

There will always be trade-offs. A fallow crop costs money to establish. Residue can make subsequent operations more difficult. Reduced tillage may require different equipment or management. Some paddocks have specific constraints that need direct intervention. Improving soil health is about identifying the problem, understanding the major processes controlling it, and selecting practices that provide the best return.

Making the next fallow count

As the end of the harvest season approaches, some simple questions may help guide fallow management decisions.

- Can we get the fallow established earlier and maximise the period of active plant growth?
- Are we growing enough biomass to achieve the benefit we expect?
- What is the main job of the fallow crop—nitrogen, biomass, weed suppression, soil cover, pest management, or several of these?
- Do we need a complex mixture to achieve that objective?
- Can more fallow residue be retained on the soil surface?
- Which cultivation operations are genuinely necessary?
- Are there specific soil constraints that should be addressed directly during the fallow?
- Can we measure whether what we are doing is actually working?

Perhaps the most useful way to think about soil health is not as a product or even a particular farming system. It is the accumulated result of how the paddock is managed.



Key points:

- Grow something useful. A well grown legume crop is more helpful than a poorly grown mixed species fallow.
- Grow plenty of it and retain as much of the biomass in the paddock as practical.
- Disturb the soil only when there is a reason to do so.

This article draws on the soil-health Perspectives series written by Andrew McGuire, Washington State University Center for Sustaining Agriculture and Natural Resources.

Read more of Andrew's blogs here: <https://extension.wsu.edu/grant/andrew-mcguires-homepage/>

PACHYMETRA AND NEMATODE TESTING

(Source: Sugar Research Australia)

BPS has just completed the annual Pachymetra and Nematode survey across the Burdekin. Each year, the field officers go out and take 80 Pachymetra and nematode soil samples, 20 samples in each mill area, picked at random. These samples are sent to SRA Tully for Pachymetra testing and SRA Woodford for nematode testing. BPS has been providing this service for the last 8 years.

Growers who had samples taken will be notified of the results as they are received from SRA.

Pachymetra Root Rot

Pachymetra is a fungal disease that invades the root system and greatly reduces root growth and yields in susceptible varieties. Once infected the internal root tissue breaks down leading to a soft, flaccid rot of the larger roots. These roots either stop growing, or are completely destroyed. The overall root system is much smaller than a healthy root system. This can lead to less well anchored plants and excessive stool tipping.



Pachymetra Root Rot. SRA image

Pachymetra root rot is unique to Australian cane fields. The disease is not seen in any other country, or in fields where sugarcane has not previously been grown. While it is a major disease in many parts of Queensland and New South Wales. BPS has only ever found a handful of blocks containing a high count of Pachymetra in the Burdekin, and low counts in a small number of blocks. Most samples return a Pachymetra spore count of zero.

One of the key management options for Pachymetra is planting resistant varieties. According to the 2026/27 SRA Variety Guide, Q183 is resistant to Pachymetra root rot. WSRA17, SRA32, Q208, Q240 and KQ228 all have intermediate resistance.

Nematodes

Nematodes are microscopic, eel shaped organisms that live in all soils. There are many types of nematodes, but they are classified as either free-living or plant parasitic.

Free Living nematodes are beneficial. They feed on bacteria, fungi and other soil organisms. A high count of free-living nematodes is a sign of healthy soil, as they play a key role in converting nutrients in organic matter into plant-useable forms. Their presence also helps maintain the population of the natural enemies of harmful nematodes.

Parasitic Nematodes are the harmful ones. They attack the roots of living plants including sugarcane. There are many species of parasitic nematodes, such as, root-knot nematode,

lesion nematode, dagger nematode and stubby root nematode. Typical symptoms are short, thickened and blackened primary roots with very few fine secondary or tertiary roots. Lesion nematodes can cause the presence of many red lesions on root tips. Excessive branching of primary roots may be evident. Swollen galls on the roots may be observed if root knot nematodes are present. Root systems damaged by nematodes may be exposed to further attack by bacterial and fungal organisms.

There are currently no varieties that are resistant to plant parasitic nematodes. Management is based on maintaining the natural predators to suppress the plant parasitic nematodes. This is typically achieved by increasing soil carbon as a food source for beneficial nematodes.

Nematode Management

- Get your farm tested to check the population in your soil. You should check for both plant parasitic and free-living nematodes as the ratios are important.
 - Make sure fallow crops are kept free of weeds.
 - Ensure machinery is cleaned between paddocks.
 - Green cane trash blanket provides a better environment for the beneficial organisms.
 - Minimum tillage preserves the beneficials.
 - Most legumes are resistant¹ to root lesion nematodes; however most are susceptible² to root knot nematodes.
 - The exceptions are, Sunn hemp which is resistant to both nematodes, and some of the soybean varieties (see table).
1. Resistant – nematodes won't build up under these crops
 2. Susceptible – nematodes will continue to build up under these crops



Galls produced by root-knot nematode. SRA image

Legume	Root knot nematode	Root lesion nematode
Soybean	Leichhardt – highly susceptible Stuart, Kuranda & A6785 - Resistant	Resistant
Lab lab (Dolichos)	Highly susceptible	Resistant
Cowpea	Meringa – moderately susceptible All others - highly susceptible	Resistant
Mungbean	Highly susceptible	Resistant
Sunn hemp	Resistant	Resistant

FALLOW OPTIONS

There are 4 potential options for the fallow period:

1. Bare fallow where the soil is kept free of weeds
2. Grass or weedy fallow
3. Cover crop
4. Cash crop

Each option has positives and negatives, and the choice may depend on other factors such as access to agronomic services, availability of irrigation, or the need for major earthworks.



Fallow Type	Bare	Grass/Weedy	Cover crop	Cash crop
Soil health benefits	No	Some	Yes	Some
Control problem weeds e.g. itch grass, sorghum	Yes	No	Yes, depending on crop	Yes, depending on crop
Complete major earth works e.g. levelling; irrigation infrastructure	Yes	No	No	No
Protect the soil from heavy rain or flooding	No	Yes	Yes	Yes

Legumes are the most common fallow crop option and they can be grown as either a cover crop or as a cash crop. If planning a cash crop it is important to consider marketing options, pest control, and harvesting and storage along with growing the crop.

Cover crops will be more successful if time is taken to ensure successful plant establishment, this may mean hiring planting equipment or getting a contractor in. Irrigation may also be necessary, at least for establishment.

Legume	Pros	Cons	Inoculation Required
Soybean	Option for a cash or cover crop High nitrogen input even after harvesting grain Moderate to high biomass for cover cropping	Longer growing season than other grain options Higher management requirements – planting, agronomy	Group H Yes Inoculation is always required
Mungbean	Short season cash crop, fits easily into the fallow period Reasonably tolerant of dry conditions – but grain yield and quality will be reduced	Low biomass and nitrogen inputs Low tolerance to waterlogged conditions	Group I Yes for grain crops Cover crops will usually nodulate effectively from native rhizobia

Legume	Pros	Cons	Inoculation Required
Lab lab (Dolichos)	Easy to grow and vigorous Moderate biomass and nitrogen inputs Tolerant of dry weather	Twining stems can make it difficult to manage biomass High weed potential if allowed to go to seed	Group J Not necessary if legumes have been grown before
Cowpea	Easy to grow and vigorous Moderate biomass and nitrogen inputs	Twining stems can make it difficult to manage biomass High weed potential if allowed to go to seed	Group I Not necessary if legumes have been grown before and will nodulate from native rhizobia
Sunn hemp	Fast growing and vigorous High biomass and nitrogen inputs	Cover crop only Managing woody biomass can be challenging	Group I Will nodulate from native rhizobia

For more information: https://sugarresearch.com.au/wp-content/uploads/2019/04/Legumes-Pros-and-Cons_2018_F-Web.pdf

SOIL TESTING

With the end of the season rapidly approaching now is a good time to be organising soil testing. Taking soil tests early allows plenty of time to apply any required ameliorants and to plan fertiliser requirements.

BPS offers a comprehensive soil testing service for both surface (0-20 cm) and deep (to 75 cm) samples. Reports and recommendations for plant and ratoons are included in the cost of the soil test. Contact any of the BPS staff to arrange soil testing.



NO-SPRAY WINDOWS

A number of sugarcane products have spray restrictions and no spray windows. These vary by product, rate and application method and you should always check the individual product label before spraying any product. **Products with the same active ingredient can have different restrictions or label requirements.** Summer is the time when most products have no-spray windows that restrict their use.

Products that have spray timing restrictions include:

- Products containing 2,4-D (including Tordon 75-D)
- Diuron products
- Products with combined Diuron and Hexazinone (e.g. Bobcat Combi)

- Imidacloprid products (e.g. Confidor)
- Clothianidin products (e.g. Shield)

The following table is general advice only. ALWAYS check individual product labels for rates and restrictions.

Active ingredient	Burdekin No spray window CHECK LABEL	Other restrictions CHECK LABEL
2,4-D	Varies by product and rate Ranges from September - November	Buffer zones can apply Must use minimum VERY COARSE nozzles
Diuron	Varies by rate Ranges from 1 January – 29 February	Some rates are band spray only Only 1 application per calendar year Buffer zones can apply
Diuron + Hexazinone	Varies by rate Ranges from 1 December to 29 February	Buffer zones can apply Some weeds are band spray only Must use minimum COARSE nozzles
Imidacloprid	Varies by product and pest December to May or July (depending on product)	Not all products are registered for plant cane Do not apply more than 1 group 4A product per year
Clothianidin	January to September	Do not apply more than 1 group 4A product per year

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