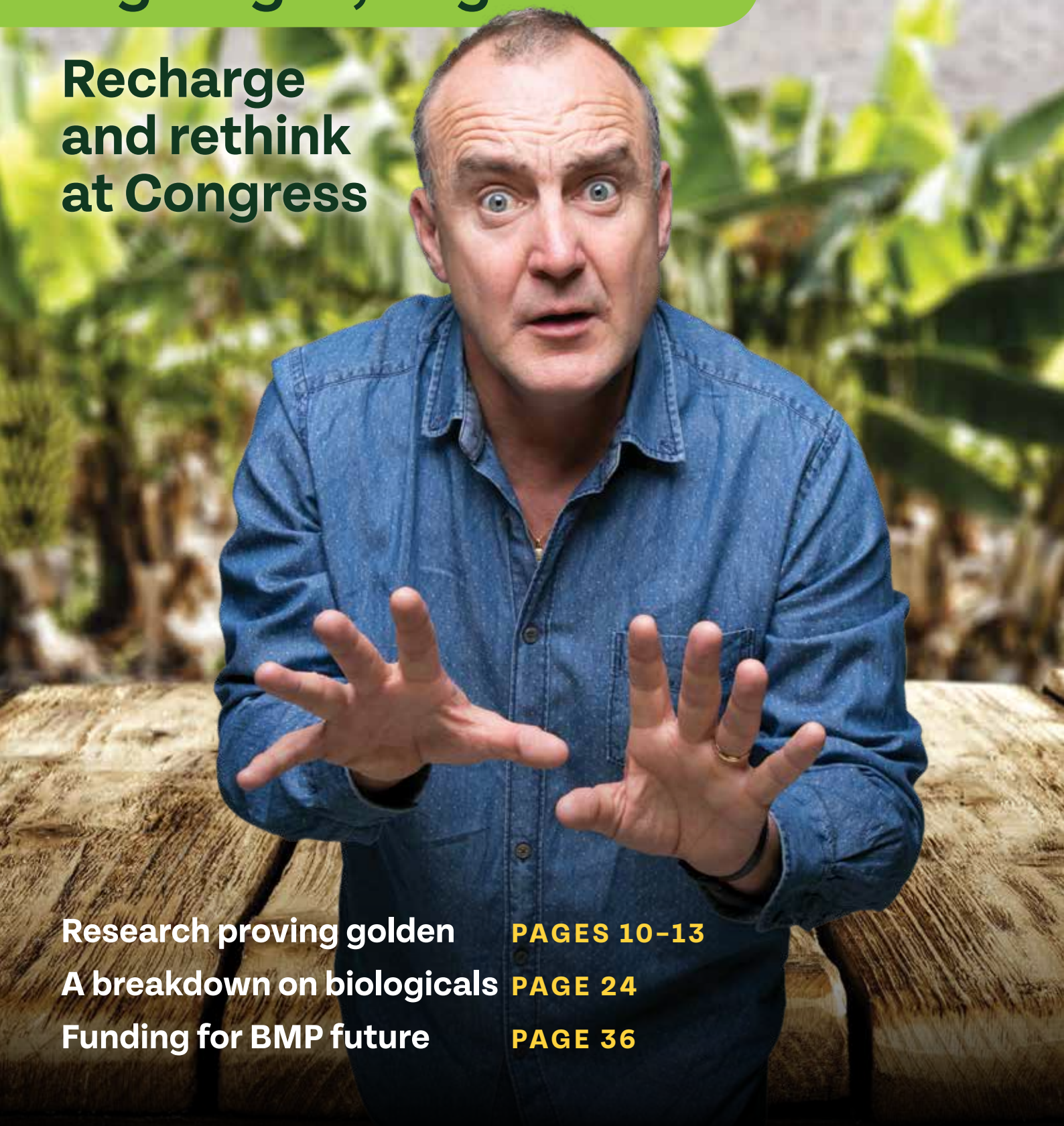
Australian Bananas

Australian Banana Growers

ISSUE 67 | APRIL 2023

Big laughs, bright ideas

Recharge and rethink at Congress



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Australian Banana Industry Congress
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Cairns Convention Centre

bananacongress.org.au

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CEO COLUMN

Leanne Erakovic, CEO

In the short time I've been ABGC CEO, I have heard loud and clear from growers that for the first time in generations they are questioning how to remain profitable in the face of rising costs.

I am proud to be fighting for Australian growers to get a fair go, and pushing to secure the future of bananas in Australia.

ABGC is the only association that champions exclusively for the banana industry. This means all our time and resources are dedicated to getting traction on issues affecting Australian bananas.

Please get in touch and tell me about the issues that matter to you: ceo@abgc.org.au.

Promising research

Since Panama TR4 was first detected in Queensland, we've spoken regularly about the need to buy time. Time to understand the devastating implications of this disease. Time for our industry to adapt. Time for researchers to do what they do best.

Reading this edition of Australian Bananas magazine, I get the sense, now more than ever, that the time we have bought through containment is paying off.

While there are still countless challenges to overcome, in this and other areas of our industry, we are starting to see more options for our future with TR4. Options for growers, for the supply chain and perhaps even for Australian consumers. On pages 10-13 you can read about new varieties that are not only proving to be TR4 resistant, but also super tasty. Jeff Daniells and Katie Robertson at the Department of Agriculture and Fisheries are just some of the highly regarded researchers making real, exciting progress in their work. In this particular project, looking at Goldfinger variants, commercialisation may still be a way down the track – but the prospect is very real.

I don't want to downplay the tough realities of living with TR4, or any other disease. I'm under no illusion that times are tough in countless other ways. But I think there's reason to feel hopeful about some of the opportunities and options that are on the horizon.

Supply Chain Engagement

We're more than six months into the banana industry's Supply Chain Engagement project and I'm pleased to say it's delivering results. Engagement Manager Andrew Burns, who is employed by ABGC and funded by Hort Innovation, has already made tangible improvements to communication along the supply chain. Working with Hort Innovation and retailers, there's more focus on instore activities and promotions that aren't tied to price. The feedback we're receiving is hugely positive, and I know this is just the beginning of the work Andrew is undertaking. You can read an update from him on Page 9 of this magazine.

Sustainable Farming

Our mission as ABGC is clear – to ensure this industry has a bright, profitable and sustainable future. There is fantastic work being done by growers across the country, continually improving their own practices both for the benefit of their business and the environment. Check out the latest on Banana Best Management Practice (from Page 36), for example, where you'll read about growers like Gavin Devaney, who won a Future Farming Award in 2021, and Jack Singh, who is working with our team on nutrient management planning.

Get in touch: 07 3278 4786 or ceo@abgc.org.au

REDUCING FUTURE RISKS

Australian Banana Growers' Council CEO Leanne Erakovic and Strategy Manager Michelle McKinlay attended the Queensland Biosecurity Partners Forum in March.

They're pictured with Rachel Chay, Queensland's incoming Chief Biosecurity Officer (far left) and Malcolm Letts (far right), who is leaving the position.

Ms McKinlay was one of the speakers at the event, where partners were asked to look to the future, assess biosecurity threats and design a program of work to reduce risks and keep Queensland's economy strong.

CHAIR COLUMN

Stephen Lowe, ABGC Chair

It was with a heavy heart last month (2 March) that we learnt the news of another property receiving a positive detection of Panama TR4 in the Tully Valley, taking the number of confirmed infested farms to seven since 2015.

Unfortunately, I know all too well how this news feels, as I was the last property to receive the same news in June 2022. My thoughts have been with this grower, and it certainly does remind us all, that this disease is not going away.

You will see on the graph below, that (as at 10 March, 2023) a total of 199 infected plants have been confirmed with TR4 across seven properties in eight years.

While the newest IP is in close proximity to other infested farms, and a new detection doesn't come as a complete surprise, it does serve as a reminder to all growers that keeping this disease away from your property is your first defence.

Managing the movement of people, banana plants, machinery and equipment on and off property is imperative to maintaining best biosecurity practices. This includes ensuring everyone, and everything, comes clean and leaves clean.

For those who haven't implemented on-farm biosecurity protocols, you will find some great tips on Page 23. The 'Top tips for revisiting your on-farm biosecurity' article includes some back-to-basics information from zoning your farm to cost-effective decontamination options.

I would encourage anyone who doesn't have good biosecurity systems in place to take the time and have a read.

Feral pigs

The wet season has again resulted in an increase in feral pig numbers throughout Cassowary Coast. As well as causing damage to farms, they also pose a risk of spreading TR4.

As they continue to multiply, I would urge growers with pig problems to do everything they can to reduce their numbers on farm. More information about this issue can be found on Page 6.

Given the scale of the problem, ABGC has written to Government seeking funding support for feral pig control.

Congress

Congress is fast approaching and I am looking forward to seeing as many growers as possible in Cairns in May.

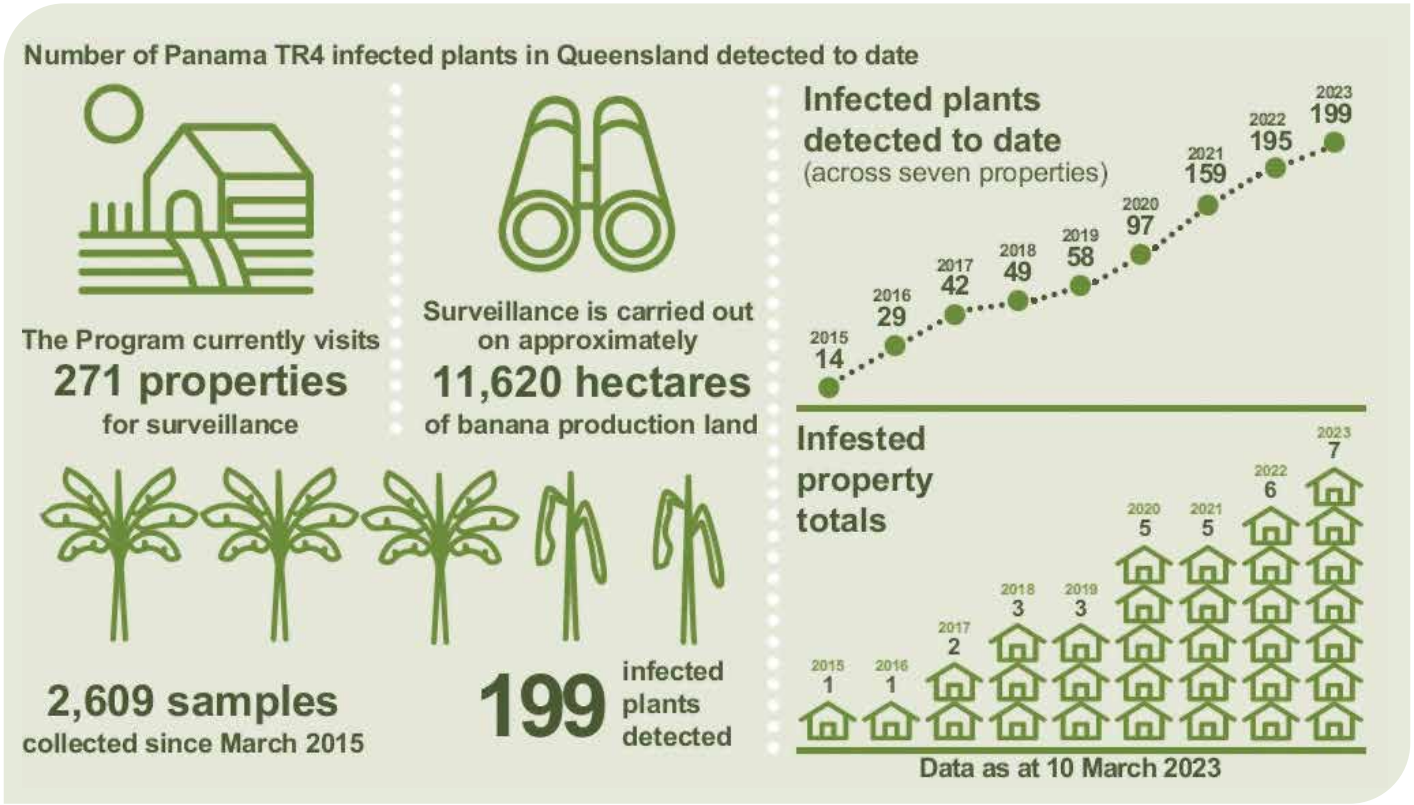
I, like Paul Inderbitzin (Page 16), believe there has never been a more crucial time to gather as an industry, in order to forge a better future. What better chance to have a voice and network with the biggest stakeholders in our industry?

I know the Planning Committee has gone to great lengths to craft a program that is relevant to industry and a worthwhile investment for those who attend.

And, equally as important, Congress is the perfect chance to catch up with friends, meet new people and just have a little fun away from our farms.

I know I certainly look forward to Congress each time it rolls around and I hope to see you all there.

Australian Banana Industry Congress



GETTING ON TOP OF FERAL PIG PROBLEMS ON YOUR PROPERTY

The wet season weather has resulted in an increase in pig numbers and movement.

The four-legged pests cause havoc on farms without pig management measures in place. The damage they cause to crops, property and the environment, and the potential risk they pose in spreading Panama TR4 are reasons to take action.

ABGC Deputy Chair and grower Leon Collins has spearheaded feral pig eradication in the Tully Valley and said, "everyone's got to protect their front and back door - we've all got to do our bit. At the rate pigs multiply, there's no room for complacency."

Overgrown and unmanaged areas of land can encourage feral pigs onto properties. Keeping grass and vegetation under control can help deter feral pig activity.

Successful eradication methods include trapping, ground shooting, and baiting.

Visit the Cassowary Coast Regional Council website for details on traps and baiting services, as well as further general information.

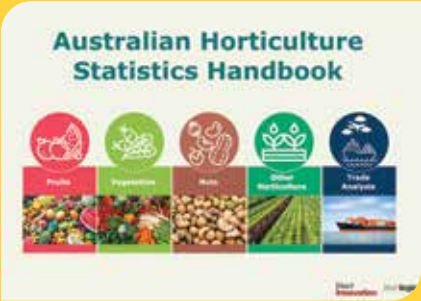
THE BANANA BREAKDOWN

Hort Innovation has released the 21/22 Horticulture Statistics Handbook, providing the most comprehensive and up-to-date data available on more than 75 horticultural products, including bananas.

The data shows the banana industry produced just over 374,000 tonnes in the last financial year, down 7 per cent on the previous year.

Overall production was valued at $501.6 million.

For the full breakdown, including state-by-state, you can read the handbook by visiting horticulture.com.au



CHANGES TO PALM SCHEME

The Department of Employment and Workplace Relations (DEWR) has undertaken consultation with industry in regard to proposed changes to the PALM Scheme.

Details of the proposed changes and the consultation process can be found here: www.dewr.gov.au/pacific-australia-labour-mobility-scheme. Feedback for Phase 1 closed in March.

As there were some significant changes proposed in this round of discussions, particularly around the role of Labour Hire companies, the Horticulture Council (of which ABGC is part), made a submission to DEWR.

The Council highlighted that an effective and efficient PALM scheme is of significant interest to industry and that while it supports a successful scheme, expansion must not lead to over dependence. The submission covered various issues, from minimum hours and labour hire companies (no support for limiting their role) through to welfare and wellbeing.

SARAH STEPS INTO EXTENSION ROLE

Meet Sarah Williams, a dog-loving Development Horticulturalist who has recently joined the National Banana Development and Extension team in Far North Queensland.

Where are you based? You'll find me at South Johnstone Research Station when I'm not in the field or chatting to growers.

What does your role involve? I'll be working to assist growers by shaping research to address their concerns. Right now, I'm focusing on determining methods to improve bunch pest management practices to reduce fruit damage, waste, and raise the bottom line for growers.

What did you do before going bananas? I studied Environmental Science at the University of Technology in Sydney. In my Honours year, I focussed on using natural rooting hormones from plant extracts to improve planting establishment, to reduce dependencies on fertilisers. After completing my degree, I knew I wanted to work in a role that allowed me to bring the latest science to people who could use it, which is why I packed up and moved some 2000km to Ayr in Queensland. My role there involved working with the sugar industry as part of an independent agronomy firm, which really fostered my love of working with growers to get the best crop possible.

What are you most excited about in this new role? I'm excited to provide the industry with research that's relevant, practical, and address growers' concerns and limitations within the industry.

Who is Sarah Williams when she's not at work? Outside of work, I enjoy hiking, camping and playing with my dog, Fin.

Favourite banana recipe: Rum-soaked, barbequed bananas.

PHILLIP BRINGS BANANA EXPERIENCE TO NEW ROLE

Phillip Spokes is ABGC's newest member of the Best Practice Team based at South Johnstone, Far North Queensland. He started at the beginning of March 2023, and is already proving to be an asset to the team.

Phillip comes to the ABGC with a long history of involvement with the banana industry and has an aptitude for working with growers to help manage their priorities and achieve their goals.

Working directly with growers and their industry representatives as the North Queensland Banana Growers Liaison Officer for 10 years through the 90s, he developed a thorough understanding of the uniqueness of banana growing and of the industry in general.

"I'm confident I can use my knowledge and experience to encourage growers to adopt best practice and use it to not only meet their regulatory requirements, but more importantly to be good stewards of the environment."

More recently, Phillip worked on-farm for 22 years in all aspects of banana farming, from land preparation through to growing, harvesting and packing, to marketing and food safety compliance activities. Growers can comfortably discuss the finer points of their operations with Phillip and be assured that he understands the challenges and issues that those activities present.

Phillip can be contacted via Phillip.Spokes@abgc.org.au or 0457 924 518.

TOP END FRECKLE RESPONSE CONTINUES

Over 1800 premises have been inspected by biosecurity officers in the Northern Territory, following a detection of banana freckle in May 2022.

It's believed the disease is still contained in the Top End, with delimitation surveillance finding no evidence that it has spread further afield.

Two of 52 infected properties (IPs) are commercial properties and, of those 52 IPs, 49 have now had all banana plants removed.

Biosecurity officers, who follow strict decontamination protocols, will continue to monitor the IPs throughout the wet season on a monthly basis. The properties will need to remain host-plant free for a minimum of 12 months.

A revised response plan has been developed which aims to achieve eradication and declaring country freedom by the end of 2024. This will involve continuing with the current strategy of removing banana plants from IPs and monitoring for regrowth.

Quick facts:

- The Consultative Committee on Emergency Plant Pests (which includes ABGC representation) has confirmed it is still feasible to eradicate the disease
- The response plan is cost-shared under national arrangements (no change to banana levy)
- Details regarding owner reimbursement costs can be found at planthealthaustralia.com.au
- All infected and suspect properties have been issued with notices to stop fruit and plant material moving off the property
- Queensland, New South Wales and Western Australia have regulations in place that prohibit the entry of banana fruit and/or plant material from the Northern Territory
- Travellers should not take banana fruit, peel or plant material outside of the area it was purchased in the NT

Banana freckle is caused by a fungal pathogen. The affected fruit is safe to eat, but is unmarketable. Banana freckle also reduces plant productivity.

Exotic Plant Pest Hotline: 1800 084 881

REFRESHED LOOK FOR ABGC

After six decades, the ABGC has updated its brand, giving it a simple but more modern new look. The logo represents growers from across the country and a nation that loves the product they produce.

In coming weeks, you'll also be invited to check out a new, streamlined Australian Banana Growers' Council website, offering all the information and news you have come to expect, in a fresh, easy-to-use format.

Australian Banana Growers

MEMBERS-ONLY

NEW, EXCLUSIVE PORTAL IN THE WORKS

As the new website goes live, ABGC members will each be provided with a unique log in, granting access to exclusive content and features.

"We proudly advocate for the entire Australian banana industry and that's not going to change," Chief Executive Officer Leanne Erakovic said. "But what we do want to change is our offering for members. While we hope our current members know just how valued they are, you can expect more information, more resources and more interaction as we move forward."

Ms Erakovic added that while the organisation ensures all growers are represented when key decisions are being made, members help ABGC set the agenda.

"Without our members we simply wouldn't exist. And without the ABGC, there would be no organisation advocating solely for the banana industry.

"With our members behind us, guiding our decisions, we present a more powerful, united front when it really matters."

Details regarding the new Member Portal, including how to log in, will be sent out in coming weeks.

Members, and those wishing to inquire about membership, are welcome to contact members@abgc.org.au at anytime.

ABGC PANAMA TR4 TEAM UPDATE

ABGC TR4 Program Manager – Geoff Wilson

Geoff Wilson has been appointed as the new ABGC TR4 Program Manager. His previous position as Industry Transition Leader since March 2021 has provided him with knowledge and experience working with all areas of the Program.

Grower Support Coordinator Position

Recruitment for the Grower Support Coordinator position is currently underway.

Communications and Engagement Officer – Skye Orsmond

Skye Orsmond has joined the ABGC as the new Panama TR4 Communications and Engagement Officer.

Skye has over ten years' experience working in various communications roles in local and state government and corporate environments. Skye's family own an award-winning exotic fruit farm near Tully, and she has a passion for agriculture and the region.

TR4 Industry Transition Leader – Curtis Lanham

Curtis has been a cornerstone for the Program in the policy arena and has now moved into a role as Transition Leader. He will be responsible for ensuring the Program transition from government to industry is as seamless as possible.

BOARD IN BRISBANE

ABGC Directors and senior staff met in the Queensland capital in February, with the TR4 Transition, Supply Chain Engagement and Congress among the topics discussed.

Pictured from left to right are Doriana Mangili (WA), Stephen Spear (NSW), Leon Collins (Deputy Chair, QLD), Stephen Lowe (Chair, QLD), Andrew Serra (QLD) and Paul Inderbitzin (QLD). Not pictured: Ben Franklin (Treasurer, QLD) and Tayla Mackay (QLD).

TR4 TRANSITION TO INDUSTRY LEADERSHIP UPDATE

In early March, Industry TR4 Transition Leader Geoff Wilson updated the ABGC Board of Directors on progress of the Panama TR4 Program transition to industry management by 30 June 2023.

As well as the Code of Practice, key elements of the ABGC's program are nearing completion including a Compliance Strategy, Sampling and Diagnostic Strategy, Surveillance Strategy, and an overarching Management Plan that will provide a framework for how, with grower support, the ABGC intends to practically manage the disease.

ANNUAL BANANA VOLUMES

The national banana levy collected by the Federal Department of Agriculture is compulsory for commercial banana growers. It is 2.19 cents per kilogram of bananas sold.

The dollars collected show an estimate of production for the previous financial year. Right is a table of the levy-based banana volumes. For non-industry participants, please note this is an approximation of production, but not all bananas grown are sold, i.e. some don't make the retailer-required specifications.

Also, there is a lag factor, in that levies paid on June sales (at least) are paid in the following financial year. Exemptions from paying the levy and other details are to be found at agriculture.gov.au/ag-farm-food/levies/rates/bananas

Years ending 30th June (in '000 tonnes):	
2013	341
2014	371
2015	371
2016	393
2017	414
2018	388
2019	372
2020	382
2021	403
2022	375

BANANA LEVY RATE

The make-up and purpose of the various components of the Banana Industry Levy are as follows.

Levy Amount	Purpose
0.50c /kg	Plant Health Australia (PHA) levy: The Department sends the funds to PHA, for the ongoing containment and management of Panama Tropical Race 4 disease, and to conduct activities that aim to improve biosecurity within the banana industry.
1.69c /kg	Hort Innovation (HIA) levy. The Department sends the funds to HIA for R&D and Marketing: 0.54 c/Kg is for Banana R&D, which is matched dollar for dollar by the Department and 1.15 c/kg for Banana Marketing
	Total = 2.19c /kg* (32.85c per 15kg carton).

The Banana PHA levy currently funds the containment of the first TR4 infested farm that the industry purchased and the industry's part of the cost-sharing deed with the Queensland Department of Agriculture and Fisheries for TR4 containment.

It also funds the pre-existing commitments – Torres Straight Exotic Fruit Flies Eradication Response, PHA membership/meetings and Government levy collection.

Further information: Leanne Erakovic, leanne@abgc.org.au
Phone – 07 3278 4786. More info on the levy rate:
https://www.agriculture.gov.au/ag-farm-food/levies/rates/bananas

THE LATEST ON SUPPLY CHAIN ENGAGEMENT

By Andrew Burns, Supply Chain Engagement Manager

Back to School for Term Two

Following a strong, retailer supported return to school campaign for Term One 2023, we (the Hort Innovation banana marketing team and the ABGC) wanted to make sure that we could endeavor to replicate the gains with a change of approach.

We have an exciting update to the Nutritional Banana poster for use in store for Term Two Back to School. The revised poster is more in line with the overall brand look and feel, and the Back to School messaging can be used or removed as retailers require. We have provided a poster image (ideal for stores to print off and display), as well as a catalogue panel to all retailers. This will allow them to use it within their brochures, not just in this instance but for future back to school events too. The nutritional communication is an approach we would like to build on as another avenue of using "benefits" to help drive incremental consumption with both our light and heavy buyers. Retailers provided positive feedback on the updated poster, and we hope to see it being utilised in store and/or in catalogues.

Banana Nutrition

I am in the midst of a project with the Queensland Alliance for Agriculture and Food Innovation (QAAFI) with an aim for them to source, provide and confirm banana nutrition and consumption benefits, along with the QAAFI being the recognition body for us to reference the validations. We at the ABGC and Hort Innovation don't have recently validated information that we can supply to retailers and the validation statement we can use in house or in our marketing programs/communications. As mentioned in the Back To School section above, we want to highlight nutritional and consumption benefits to educate and entice increased consumption as another way of engaging with our consumers both light and heavy.

Banana Nielsen Homescan information

Information is readily available for everyone within our industry regarding the banana category (and other categories). Banana performance information is updated quarterly, and is sourced, analysed, reported and supplied by Nielsen IQ. Harvest to Home is an analytics tool, developed by Nielsen and Hort Innovation, providing insight on marketing performance and shopper behaviour for a range of fresh produce. The below link will take you directly to the Banana segment where reports covering a range of topics can be found, including Latest Highlights, Market Overview, Retailer Overview, What Households buy, Who is buying, Two year trends, and other produce categories. The information for Bananas is up to the 4th of December 2022 and covers the previous 52 weeks. A new quarterly update will be with us shortly, which we will send out via the E-Bulletin.

Please familiarise yourself with the "Use of information in the dashboard and reports" located at the bottom of the welcome page. https://www.harvesttohome.net.au/fruitmushroomnuts/latest-highlights/banana

IS THERE A POT OF GOLD IN THE SOUTH JOHNSTONE MUTAGENESIS TRIAL?

By Katie Robertson & Jeff Daniells, Queensland Department of Agriculture and Fisheries

Six years, and a lot of banana-tasting and agronomic assessments later, researchers behind the Goldfinger mutagenesis trial at South Johnstone have selected four variants which have the most promising market prospects. Now, on-farm commercial trials will allow for greater grower feedback and detailed post-harvest ripening and handling studies.

Since planting the original trial in 2017, the Goldfinger mutagenesis project has progressed through several milestones. After generating several thousand unique variants using mutation breeding, 631 plants were established in a field trial at South Johnstone Research Facility. The top twenty performing variants in the plant crop, based on agronomic and post-harvest characteristics, were taken forward into a replicated trial in 2019. Further taste-testing identified five variants to include in a large-scale consumer and sensory evaluation (see *Australian Bananas* Issue 62, August 2021, pp. 18 - 19). This phase of the project identified four selections which were liked by consumers as much as Cavendish and Lady Finger (more detail on this is published on pg. 12-13). March 2023 saw the final bunches of the second ratoon crop harvested from the top twenty selections at South Johnstone.

Variants 144, 211, 521, 544 and 903 were the top five tasting selections chosen to be further assessed in the larger consumer surveys, but nonetheless the other fifteen remain an important part of assessing the value of this mutagenesis breeding approach. The agronomic results from nineteen of these selections are summarised in the accompanying table (opposite page). Variant 255 was excluded after the first ratoon due to its excessive height and slender pseudostem, which made harvesting very difficult. Its fruit was also rated poorly in the South Johnstone consumer surveys.

Some of the key observations from the second ratoon include:

- Seven out of the nineteen selections had plant heights shorter than standard Goldfinger, which stood at 4.2 m. In most cases the pseudostem circumference was also smaller, meaning these plants remained proportionally comparable to Goldfinger.
- Most variants had shorter finger lengths than the original Goldfinger by an average of 3 – 4 cm. The consumer study found this was generally regarded as preferable, as Goldfinger was rated as "too big" by 46% of panellists.
- Although variant 521 averaged a smaller bunch size (15% less than Goldfinger), its slightly faster cycle time meant the cumulative yield was not significantly different to Goldfinger. This was also the case for selections 119 and 339 (which were also aided by having slightly heavier bunches in the first ratoon).
- In contrast, variants 544 and 144, which had similar second ratoon bunch weights to Goldfinger, had lower cumulative yields by 16 and 17%, respectively, due to lower bunch weights in the first ratoon.

WHERE TO FROM HERE?

The trial block has been nurse suckered and prepared for rating the susceptibility of the variants to yellow Sigatoka in the coming months.

Later this year, the plan is to establish two on-farm trials (with around 50 plants of each selection per site) to evaluate how these variants grow on a larger scale under commercial farming practices. In the process, larger volumes of fruit will become available to fine-tune the harvesting criteria and post-harvest handling requirements, ensuring optimal fruit quality and eating experience for the consumer.

We also plan to screen the remainder of the top five variants in the Northern Territory to confirm they have retained their TR4 resistance. Variants 544 and 144 have already been screened in a plant crop, where they were rated as being resistant and highly resistant respectively to TR4 – see Australian Bananas Issue 65, August 2022, pp. 18 – 19.

The banana freckle outbreak in the NT has contributed to delays for continuing this necessary trial work, which is now part of the project BA21002: 'New varieties for Australian banana growers'.

Just over 120 consumers were recruited to taste test the new Goldfinger selections in a controlled sensory environment, rating the fruit on characteristics relating to appearance and taste. This work was overseen by the Consumer Intelligence team, Simoné Moller, Ishita Pramanik and Philippa Lyons.

Whole banana samples being prepared for consumer analysis at the Health and Food Sciences Precinct in Coopers Plains, Brisbane. This work was overseen by the Consumer Intelligence team, Simoné Moller, Ishita Pramanik and Philippa Lyons.

A summary of the elite Goldfinger selection's second ratoon agronomic data

Variant	NS[1] to R2 harvest (months)	R2 Bunch Wt[2] (kg)	Cumulative yield (R1+R2; kg/plant/year)	Pseudostem Ht (m)	Third hand finger length (cm)
Goldfinger	**21.2**	**39.5**	**46.6**	**4.2**	**24.3**
119	20.5	32.9 <	40.1	3.6 <	21.5 <
126	21.2	39.6	49.0	4.2	24.1
144[3]	20.4	34.9	38.6 <	4.0	21.6 <
145	19.7 <	25.7 <	33.0 <	3.6 <	22.0 <
211	23.3 >	23.2 <	29.1 <	4.1	17.7 <
333	22.9 >	18.4 <	22.3 <	3.6 <	17.7 <
339	20.8	33.7 <	42.1	4.2	21.8 <
366	19.6 <	37.6	48.5	4.0	24.2
417	19.9	42.8	52.4	4.1	24.0
423	22.9 >	22.7 <	25.2 <	4.1	18.1 <
434	20.0	30.9 <	38.8 <	3.5 <	20.3 <
473	19.2 <	26.7 <	34.8 <	4.1	21.3 <
521[3]	19.9	33.7 <	40.9	4.0	20.3 <
544[3]	20.4	34.4	39.2 <	4.0	21.5 <
602	21.6	26.9 <	33.0 <	3.9	19.4 <
746	21.7	29.8 <	36.3 <	3.4 <	21.4 <
766	22.4	23.7 <	26.8 <	3.9	19.6 <
843	19.4 <	24.6 <	31.0 <	3.0 <	22.1 <
903[3]	20.2	38.6	48.5	3.8 <	22.1 <

Less desirable

More desirable

[1]After the plant crop, the block was nurse-suckered (NS) to synchronise plant development and improve fruit availability for the consumer and sensory work. Time-dependent data points like cycle time and cumulative yield are calculated from the date of nurse-suckering.

[2]Excludes bunch stalk weight

[3]The four selections which were rated the highest in the consumer and sensory assessments.

< = significantly less, > = significantly more than Goldfinger (95% confidence level)

NEW VARIETY EVALUATION TRIAL
ESTABLISHED AT SOUTH JOHNSTONE, DECEMBER 2022

By Jeff Daniells and Katie Robertson, Queensland Department of Agriculture and Fisheries

Five new TR4 resistant Cavendish selections from Taiwan and eighteen TR4 resistant Cavendish from DAF's mutagenesis program were field planted at South Johnstone and are being assessed for agronomic performance. Some new Lady Finger types from Brazil are also included in a smaller sub-trial.

Trial Objectives

The Queensland Department of Agriculture and Fisheries imported new varieties as part of the 'Improved plant protection for the banana industry' project (BA16001) completed in 2021. These varieties included some TR4 resistant Cavendish from Taiwan and various Lady Finger types from Brazil, which were released from quarantine in early 2022. Also during that project, 18 TR4 resistant Cavendish selections were made from the mutagenesis trials established earlier in the Northern Territory as part of the 'Fusarium wilt Tropical Race 4 research program' (BA14014).

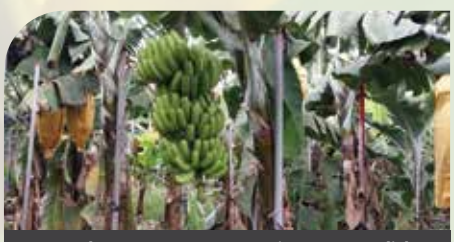
The new trial at South Johnstone was field planted with these varieties in early December last year. They will be evaluated for agronomic performance over two crop cycles as part of the project 'New varieties for Australian banana growers' (BA21002). This is a first look at many of these varieties to see how they perform under north Queensland conditions. In addition, preliminary taste panel assessments will be made.

In conjunction with this agronomic evaluation, several of these varieties are to be screened against TR4 in the NT to confirm their level of disease resistance. However, the banana freckle outbreak in the NT last year is contributing to delays in commencing this component of the broader work. The Lady Finger types will also be evaluated for Race 1 Panama disease resistance in an on-farm trial on the Atherton Tablelands.

Overview of Varieties

- There are five new Cavendish selections from Taiwan including Improved Formosana, which is reported as quicker cycling than standard Formosana and shorter in stature, and GCTCV 219 which has sweeter fruit.
- There are eighteen Cavendish selections from DAF's mutagenesis program. They were derived from the already TR4 resistant CJ19 and GCTCV 215. The selections were made for improved agronomic characteristics, including plant stature, and having a cycle duration closer to Williams.
- Ones to watch amongst the Lady Finger types from Brazil are SCS451, a selection of Santa Catarina Prata with tolerance to Race 1 Fusarium wilt, and the Sugar hybrid, Princesa.

The new Cavendish variety trial established at South Johnstone in December 2022



Improved Formosana, a TR4 resistant Cavendish selection from Taiwan is included in the new trial (photo courtesy TBRI).

Hort Innovation | BANANA FUND

This project has been funded by Hort Innovation using the banana research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit horticulture.com.au

GOLDEN APPEAL TO BOTH TR4 AND CONSUMER DEMAND

The Goldfinger mutagenesis project started as a pursuit to find a marketable banana variety resistant to Panama TR4. However, it may also prove a commercial winner by filling a market void and increasing category demand.

In a 2011 report, 'New and alternative banana varieties designed to increase market growth', principal horticulturist with the Department of Agriculture and Fisheries, Jeff Daniells, detailed how there were market opportunities for more banana varieties, to increase demand.

"People are looking for a little bit more diversity in the marketplace. So, this is potential opportunity to open up bigger markets. And, if there are more varieties and opportunities for people to eat more bananas - that can be profitable to industry - then all the better," Mr Daniells said.

He said in recent consumer and sensory evaluation many consumers indicated that they liked the sweet and sour balance of the Goldfinger selections. The consumers scored the four Goldfinger variants 144, 521, 544 and 903, 'on par' with commercial Lady Finger and Cavendish.

Mr Daniells said the consumer testing results were extremely encouraging given the progress that had to be made in improving the eating characteristics of Goldfinger in the trial, whilst retaining its TR4 resistance.

The sensory panel assessment indicated that the selections were firmer in texture than the original Goldfinger. This was an important component of the improved overall liking of the selections compared to the original Goldfinger.

"It was surprising, but very encouraging just how much better the new selections were to eat compared to the original Goldfinger.

"And that's also a very encouraging thing for the future, because often hybrid varieties like Goldfinger, when they were originally bred, it was considered that the hybrid couldn't be improved further. In DAF's Goldfinger mutagenesis research it has been demonstrated otherwise. Improvement is still possible!"

Attendees at Goldfinger field walk

Ripened fruit of best Goldfinger selections

Commercialisation

The program is now ready to embark on the next stage of the work, growing the Goldfinger selections in a small number of on-farm trials. But commercialisation itself is still at least a few years away.

"It's not a quick process because there's no immediate market for the fruit. We can't just put 1000 plants out and expect someone to support a commercial agreement, without knowing that we can sell any of the fruit," Mr Daniells said.

"It will take at least a couple of years to grow on growers' properties to see how they are performing and get some more information to optimise their post-harvest handling characteristics.

"We haven't had a quantity of fruit sufficient enough to do this at previous stages of the trials.

"Then the expectation is that a marketing company would be sought to take on the opportunity of moving the varieties forward on a commercial level. So, I would hope in a few years from now we'll be able to get this release process going if there is enough support for it from the growers and marketers to invest in the opportunity."

Consumer appeal

In early 2022, around 120 consumers took part in a series of tastings to assess the five new varieties of Goldfinger bananas from the South Johnstone trial, with four of the varieties scoring equally well with existing commercial varieties of Cavendish and Lady Finger.

DAF Consumer & Sensory Scientist Simoné Moller said more than 1000 bananas were tasted during the trial at DAF's specialised sensory facility in Coopers Plains.

"Overall, the reviews were positive but well summed up by one taster who described the new Goldfinger selections as a 'super healthy and delicious snack' that they would look forward to eating," Ms Moller said.

"Tasters liked the balance of sweet and sour taste in the new Goldfinger selections with one noting that the fruit had a 'complex flavour with notes of citrus, confectionery, and tropical fruit'.

"Other comments from the tasters included that these Goldfinger selections had just the right amount of sweetness, the texture and flesh colour of the banana was very exciting, and that they would be fantastic in a fruit salad.

"My favourite comment came from a taster who said they were reminded of banana lollies and thought they could be marketed as 'sweet confectionery without the naughty numbers'."

GOLDFINGER FIELD WALK

A field walk was held at South Johnstone Research Facility late last year for selected growers and supply chain representatives, including those that might host potential sites in North Queensland for pre-commercialisation trials with the best Goldfinger selections.

The project team from the National Banana Development and Extension Program (BA19004), helped facilitate the event. Attendees received an update on the outcomes of the consumer and sensory analysis of the better selections conducted by DAF, in Brisbane in late 2021/ early 2022.

They also had the opportunity to see ratoon bunches on some of the better selections and to taste ripened fruit of those selections. Their input was sought to help guide future development of the select lines.

SWEETER BANANA PROGRESSES TOWARDS LOW EMISSIONS PRODUCTION

A proof-of-concept patch established by Sweeter Banana as part of a regenerative agriculture project has provided some encouraging results.

The Sweeter Banana Co-Operative, with agricultural consultancy Field Capacity, has begun investigating whether a Biomineral production system could provide adequate plant nutrition to produce their popular Carnarvon-grown fruit. The Biomineral production system involves the use of controlled release fertilisers in conjunction with biological and mineral components. Research carried out in broadacre agriculture has found that this approach led to increased water and nutrient use efficiency, as well as soil health and mitigation of nutrient losses. Over recent years these research findings have been adapted and deployed in the Carnarvon horticultural industry to successfully produce a wide range of fruit and vegetable crops.

The proof-of-concept patch demonstrated that over a period of 12 months it was possible to reduce Nitrogen application rates from 440 kg/ha to 40 kg/ha and Potassium rates reduced from 211 kg/ha to 18 kg/ha without impacting on plant nutrition or yield. When the total volume of fertiliser applied is taken into consideration, inputs decreased from 1253 kg/ha to 400 kg/ha translating to significant reduction of the greenhouse gas footprint associated with the manufacturing and transport of synthetic fertilisers. Yield increased from 35 to 45 t/ha after transitioning to the Biomineral program.

Scott Brain, Principal Agronomist at Field Capacity, said that despite the reduced application rates, results from soil and leaf tissue tests found that all nutrients were being maintained at adequate levels.

"In addition, soil carbon content had increased by 15%, translating to an additional 3t/ha of organic carbon being present in the top 10 cm in the first year," he said.

"This provides the soil with the capacity to hold an additional 40 kilolitres of water per hectare and increasing the amount of organic Nitrogen in the soil pool by 240 kg/ha."

The proof-of-concept patch has provided members of the Sweeter Banana Co-operative with a future state scenario which has informed practice change through the State NRM Community Stewardship Regenerative Agriculture.

Field Capacity has been engaged by the Sweeter Banana Co-operative to provide support to members in transitioning to Biomineral production and to validate the performance of the system in conjunction with the University of Western Australia. This has also included an initial assessment fruit shelf which found that fruit produced under the biomineral system had an extended shelf life of two days. So far 50 per cent of the area growing fruit for Sweeter Banana has been converted to Biomineral production and participating growers have also been able to reduce their fertiliser costs by more than 50% which has made a contribution to greater cost efficiency.

The cumulative benefits of this project are providing positive steps towards a low emissions production system whilst environmental loss of nutrients is being mitigated through the controlled release fertiliser formats which results in increased nutrient use efficiency.

"The Biomineral production system is demonstrating that profitability and Regenerative Agriculture can be complimentary as opposed to being mutually exclusive as it is often assumed," Mr Brain said.

Sweeter Banana Chairman Chris Collins, Farm Manager Graeme Sinclair (holding Victoria), Minister for Agriculture The Hon Jackie Jarvis, The Hon Peter Foster MCL and SBC Business Manager Doriana Mangili. Minister Jarvis visited the trial site in March.

Scott Brain, Principal Agronomist at Field Capacity, working on the trial. Image: VegetablesWA

The trial site in Carnarvon. Image: VegetablesWA

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CAIRNS SET TO PARTY!

Australian Banana Industry Congress

Excitement is building for the 15th Australian Banana Industry Congress which will return to Cairns from 17-19 May, 2023.

International funny man, comedian Jimeoin, will headline another stellar line-up of presenters and panelists who will take to the stage over the two-day plenary program. Popular Sunshine Coast radio personality Todd Widdicombe will return as MC.

The Congress Planning Committee has worked hard to develop thought-provoking plenary sessions exploring issues impacting the industry, while showcasing innovation, technology, future trends and opportunities relevant to growers well into the future.

With industry continuing to face so many challenges, Congress will offer growers the chance to reconnect with their peers, as well as supply chain and other industry stakeholders. It's a rare opportunity to spend a few days away from the farm.

It will also be a chance to celebrate that, despite enduring unprecedented challenges, growers continue to grow, pack and deliver the nation's number one selling fruit to wholesale markets and retail shelves every day.

LOCATION

The Cairns Convention Centre will host the main speaker program, the exhibition area, Tradeshow Evening and Banana Ball and Awards night, while the Pullman Cairns Reef Casino Hotel, will be transformed into 'Banana Central' for the Welcome Reception, Banana Bar and Science Symposium.

AWARDS OF HONOUR

A social highlight of every Congress is the Banana Ball and Awards ceremony. The event recognises some of the industry finest, with Awards of Honour presented to both grower and non-grower industry leaders.

This will include the Future Farming Award, recognising a grower with outstanding best practice, demonstrating improved farm management focused on looking after water quality and the environment, while also having a willingness to share information and their innovations.

This will be the second Future Farming Award presented at Congress, with the inaugural award announced in 2021.

SPONSORS AND EXHIBITORS

Congress would not be possible without the support of our incredible sponsors and exhibitors, and the Australian Banana Growers' Council (ABGC) and ABIC Management Committee would like to thank those valued companies who have supported our 2023 event. Special thanks to our Major Sponsors; Foundation Partner: Visy; Principal R&D Partner: Hort Innovation; Major Partner: Australian Produce Partners; Associate Partners: Costa, Arcella Bananas and Bayer; Supporting Partners, Soils First NQ, Pakall and La Manna; and Primary Partners: Loscam, Campbell Chemicals, DAF, Loscam, Opal, Netafim, Seasol, Signet and Blenners.

BE PART OF SHAPING A BETTER FUTURE

Congress Chair and ABGC Director Paul Inderbitzin believes there has never been a more important time for growers in every growing region to attend next month's Congress.

With industry battling against more challenges than it has ever had to face, he believes the three-day program is a vital opportunity to come together and help shape a better future.

"We all know how hard it is to find the time – and often the finances - to leave your farm to attend Congress," Mr Inderbitzin said.

"But I really do believe that if the past two years have shown us anything, it's that it has never been more crucial to consolidate and try to tackle some of the very real challenges that we have endured and continue to face."

"We cannot expect other people to fix our problems. We need to have robust and constructive discussion, that hopefully leads to solutions."

"Throughout the two-day plenary program, which we have carefully crafted, we will have a room full of marketing, retail, R&D and other supply chain heavy weights. I mean, what better opportunity could we possibly have to come together and have input into what direction we as growers believe our industry should take."

"I know financially, it has never been tougher for many growers. But I would implore every one of you to try your best to attend Congress in 2023, to show we are a strong industry, that is committed to finding answers and ensuring a stronger future."

BANANA WOMEN'S LUNCHEON

The popular Banana Women's Network lunch will return to Congress in 2023.

The luncheon will be held during the extended Congress tradeshow lunch break, on Thursday 18 May, ensuring no-one misses a thing on the first day of the plenary program.

Keep updated on more details about the luncheon, including location, by reading your ABGC e-bulletins and popping onto the Congress website – www.bananacongress.org.au

SCIENTIFIC SYMPOSIUM

The 3rd Banana Scientific Symposium is being held the day before Congress (Wednesday, 17 May 2023) and provides an exciting opportunity for those involved in banana R&D to present their work to peers and industry, with interested growers and other stakeholders welcome to attend.

After the success of the 2021 Symposium, the event is a great opportunity for the banana research community to share a more detailed account of their latest research, exchange ideas, improve linkages and initiate new collaborations.

The Symposium provides a chance to foster communication and collaboration between researchers so that they can continue to deliver high quality scientific research that adds value and benefits Australian banana growers.

The format of the full-day session will be a series of 10 minute oral presentations grouped into four main themes. Presenters will be given the opportunity to participate in a Q&A session at the conclusion of each theme.

OUR SHOUT!

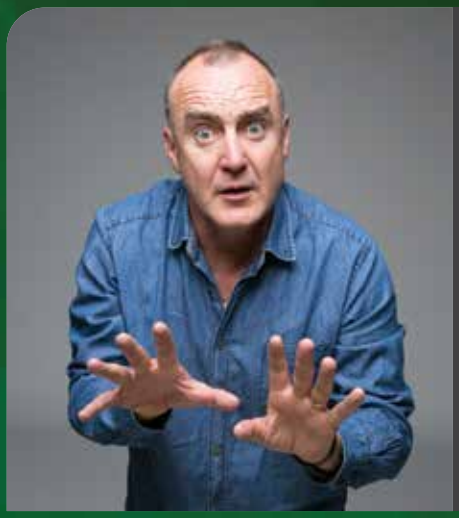
Register for Congress before May 1 and go into the draw to win a $250 bar tab at the Cairns Pullman Reef Casino, or a hotel voucher to the same value. The voucher winner will be drawn at the Welcome Drinks.

For sponsorship and exhibition opportunities please contact Thomas Howden at MCI Australia on 02 9213 4016 or email thomashowden@wearemci.com

For general information on Congress please call Sonia Campbell on 0428 038 330 or email sonia@abgc.org.au

Meanwhile you can keep up to date with all the latest news and information about Congress by logging onto www.bananacongress.org.au

GUEST SPEAKER PROFILES



Jimeoin

What better way to open the 2023 plenary program than with internationally renowned comedian Jimeoin.

Jimeoin is the first speaker on Thursday 18 May and we have no doubt his much-loved brand of humour will leave Congress delegates buzzing and ready to tackle the rest of the program.

Jimeoin's regular appearances at the Melbourne International Comedy Festival and his widely successful Australian tours sell out in advance, with extra shows often added due to demand.

Internationally, Jimeoin has toured to great acclaim from New York to New Zealand, Aspen to Amsterdam, the Middle East to the Far East. He has also performed around Europe and the UK and is a regular invitee to the Mecca of comedy, Montreal's Just For Laughs Festival.

He has toured throughout the vast outback regions of Australia as well as playing at every major city nationally.

His other accomplishments are too long to list, but make sure you don't miss the chance to see one of comedy's best!

Professor Veena Sahajwalla

Professor Veena Sahajwalla is an internationally recognised materials scientist, engineer, and inventor revolutionising recycling science.

She is the founding director of the Centre for Sustainable Materials Research & Technology at the University of New South Wales. She works with industry, national and international research partners, and government across Australia, on the development of innovative environmental solutions for the world's biggest waste challenges.

Prof Sahajwalla is known for her role as a judge on the ABC television show The New Inventors, more recently she featured on the ABC's Australian Story and was named the 2022 NSW Australian of the Year.

Professor Salah Sukkarieh

Salah Sukkarieh is a Professor of Robotics and Intelligent Systems at the University of Sydney. He is recognised as an international expert in the research, development and commercialization of field robotics systems.

Prof Sukkarieh is a Fellow of the Australian Academy of Technological Sciences and Engineering (ATSE). He has over 500 academic and industry publications in robotics and intelligent systems. From 2019-2022 he was the CEO of Agtech startup company Agerris, where he led the manufacturing and commercialisation of on-farm robotic solutions to improve agricultural productivity and environmental sustainability.

He was the Director of Research and Innovation at the Australian Centre for Field Robotics from 2007-2018, where he led the strategic research and industry engagement program in the world's largest field robotics institute.

Emma Germano, Victorian Farmers Federation (VFF) President

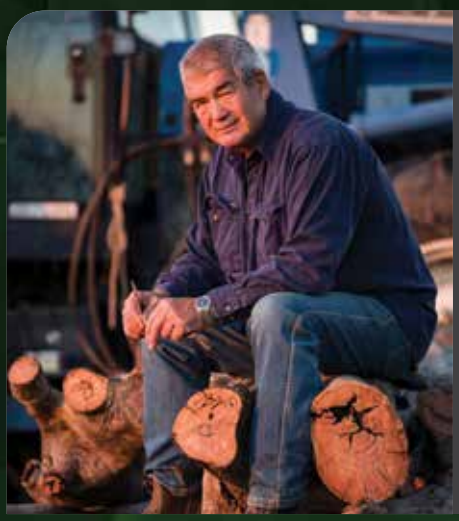
Emma Germano is Managing Director of her family's mixed farmed operation, I Love Farms. Growing fresh vegetables for local and export markets, as well as running sheep and beef cattle, I Love Farms has a firm focus on sustainability and strives to connect with Australian consumers. I Love Farms has a farm-gate store which assists in increasing the community's understanding of food and fibre production.

Emma is the current Victorian Farmers Federation President and Director of The Queen Victoria Market.

Emma is also a Nuffield Scholar (2014). Her research examined global export opportunities for Australian primary producers.

Ultimately, Emma strives to be a strong voice, representing Australian growers and ensuring a vibrant and sustainable future for agriculture in Australia.

GUEST SPEAKER PROFILES



John Harper, Rural Mental Health Advocate

John Harper, a wheat/sheep farmer, talks about what he has learnt, reflected on, and observed since he struggled with mental wellbeing and depression. John uses visual props, audience participation and anecdotes from his life in his presentations. Humour, use of everyday language and a laidback, matter of fact delivery helps John to deliver an effective positive message.

The knowledge he shares will allow us to identify and address wellbeing, mental illness and suicide prevention in ourselves, our families and in our mates. Thus equipped, he believes we all have the potential to enjoy our lives and a positive future.

Trevor Farmer, author and Topcatz founder

Having run a highly profitable Veterinary practice for 14 years in North Queensland, and realising that the stress of working 60 hour weeks to maintain the business was affecting his ability to see his children grow up, Trevor sold the practice, retired, and built a series of sales distribution networks that gave him both time with his family and a six figure income.

For more than 30 years, Trevor has studied the principles of 'Unbreakable Success' and introspective leadership through various avenues, and has successfully coached others - including world-champion athletes, start-up businesses and people with severe medical impairments - through his transformational mentoring.

The culmination of this work resulted in co-founding a transformational 2-day program 'The Unbreakable Success Matrix', helping people to reach their goals and organisations to address performance and culture in the workplace.

Brett Fifield, Chief Executive Officer, Hort Innovation

Brett Fifield joined Hort Innovation as CEO in 2022. He believes Hort Innovation has a firm responsibility to deliver real impact for growers and those across the supply chain.

Prior to joining Hort Innovation, Brett was the Deputy Director General, Infrastructure, Investment and Business Development, and member of the Executive Leadership Team, at the NSW Department of Primary Industries in Orange.

Brett has more than 20 years' experience in agriculture including 10 years in senior executive roles working across agriculture, biosecurity, food safety, fisheries, policy and cabinet, business performance, communications, and engagement. He also grew up on a mixed farm near Wagga Wagga NSW and spent the early part of his career as a country journalist.

Belinda Van Schaik, Marketing Manager, Hort Innovation

Belinda Van Schaik is the Marketing Manager at Hort Innovation responsible for delivery of the Australian Bananas marketing program.

Having started at Hort Innovation in 2020, Belinda specialises in integrated marketing, data-driven insights and product innovation.

Before joining Hort Innovation, she worked across a range of fast moving consumer goods companies including Lion, responsible for brands such as Berri fruit juice, Yoplait yoghurt and Dare Iced Coffee. Belinda's experience spans cross functionally into Sales with a strong focus on collaboration and commercial acumen, as National Account Manager for Aldi and later Woolworths at Tassal Salmon.

Belinda is passionate about delivering results orientated, consumer insight driven marketing campaigns that drive increased demand for Australian horticulture.

Belinda holds a Bachelor of Commerce, with majors in Management and Marketing.

SEVENTH DETECTION OF PANAMA TR4 IN THE TULLY VALLEY

In early March, a new case of Panama disease tropical race 4 (Panama TR4) was confirmed on a commercial banana farm in close proximity to existing infested properties in the Tully Valley, Far North Queensland. This is the first plant on the property to return a positive result for Panama TR4.

The Panama TR4 Program has issued a regulatory notice on the property and is working closely with the property owners to limit spread of the disease and protect the broader banana industry.

Panama TR4 cannot be eradicated and long-term management is required.

Everyone needs to be vigilant for signs of Panama TR4 and report suspect plants to Biosecurity Queensland on 13 25 23.

- Check banana plants regularly for signs of Panama TR4
- Report suspect plants to Biosecurity Queensland on 13 25 23
- Protect your property at the farm gate with effective on-farm biosecurity
- Come clean and leave clean.

Strong biosecurity measures with community support are key to containing the disease and minimising spread.

For further information, head to panamatr4protect.com.au

IF YOU ARE A BANANA GROWER, HERE'S WHAT YOU NEED TO KNOW

Panama TR4 is unpredictable, easily spread and is here to stay. It's best to be prepared.

If you are a banana grower, protect your farm from Panama TR4 with simple measures including:

- Use clean planting material from a reliable source such as QBAN (Quality Approved Banana Nursery) scheme facilities
- Fence or establish natural barriers that restrict people and machinery movement onto the property
- Have a hose and spray tank filled with a disinfectant solution that is effective against Panama TR4
- Shut gates to limit unnecessary access
- Put up biosecurity signs that clearly state 'no unauthorised access' and a phone number to call on entry
- Provide spare boots for people to wear when they enter your farm
- Always report sick plants to 13 25 23.

For inspiration to get your on-farm biosecurity started, head to betterbananas.com.au
You can also find more information at panamatr4protect.com.au

THERE'S ONLY ONE PLACE TO GO FOR INFORMATION ABOUT PANAMA TR4

Wanting to know more about Panama TR4, well panamatr4protect.com.au is a one-shop stop.

There is an extensive amount of information on this site, as the Department of Agriculture and Fisheries alongside ABGC has been building the site over the last few years.

Many of the current Departmental pages about Panama TR4 will be unavailable by 30 June, so get familiar with panamatr4protect.com.au whether you are a grower, service provider, farm worker or community member.

Everyone has a role to play in protecting our banana industry from Panama TR4.

Advanced symptoms, whole leaves turning yellow & starting to die off

VALE PASQUALE 'PAT' LAMANNA

10.06.32 – 10.02.23

Pasquale 'Pat' LaManna, the founder of LaManna Bananas, passed away in February.

After arriving in Australia as a 16-year-old, with little education and no English, he went on to establish the successful and well-known wholesale business. LaManna Bananas evolved into the banana category of Premier Fresh Australia.

Outside of his incredible legacy in fresh produce, the entrepreneur and philanthropist was named Senior Australian of the Year in 2009. He gave back to others in countless ways, including through the Pat LaManna Cancer and Stroke Foundation.

Mr LaManna passed away with his family by his side.

On behalf of industry, the Australian Banana Growers' Council sends deepest condolences to the LaManna family.

Image used with permission from Mr LaManna's family / LaManna Melbourne.

MANAGING COMPLIANCE

As one of Australia's largest agricultural industries, the banana industry plays a vital role in the country's economy.

However, with great production comes great responsibility. Ensuring compliance with increasing regulation and requirements is crucial to maintaining the industry's reputation and profitability.

For Australia's banana industry, compliance management covers a range of areas, including food safety and quality, workplace health and safety, ethical employment, environmental regulation, biosecurity, and market access.

Food safety and quality are of utmost importance in the banana industry. One of the most significant food safety risks in the banana industry is the presence of chemical residues. Pesticides and other chemicals are commonly used to control pests and diseases in banana crops, but their use must be carefully monitored to prevent residues from exceeding maximum residue limits (MRLs). MRLs are the maximum levels of chemical residues that are permitted in food products, and they vary depending on the chemical and the type of food.

To ensure compliance with MRLs, banana growers must follow strict chemical application protocols and keep detailed records of their chemical use. They must also regularly test their produce to ensure that it meets food safety standards.

Biosecurity is another critical area of compliance management. To manage biosecurity risks, growers must implement strict on-farm biosecurity measures and comply with state and federal biosecurity regulations. Keeping good records of planting material, equipment and vehicle movement, visitors to the property and more will greatly assist response measures in the event of a biosecurity incident. Records can also be used to support eligible claims for statutory compensation in the event of damage or loss arising from regulatory action.

Market access brings a range of standards and regulations, including phytosanitary requirements, labelling requirements, and product specifications. Failure to meet market access requirements can result in the loss of market access.

You should also be aware of your requirements under the Queensland reef protection regulations and the requirements for banana growers in reef catchments. Growers will need to comply with standard conditions of the Agricultural Environmentally Relevant Activity standard for banana cultivation, including record keeping and supporting documentation (such as invoices or receipts).

The regulations listed in this article are not exhaustive and more may apply to your farming enterprise, activities or property. Regardless, the importance of good record keeping practices cannot be understated. Not only will it make the preparation for compliance and certification audits easier, but they will support you in the event of an incident, accident or incursion. Many farms are utlising farm management software or digital record keeping platforms, such as Spades, to manage and demonstrate their compliance. Spades has been developed with the help of banana farmers and can be used for all regulations and standards (Freshcare, HARPS, Ethical Employment, Biosecurity, WHS, Reef Regulations, ICA and more), as well as custom forms and checklists needed for your farm's management. If you would like to learn more about digitalising your compliance, or are looking for guidance navigating through legislation and regulation, please contact Jennifer McKee on 0422051233 or jennifer@spadesonline.com.au.

TOP TIPS FOR REVISITING YOUR ON-FARM BIOSECURITY

By Tegan Cavallaro (Kukulies), Department of Agriculture & Fisheries

How long has it been since you have made the time to plan or review your on-farm biosecurity practices? With so many things to do on a day-to-day basis, making the time can be difficult. Going back to basics with on-farm biosecurity, we look at some of the key questions asked by growers.

Remember: there is no one-size-fits-all for on-farm biosecurity. Tackle your on-farm biosecurity one step at a time. Start with something, and if you need to, change or modify it as you can.

How do I start putting on-farm biosecurity practices in place?

Think about how Panama disease spreads. It spreads in SOIL, WATER and PLANT material. With this in mind think about all the risks and movements on and off your farm.

Then grab an aerial map of your farm and start to draw or mark these to visualise the risk pathways for your property. Many of these movements will be around your packing shed, so it's also good to have a close-up aerial map or drawing of your shed and access area.

Once you have the risks and movements all mapped out, it will be easier to think about zoning your farm and what on-farm biosecurity you can put in place to manage these risks.

How do I 'zone' my farm?

Think of your farm as an airport and you want to section it into 2-3 zones. To determine where zones should start and end, consider the risk pathways you just identified and also the key areas you and your staff access. For example, where do your staff have smoko and where are your toilets located? At the edge of each of the zones is where you implement on-farm biosecurity practices to move between zones. If you think about an airport, changing shoes and walking through a footbath is equivalent to going through the x-ray scanner before you get to the departures/arrivals area.

But isn't it expensive to implement on-farm biosecurity practices?

There are simple and cost effective on-farm biosecurity practices that you can put in place to protect your farm. Since there is no one-size-fits-all when it comes to on-farm biosecurity, costs will be different for each farm layout, situation and risks.

There are risks to my farm that I can't control, what should I do?

There are risks like flooding and animal movement that you may not be able to control. But this might not be the way that the disease enters your farm. Put things in place to manage the risks that you can control. Doing something is better than doing nothing at all. Implementing some of the cost-effective practices like changing shoes and zoning can reduce your risk.

Panama disease can be moved in plant material (e.g. bits and suckers). Also consider the machinery involved in working up new paddocks if they have come from outside your farm.

1000L pod converted into a footbath located at the entrance to the shed to walk through after changing shoes.

1000L shuttle of disinfectant located at the entrace to the driveway to the shed for 'clean' vehicles that need to access the shed on the designated driveway.

Brick wall barrier to complement a footwear exchange. Limits accidental movements and great for when it comes time to hose out the shed.

Where do I go for more info?

Check out the www.betterbananas.com.au for photo galleries of on-farm biosecurity practices FNQ growers have implemented for ideas that may work on your farm. You will also find a link to the on-farm biosecurity BMP. The banana extension team is available to come out and have a chat about what on-farm biosecurity practices to consider for your farm.

Contact Tegan Cavallaro (Kukulies) – 07 4220 4152.

This information has been compiled as part of the National Banana Development and Extension Program (BA19004). This project has been funded by Hort Innovation, using the banana research and development levy, co-investment from the Department of Agriculture and Fisheries and contributions from the Australian Government.
Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.

SOIL MICROBIAL INOCULANTS AND SUSTAINABLE AGRICULTURE

By Tony Pattison, Senior-Principal Nematologist, Queensland Department of Agriculture and Fisheries

Farmers have access to 265 different biological products in Australia.

Biological products aim to protect crops and retain production and are seen as 'environmentally friendly' alternatives to chemical fertilisers and pesticides. However, the efficacy of many biological products still needs to be improved.

The global biological agricultural input market was valued at US$1.57 billion in 2018, with its application increasing, making it one of the fastest-growing industries. It is common for individual farmers to spend $600/ha annually on biological products.

What are biological products?

Biological products are biofertilisers, biostimulants and microbial inoculants (or bioinoculants).

- Biofertilisers tend to increase soil nutrition, particularly nitrogen and phosphorus, either by containing nitrogen, increasing organisms involved in nitrogen fixation or making nitrogen and phosphorus more available.
- Biostimulants enhance overall plant growth by increasing root growth or stimulating soil microbial activity and water-holding capacity, thereby enhancing plant tolerance and resistance to abiotic stresses.
- Microbial inoculants are bacteria and fungi introduced to perform a specific function, such as protecting plants from pests and diseases, stimulating plant growth, or helping with nutrient availability. Nearly half of the 265 biological products available to farmers are microbial inoculants, with many manufacturers not specifying the organism's activity.

What to do before using microbial inoculants

1. Review the claims placed on the product.
   - How realistic are the claims being made by the manufacturer, and can they be independently verified?
2. Consider the product's quality and the manufacturer's reputation.
   - Is the product likely to contain the organisms in the quantity specified, and are the organisms likely to survive storage, shipment and application methods?
3. Consider the farm's soil environment.
   - Are soil conditions likely to support the introduction of a new organism?
   - For example, some microbial products are selected from environments utterly different to the environment they are applying to. In general, conditions that favour crop growth are also suitable for microbial inoculants. That is neutral pH, adequate moisture, adequate organic carbon, good soil nutrient status and low salinity all favour microbial inoculants' establishment, function, and persistence.

Methods

A decision aid has been developed with six questions to answer (Table 1), to help determine the likelihood microbial inoculant products will benefit production systems.

This table will provide a score and determine the level of risk to take around the product and the response rate of using microbial inoculant products.

Table 1: Decision considerations of the key factors on the likelihood of crop response to a soil microbial inoculant

Considerations	Response to consideration	Score*	Answer
Is there a likelihood of a response from the microbial inoculant?	Yes, worked previously	10	
	Unsure	5	
	No, failed previously	0	
Does the product claim to address a production problem on your farm?	Yes, the product claims to address my problem	10	
	I do not know if the product addresses a problem on farm	3	
	No, the product is not addressing a problem on my farm	0	
Can the manufacturer's claims be independently verified?	Yes, there is independent information available from a reliable source	10	
	There are good reports from other farmers	4	
	No, there is no supporting independent information	0	
What is the likely quality of the product?	High quality product from a reputable manufacturer and supplier	10	
	Manufacturer is unknown but supplier is reputable	5	
	Manufacturer is unknown and conditions of supply are questionable	0	
Is the existing microflora likely to inhibit the establishment of the microbial inoculant?	No, low number of low functioning soil organisms	10	
	Unsure of my soil microbial condition	4	
	Yes, high number of high function soil organisms	0	
Is the soil environment likely to support the establishment of the microbial inoculant?	Yes, soil moisture, organic matter, pH, and temperature are optimal for introduced microbes	10	
	Soil is in good condition, but some soil properties are not optimal	5	
	No, soil moisture, organic matter, pH, and temperature are sub-optimal for introduced microbes	0	
Total	**Maximum**	**60**	

** Suggested scores. Scores may be modified to fit individual situations*

Likelihood of outcomes from your scores	Your appetite for risk		
	High	Moderate	Low
High likelihood of seeing a response by applying the biological inoculant	>40	>46	>51
Moderate likelihood of seeing a response by applying the biological inoculant	25-39	30-45	45-50
Low likelihood of seeing a response by applying the biological inoculant	<24	<29	<44

This work is based on the concepts developed by O'Callaghan et al (2022) Soil microbial inoculants for sustainable agriculture: Limitations and opportunities. Soil Use and Management 38, 1340– 1369. https://doi.org/10.1111/sum.12811 and used the Decision Wizard, decision matrix concept as developed by Cam Nicholson, Nicon Rural Services, based on an idea from Barry Mudge https://decisionwizard.sfs.org.au/. This publication has been funded by the Australian Government through the Australian Centre for International Agricultural Research. The views expressed in this publication are the author's alone and are not necessarily the views of the Australian Government.

Challenges

New research techniques, such as DNA sequencing technology of entire soil and plant microbial communities, can help develop an understanding of how soil microbes interact with crops, like papaya, and with other soil organisms, such as Phytophthora. This information can help improve the effectiveness of microbial inoculants, knowing which products are likely to be most beneficial under different conditions.

One of the significant challenges facing microbial inoculant decision aid is the inconsistency in response. Adverse environmental conditions, inconsistencies in manufacturing and misleading claims can all lead to a disappointing response from the application of microbial inoculants.

Knowing when a microbial product is likely to work and when it isn't is an important part of moving microbial inoculants beyond the 'snake oil' reputation. Understanding how soil organisms survive in soil in different environmental conditions may go part of the way to addressing this problem.

For more information, please contact Tony Pattison, Senior-Principal Nematologist, Soil Health Team Leader Department of Agriculture and Fisheries at: Tony.Pattison@daf.qld.gov.au

FIGHTING BACK AGAINST PANAMA DISEASE IN THE PHILIPPINES

By Tony Pattison, Department of Agriculture and Fisheries

Smallholder banana growers in the Philippines have been fighting back against Panama disease Tropical Race 4 (TR4), which is causing devastation in Cavendish banana production throughout Southeast Asia.

The Philippines exports 1.8 million tonnes, ranking second in the world in terms bananas exports. The industry is worth around US$1.6 billion annually, produced from approximately 85,000 hectares. TR4 has infected around 20% of the Cavendish banana production area. Some reports suggest as much as 30,000 hectares of Cavendish plantations are infected.

Smallholder banana growers in the Philippines are the most vulnerable to losing their livelihoods to Panama disease. Many of them supplied the export Cavendish market before being wiped out when the disease entered their properties. Resistant cultivars like the Formosana or GCTCV 218 were not suitable disease management strategies for the smallholder growers due to inaccessibility of planting material, longer crop cycles, floating rhizomes, and downgrading of the fruit in the marketplace.

Using an integrated disease management system, smallholder banana growers are making a comeback and supplying the substantial Chinese banana market with Grand Naine or Williams Cavendish bananas. Successful growers like Mr Arnold Dela Cerna have been growing corn on infected land for at least three crops to reduce disease inoculum. He then replants the land with tissue culture banana plantlets and ensures optimal fertiliser applications at planting. Mr Dela Cerna also credits his success to regular field monitoring, which enables early identification and management of disease, use of a Trichoderma biocontrol and his use of clean tools and equipment.

Additionally, there has been a growing recognition of the importance of social vulnerability in addressing the disease threat. Adaptation to external threats like TR4 requires a bottom-up, case study approach, with greater focus on creating grower resilience. The vulnerability of banana growers to TR4 is based on exposure (proximity and impact of TR4), sensitivity (ability to respond) to a threat, and on grower's adaptive capacity to respond successfully to the threat, including behaviour, technology, and resource adjustments.

In conclusion, smallholder banana growers in the Philippines have been fighting back against Panama disease TR4 through an integrated disease management system, using regular field monitoring, the use of clean tools and equipment, access to clean planting material, biocontrols and fertilisers. The success of these growers highlights the importance of addressing social vulnerability and promoting a bottom-up perspective using a case study approach to disease management. By doing so, smallholder banana growers can continue to supply markets and maintain their livelihoods.

Three crops of corn are grown in rotation with banana to help reduce Panama disease inoculum in the soil before replanting tissue culture plants.

Mr Arnold Dela Cerna describes the production system on his farm of less than 10 ha and how he has been overcoming Panama disease TR4 using an integrated disease management system.

This publication has been funded by the Australian Government through the Australian Centre for International Agricultural Research (ACIAR) with addition support from the Queensland Government. The views expressed in this publication are the author's alone and are not necessarily the views of the Australian Government.

DOES PLANT DESTRUCTION SLOW THE SPREAD OF PANAMA DISEASE?

By Tony Pattison, Senior-Principal Horticulturalist, Queensland Department of Agriculture and Fisheries

The North Queensland banana industry has been dealing with Panama disease Tropical Race 4 (TR4) since 2015.

Biosecurity has been integral to slow the spread of the disease. This includes restricting farm access, using hygiene practice, like washing and disinfesting vehicles entering the farm, and making sure people have clean footwear.

Another component for those farms unlucky enough to have TR4, has been the destruction of symptomatic plants (Fig 1). This is an ongoing battle to find infected plants.

Symptomatic plants are tested and if TR4 is confirmed they are destroyed. The destruction follows a protocol where the plants are injected with glyphosate, cut down and the plant material placed in bags with urea. All plants within an area up to 10m from the infected plant are also destroyed. The whole area is treated with a high dose of urea and covered with plastic, and a fence is erected to prevent entry in and out of the area (Fig 2).

The rapid destruction of infected plants has helped slow the spread of the fungus on the farms with TR4. The destruction of plants reduces the amount of inoculum the fungus can produce to infect other plants.

Over the past 12-months we have been monitoring the destruction sites at regular intervals to determine their effectiveness at reducing TR4 (Fig 3). When the plants were first identified with TR4, it was possible to detect the fungus in the soil on either side of the infected plant. The detection of the fungus in the plants neighbouring the infected plant, makes it crucial to destroy nearby plants to slow the spread of the disease.

The Fusarium fungus that causes Panama disease could not be found in the soil of plants further away from the infected plant, on the outside of the destruction zone. This shows that isolating the infected plants when they first show symptoms of Panama disease can help to slow the disease's spread.

Another crucial factor is the timing of the destruction. Our research is showing that the earlier you can destroy an infected plant the more effective it is at reducing the disease spread. Where destruction was delayed, the amount of the fungus in the soil kept increasing. At a site where destruction was delayed it was possible to detect the fungus below other plants further away from the infected plant, but still within the destruction zone.

Our research is continuing to determine the impacts that high amounts of urea have on the survival of the Fusarium fungus.

The research has shown that the rapid identification, isolation and destruction of infected plants can slow the spread of the disease. Delays allow the fungus to increase in the soil, which increases the spread of the disease.

Fig 1. A recently identified banana plant showing typical external symptoms of Panama disease, such as leaf yellowing.

Fig 2. A Panama TR4 destruction site, where all plants have been destroyed, the area treated with urea and covered with black plastic. Fencing is used to prevent movement into and out of the destruction zone.

Fig 3. Hazel Gaza takes all precautions when collecting samples to determine the amount of TR4 remaining in the soil after infected banana plants have been destroyed.

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MATURITY BRONZING - STRETCHING THE LIMITS ON FRUIT QUALITY

By Ingrid Jenkins and Jeff Daniells, Department of Agriculture and Fisheries

This year several growers have reported a higher incidence of fruit affected by maturity bronzing.

In response to grower enquiries regarding what causes maturity bronzing and how to reduce its impact, it seems timely to give an overview of past research and recap on the best management options available to growers.

Maturity bronzing has been a long-term problem for Australian commercial banana producers, with research into the disorder dating back to the early 1970s in Australia. Much of the research was undertaken in Far North Queensland over 30 years ago by Jeff Daniells and other state government researchers at the time and has provided some interesting insights into what has proved to be a complex disorder.

What we know:

Maturity bronzing is not caused by a disease or insect but is a more complex physiological disorder due to certain environmental conditions.

The disorder blemishes the peel of banana fruit close to maturity and appears as bronze-red/brown streaks or blotches usually on the outer curved surface of the fruit and is more prominent in the top hands (Figure 1). The blemish can first appear when a bunch is at three-quarters to full maturity stage and worsens as the fruit continues to fill. The damage is to the peel only and does not affect the yield and eating quality of the fruit. In severe cases, it can cause corking/cracking of the peel. Its appearance makes the fruit unmarketable and can account for significant losses for growers.

The disorder is associated with periods of heavy rainfall, high humidity and overcast weather conditions leading up to harvest and is therefore worse at certain times of the year. In Far North Queensland, the disorder is usually more prevalent in the latter half of the wet season from March to June. Water stress at the time of bunch emergence has been shown to increase the severity of maturity bronzing.

Research by Dr Michelle Williams from the University of Sydney has shown that the high growth rates in the wet season lead to the stretching of the epidermis (outer surface of fruit peel) which exceeds its elastic limit, leading to cracks and cell disruption in the peel surface. Disruption of the cells causes the release of the enzyme called polyphenol oxidase. Oxidation of this enzyme leads to the production of melanin, which results in the bronze-red/brown markings within the peel. It is the same process in many fruits; for instance, when you cut open an apple and get brown discolouration of the cut surface.

Dr Williams' research also found low levels of calcium in the fruit peel and low cell number in the peel epidermis have been linked to the disorder. It also found low calcium levels present in fruit suffering from water stress near bunch emergence. This stressed fruit had more severe maturity bronzing. Subsequent trials looking to increase calcium in the fruit peel to lessen maturity bronzing were unsuccessful.

There have been several trials looking into the effects of different agronomic practices on the disorder.

Trials looking into the effect of bunch covering found that normal bunch covering does not worsen the disorder but, the disorder is made worse by fruit from sealed bunch covers.

Both bunch trimming and de-belling (removal of the male bud) increase the severity of the disorder.

It is possible to reduce the severity of the disorder by reducing the leaf number to seven or less from bunch emergence. However, this is counterproductive as bunch weight and fruit green life are reduced at the same time.

To the untrained eye, it can sometimes be tricky to distinguish damage caused by maturity bronzing, from the damage caused by banana rust thrips (Figure 2). When both occur together it can be potentially confusing. Maturity bronzing is more common on the exposed outer curve of the fruit and is not as evident where fingers are touching. It also tends to be worse on wing fingers and on the top hands of full bunches. In some cases, maturity bronzing may also have a more defined margin compared to the damage caused by banana rust thrips.

Figure 1 Photo of maturity bronzing damage seen on top and fifth hands of the bunch.

Figure 2 Photo of severe banana rust thrips damage on all hands throughout the bunch.

To view these images electronically visit the Better Bananas website.

How to manage and reduce the impact of maturity bronzing

- Maintain good soil moisture levels, particularly in the period within 2 weeks of bunch emergence. The critical period is October to January, special attention should be paid to irrigation during this time. A high moisture level should be maintained during bunch emergence.
- Maintain even growth in the plant and the bunch, particularly from 2-3 weeks prior to bunch emergence up to harvest.
- Depending on market specifications, bunches can be harvested early before the disorder becomes severe. Blemished fruit losses are minimised but there is a trade-off with lower bunch weight. For every week that a bunch is harvested earlier, 7–10 % in bunch weight is lost.
- Improve drainage and light within your paddock to ensure bunches don't take so long to reach a harvestable grade. Waterlogging can be minimised by mounding rows and the construction of deep drains on alluvial soils and light penetration can be improved by planting at moderate densities.
- Ensure bunch covers are not too long and not prone to sealing at the bottom of the bunch. If this occurs maturity bronzing will worsen.

If you would like more detailed information on past research into maturity bronzing, please contact Ingrid Jenkins 0497 801 980 or ingrid.jenkins@daf.qld.gov.au.

This information has been compiled as part of the National Banana Development and Extension Program (BA19004). This project has been funded by Hort Innovation, using the banana research and development levy, co-investment from the Department of Agriculture and Fisheries and contributions from the Australian Government.
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RESULTS ARE IN: ON-FARM BIOSECURITY REMAINS A KEY FOCUS

SURVEILLANCE AND GROWER EDUCATION CONTINUES IN QLD AND NSW

Data gathered by the Australian Banana Growers' Council (ABGC) shows biosecurity measures on banana farms in Far North Queensland are being maintained and improved over time.

In addition, Banana Bunchy Top Virus control efforts being delivered in Southeast Queensland and Northern New South Wales, show measures to support prevention and early detection continue to be a critical step in supporting a sustainable future for Australia's banana industry.

Biosecurity data shows positive trend

As part of the Multi-pest surveillance and grower education to manage banana pests and diseases project (BA21003), led by the ABGC and funded by Hort Innovation, on-farm biosecurity assessments and educational visits are conducted twice a year in North Queensland – and the latest results are in.

ABGC Plant Protection Officer Carl Rickson, who conducts the visits, said "overall we are seeing either maintenance or improvement in on-farm biosecurity practices in the north over time."

"The visits can assist in a number of ways. Industry is provided with a snapshot of where things are at and we can share the latest information on on-farm biosecurity," he added.

"The visits are a good reminder that re-enforce on-farm biosecurity as part of a grower's normal routine. As with anything new there is always room for improvement, and supporting that will be our key focus moving forward."

ABGC CEO Leanne Erakovic meets with Carl Rickson for a briefing on on-farm biosecurity assessments, leaf spot and other disease monitoring results.

On-farm biosecurity assessments are conducted across a number of criteria, but a snapshot of some key criteria are included below.

Criteria	Percent of growers implementing	Percent of total hectares implemented across
Biosecurity signage to inform visitors of requirements	89%	87%
Footbath / boot exchange for persons entering the production area	40%	70%
Carpark to control and limit vehicle movement	46%	77%
Vehicle decontamination for vehicles entering the production area	46%	74%
Fenced to limit unauthorised entry	36%	56%

Also of interest is application of on-farm biosecurity measures across growing areas. So how does your growing region rate in implementation of each measure against other areas, and what growing areas can be better protected with improvement?

The table below indicates the **percentage of growers implementing the measure in an area**, and the percentage of **total growing area implemented in for each area.**

Criteria	INNISFAIL AND DISTRICTS	GREATER TULLY	FAR NORTH	TABLELANDS
Biosecurity signage to inform visitors of requirements	89% / 96% ha	88% / 99% ha	83% / 99.8% ha	93% / 98%
Footbath / boot exchange for persons entering the production area	29% / 57% ha	59% / 88% ha	50% / 96% ha	73% / 71%
Carpark to control and limit vehicle movement	33% / 64%	63% / 87% ha	58% / 96% ha	87% / 92%
Vehicle decontamination for vehicles entering the production area	34% / 59% ha	61% / 82% ha	58% / 97% ha	90% / 96%
Fenced to limit unauthorised entry	24% / 32% ha	43% / 71% ha	75% / 99.8% ha	77% / 83%

For more information on implementing biosecurity:

- **A guide to biosecurity basics, Page 23**
- **www.betterbananas.com.au** (including photo galleries and the biosecurity BMP)
- **www.abgc.org.au**

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ABGC FAREWELLS GRANT EAST AFTER 25 YEARS OF SERVICE

Most banana growers in Northern New South Wales and South East Queensland would have had a Bunchy Top visit from Grant East over the many years he has spent as an Inspector and Team Leader in the Bunchy Top control program.

At the end of 2022, Grant retired from service in Bunchy Top Control for ABGC. ABGC and all of his team mates thank Grant for his efforts and wish him the best for his retirement.

USING SILICON FERTILISERS TO IMPROVE LADY FINGER TOLERANCE TO PANAMA DISEASE RACE 1

INNOVATION TRIAL CONTINUES

Sub-tropical Industry Development officer Steven Norman is testing the efficacy of silicon amendments to increase the tolerance of Lady Finger to Fusarium oxysporum (Foc) Race 1.

The trial, located in the Tweed Valley, was first planted in December 2021. A complete cycle of planned Silicon treatment application was carried out in collaboration with the grower, before a new round of treatments began in November last year.

As most NSW growers agree, 2022 was challenging due to extended wet and cold periods. A combination of the sub-optimal growing conditions and isolated severe weather events significantly slowed the growth of the bananas within the trial. The slowed growth reduced the infection rate, resulting in a lag of external symptoms. Our ability to record adequate data for early interpretation has been delayed. With the hotter recent months and growth rates increasing, our ability to make accurate observations has improved.

Samples were taken in late September of suspect disease in plant tissue across the trial. It has been confirmed that Fusarium oxysporum (Foc) Race 1 (Panama disease Race 1) has infected the plants uniformly within the trial. This is good news for the trial efficacy. Uniform infection is paramount to measuring the silicon application's effectiveness and its potential to improve tolerance to Panama Race 1.

Until March 2023, no external symptoms of Fusarium wilt were present, including the non-treated treatments (no silicon applied) within the trial.

Why is this trial necessary?

Panama Race 1 has been present in the north of NSW, from the Tweed region south to Coffs Harbour, for several decades and has had a devastating impact on growers of susceptible varieties in these areas.

Considered endemic in NSW, Panama Race 1 is widely distributed across the region and has made it extremely difficult for Lady Finger growers to continue to produce this variety. As there are no control options for Panama disease, the only alternative is to switch to growing those varieties that are resistant.

The trial is a joint initiative between the NSW Department of Primary Industries and Southern Cross University, the University of Queensland, Agripower Australia, and the Australian Banana Growers' Council.

What type are the treatments?

Treatments		Details
	1	Untreated
	2	Granule (100g)
	3	Granule (150g)
	4	Powder (100g)
	5	Liquid (7.5ml @ 2% dilution)
	6	Liquid (10ml @ 2% dilution)
	7	Granule (100g) + Liquid (10ml @ 1% dilution)
	8	Powder (100g) + Liquid (10ml @ 1% dilution)

The trial site in February 2023.

The site is located in the Tweed Valley, NSW.

Corm tissue sample.
Image: Steven Norman

Suspect banana pseudostem.
Image: Steven Norman

For more research updates, including developments to this trial, visit www.betterbananas.com.au

KEEP YOUR EYES PEELED FOR LEAF SPOT

Leaf spot is never far from a grower's thoughts, but with a reported increase in the Far North Queensland production area, it's timely to revisit the signs and solutions.

'Leaf spot' is the term which commonly refers to Leaf Speckle and Yellow Sigatoka. Spores are spread easily through the air.

Plant Health Officer, Carl Rickson, said if leaf spot is not controlled, it can have serious implications for banana production.

"Growers are facing a lot of challenges right now and finding time to keep on top of these things can be tricky," he said.

"Measures including de-leafing and rotating the types of fungicides you're using can at least help keep leaf spot at bay.

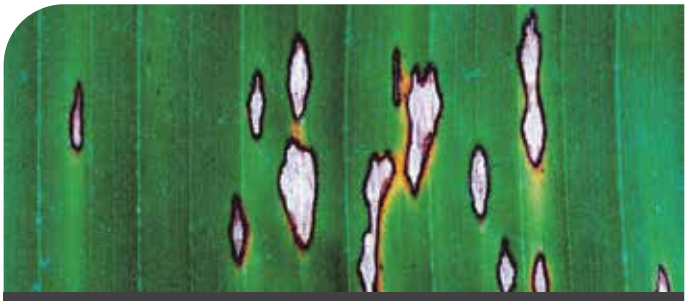
"Growers should get on top of their de-leafing now or may suffer serious problems in the spring and summer."

The banana industry guideline recommends that growers keep leaf spot levels on the banana plant below 5 per cent of total leaf area to meet general biosecurity obligations.

- delays in filling bunches
- reduced 'green life' in fruit causing mixed ripening
- increased costs for de-leafing and spraying
- difficulty in detecting exotic leaf diseases if they arrive in your area
- restricted market access.

Images are provided by Better Bananas. You can view all stages of leaf spot and more resources at www.betterbananas.com.au.

First stages of leaf spot (speck/dot): Yellowish green specks less than 1mm long.



Mature spot: The sunken centre of spots turns grey and is surrounded by a dark brown to black border, sometimes with a yellow halo. Ascospores are produced within the grey central area of the mature spots.

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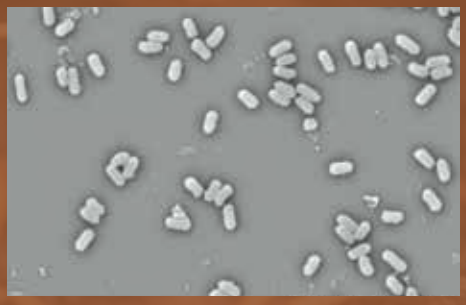
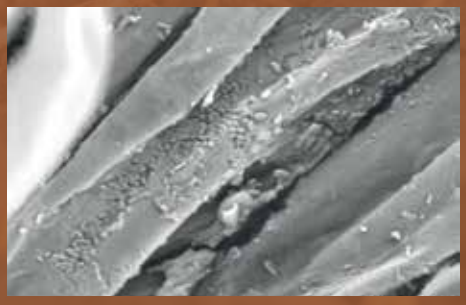


Fast acting spores rapidly colonise.



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SWAPPING FIGURES FOR FARMING

Eubenangee grower Binu Varughese with some of his horn plantains.

By Lea Coghlan

Banana farming is a world away from accountancy – just ask Eubenangee grower Binu Varughese.

When he purchased a 300 acre farm at Eubenangee, near Innisfail, in 2014 he was as green as they come.

After paving a successful career as an accountant across three countries, Binu sought a change, swapping figures for farming. He has since carved out a successful life on the land, albeit with a massive learning curve.

"I was searching for something different and visited Far North Queensland where I first thought about mango or tropical fruit but agents said they weren't profitable because they were a once-a-year crop," Binu explained.

"Bananas were suggested as they are all year round."

After a whirlwind tour of the region, Binu settled on Eubenangee, north of Innisfail, where he grows some 120 acres of bananas with a business partner as Ausgrow Farm.

The bulk of the plantation, some 80 acres, is under Cavendish but it is the remaining 40 acres that has Binu particularly excited.

Binu has diversified into Horn Plantain bananas. Popular among the southeast Asian, African, South American and Pacific Islander cultures, Binu said the Horn Plantain banana is a multi-purpose banana.

"We started growing them about five years ago, initially with five acres as a trial and we have slowly expanded to 40 acres," Binu said.

"There is no one else in Australia growing the Horn plantain commercially like us."

Binu sends the horn bananas direct to agents in Perth, Adelaide, Brisbane, Melbourne and Sydney, and says demand is good and awareness of fresh Horn banana availability in Australia is slowly increasing and in need of a stronger marketing effort.

"It can be eaten like a banana or used for cooking banana fritters and banana chips."

There are large differences between the Cavendish and Horn Plantain. The Horn Plantain takes between 11 and 12 months to produce fruit, needs more fertiliser and more trace elements and is susceptible to wind damage as it a tall tree.

Despite the increased growing costs, Binu said the diversification into Horn Plantain bananas has been successful, so much so he is eyeing off further expansion and value-added opportunities.

MODERN MONITORING TECHNOLOGIES FOR IMPROVING SUPPLY CHAIN PERFORMANCE

By John Archer, Minh Nguyen, Andrew Macnish and Shanara Veivers, Queensland Department of Agriculture and Fisheries

Bananas are a favourite fruit of Australians with over 5 million consumed a day.[1]

Given that 94% of the national crop is produced in Far North Queensland, a lot of bananas travel the length and breadth of the country.[2] Transport temperatures above and below the recommended 13-14°C and extended storage duration can negatively impact fruit quality and increase the risk of consignment rejection. Peel colour development and expression of rots accelerates with elevated postharvest handling temperatures. Chilling injury is associated with low storage temperatures. Monitoring fruit temperatures from farm to retail is critical for identifying opportunities to improve practice towards delivering consistent product quality.

Real-time monitoring

Over the past 5 years, a new generation of real-time temperature and location monitoring dataloggers have entered the market, providing low-cost autonomous reporting. Gone are the days trying to retrieve manual download loggers from consignments; real-time monitoring technologies livestream data to dedicated apps and web portals. The loggers include sensors for recording air and pulp temperature, relative humidity and shock.

Real-time loggers use GPS, cellular and/or Wi-Fi to provide accurate tracking data. Some loggers have the capacity to send e-mail or SMS notifications and alerts should shipment conditions breach setpoints. These loggers can help pinpoint when and where consignment handling conditions deviate from best practice, establishing greater accountability along the supply chain. This can encourage growers and supply chain partners to work collaboratively to identify and manage potential risks of fruit quality loss and waste. Food waste is a very serious issue and impacts the entire world. By reducing food waste, financial and environmental impacts can be improved while energy and resources are conserved.

Figure 1. Bananas with a real-time logger.

A typical domestic shipment

As part of a research project that aims to improve supply chain performance and reduce banana quality loss and waste, we monitored 35 random consignments using real-time loggers. We observed fruit leaving north Queensland packing houses at 16-28°C in all monitored consignments, well above the recommended range. Road transport temperatures to Brisbane and Sydney varied between 12°C and 16°C. During consolidation at the markets before or after gas ripening, the temperature of 25% of monitored shipments dropped lower than 12°C for >24 hours. This was associated with the development of fruit chilling injury, resulting in economic loss and physical waste. Real-time loggers, costing less than $80 each, removed the mystery of where this happened in the supply chain and highlighted opportunities to prioritise corrective action.

Frank Sciacca from Pacific Coast Eco Bananas recently trialled multiple real-time monitoring technologies and said, "You are getting the information you want and real-time loggers are a very good tool that we need, if you're not collecting the information how do you know to improve?"

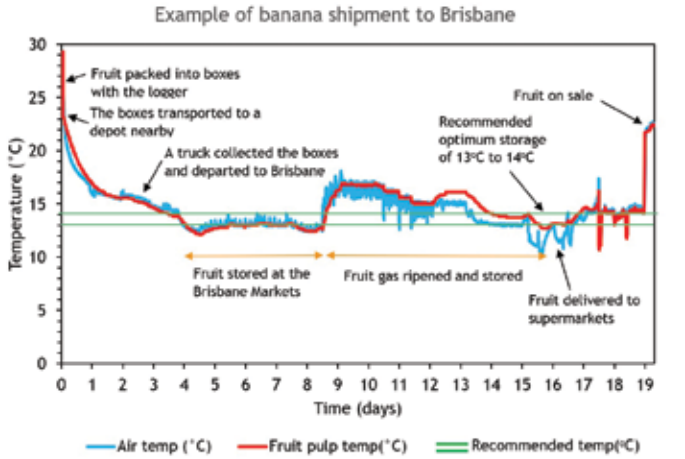

Figure 2. Example of monitored temperatures in a banana consignment from Innisfail to Brisbane.

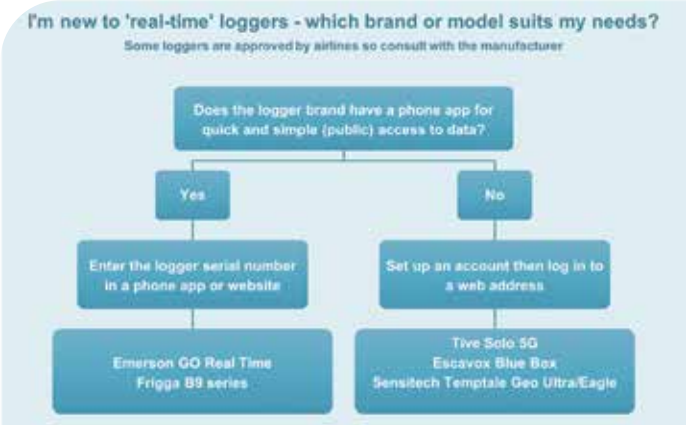

Figure 3. Example of monitored temperatures in a banana consignment from Innisfail to Brisbane.

For further information, contact John Archer from the DAF Supply Chain Innovation team on (07) 4241 8231, John.Archer@daf.qld.gov.au or see temperature monitoring technologies on https://www.daf.qld.gov.au/business-priorities/agriculture/plants/supply-chain-innovation

This work has been supported by the Fight Food Waste Cooperative Research Centre, whose activities are funded by the Australian Government's Cooperative Research Centre Program, plus co-investment from DAF and Pacific Coast Produce.

1 Hort Innovation Australia (2022). "Australian Horticulture Statistics Handbook" https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/grower-resources/mt21006-assets/australian-horticulture-statistics-handbook/

2 Hort Innovation Australia (2023). "Mind bending facts": Australian Bananas. https://australianbananas.com.au/Pages/all-about-bananas/mind-bending-facts

BMP MOVES FORWARD WITH FUNDING

Earlier this year, the Queensland Government announced they had committed $3.76 million to Banana Best Management Practice (BMP), allowing the program to continue until at least mid-2026.

The Banana BMP project, which began in 2018, is delivered by the Australian Banana Growers' Council (ABGC). It supports growers to self-assess their own practices, and where possible, make improvements to their farm management practices based on expert advice.

ABGC Chair Stephen Lowe said he was pleased the Queensland Government had made such a significant investment to support the State's banana growers.

"This will allow growers to continue to implement best management practice on their farms," he said.

"It is a practical example of the government backing growers to farm sustainably in the Wet Tropics and Cape York. Our growers are embracing practices that are critical for productivity and profitability, but also for improving water quality.

"We take our role as land stewards for the next generation very seriously, and this investment is further evidence of that."

In the previous phase of the project, more than 2,500 hectares of banana production saw improvements to farming practices. This represents more than 25 per cent of the total area under bananas in reef catchments.

"I know the very capable ABGC Extension Team wants to continue working with growers to help them consider improving the way they farm," ABGC CEO Leanne Erakovic said. "It doesn't matter if the grower is new to banana farming or has been doing it for 20 years, there is always a benefit to reviewing your practices, both for sustainability and for profitability.

"It's also pleasing to see that, as part of the latest round of funding, the government has provided $1.4 million for the Banana Best Practice Fund to help growers continue to build on this. We know it's been a tough few years, and this will go some way to supporting more on-farm improvements, as well as ensuring a strong future for Australian bananas and better water quality."

Not only is financial support available through BMPIII, but nutrient and sediment management workshops will continue to build grower capacity to better understand their own farms along with soil characteristics and nutrient requirements. These workshops are free to growers and will be held at the Wet Tropics Research Station in South Johnstone during April.

The Best Practice Team also helps growers:

- understand and comply with Reef Regulations,
- access and navigate the BMP checklist and BetterBunch record keeping app, and
- connect with specialists, advisors, and scientists in the banana growing space.

Growers interested in attending a workshop and/or finding out more about the Banana BMP project can contact the ABGC's Best Practice Team via bmp@abgc.org.au.

ABGC's Best Practice Team Amelia Foster, Kathryn Dryden, Phillip Spokes, and Molly Blake.

Growers attending Nutrient management workshops as part of the BMPII project.

AWARD PUTS SPOTLIGHT ON ENVIRONMENTAL STEWARDSHIP

At this year's Congress in Cairns, the Future Farming Award will be presented to a worthy grower for their outstanding environmental stewardship, an attribute of increasing importance to consumers and our industry.

The Award recognises a banana grower who runs a productive farming operation (big or small), whilst showing a desire to contribute to the long-term improvement of farm practices for the benefit of the environment and water quality. Importantly, the grower demonstrates commitment and innovation and has a willingness to share information with the industry.

Gavin Devaney was awarded the first Future Farming industry award at Congress in 2021.

"From applying for a grant for the innovative drain on our farm, to putting it in place, it has been a massive change for our business," Gavin said. "So much so we are now changing practices in areas of the farm we have never looked at before."

"Winning the award was a fantastic acknowledgement of changes that can be made for the better and for future generations to come."

The award acknowledged his efforts in converting a former cane paddock into a best practice banana farm with innovative runoff solutions. In doing so, he has significantly improved the farm's layout and reduced its environmental impacts, while also maintaining productivity and profitability. His enthusiasm to embrace new technologies and share information for the benefit of his farm and the broader farming community is evident through his participation in the Smart Farms project.

The Devaney family has always held and promoted a genuine commitment to environmentally friendly practices. More on Gavin's project can be found online at: https://youtu.be/Rbzsjh-fSbk.

A campaign to get the word out to growers inviting nominations for the 2023 Award was delivered via ABGC social media channels, the regular ebulletin, and some external publications throughout February and March.

The ABGC Board are deciding on the winner from a shortlist of nominations. The winner will receive a trophy along with nearly $2,000 worth of prizes including a family package on the Ocean Freedom Cruise to Upolu "Wonderwall" Reef + Cay plus two introductory dives, and a reimbursement of a Congress ticket.

"A Reef visit is a fitting prize since the work that they are doing contributes so significantly to the health of waterways flowing into the Great Barrier Reef," Michelle McKinlay, ABGC Industry Strategy Manager, said.

"We look forward to sharing the great stories of all nominees, so the whole industry can give them a pat on the back and be inspired from the ideas that are working for them on their best practice journey."

For information on the Award, or to find out more about banana best practice, contact bmp@abgc.org.au. The nominations received this year tell some outstanding stories of growers doing great things for the environment and for their farms. All growers are invited to come to Congress and be a part of the Award ceremony.

Winner of the first Future Farming Award Gavin Devaney celebrating with his mum, Sandra at the 2021 Banana Ball.

The Banana Best Management Practice Project (2023-2026) is funded through the Queensland Government's Queensland Reef Water Quality Program and delivered by the Australian Banana Growers' Council in partnership with growers.

FUND SUPPORTS GROWERS TO CONTINUE IMPROVING WATER QUALITY

Round 1 of the Banana Best Practice Fund kicked off at the beginning of March 2023, where growers were invited to apply for funding towards projects that improve the water quality flowing off-farm into waterways.

Under the Banana Best Management Practice (BMP) project, the Queensland Government has invested more than $1.4m over three years through the Best Practice Fund which offers support to growers in the Great Barrier Reef catchment to improve farm management practices. This is part of the total $3.7m investment to support best practice improvement in the banana industry.

"Good farm management enables growers to keep their nutrients and soils on the farm, which brings obvious benefits to productivity. It's a good thing that by doing this, they are also minimizing their impact on the health of our waterways," ABGC's Best Practice Coordinator, Amelia Foster, said.

She said, "The first round of the Banana Best Practice Fund closed on Wednesday 12 April which prioritised projects requiring the movement of soil. The timing of these projects was important to make sure that any works exposing soil are undertaken in the dry season and that ground cover has time to establish before the wet."

There will be further rounds of grants up to 2025, where growers can apply for half the cost of a sediment and/or nutrient management project, or up to $30,000.

Some possible projects for growers to apply for funding include:

- Sediment management such as a side-throw slasher, and farm planning including silt traps and contouring; and
- Improvements to nutrient management such as a directional spreader and fertigation.

Contact Australian Banana Growers' Council via bmp@abgc.org.au for information, or keep an eye on the Grower e-Bulletin and ABGC Facebook pages for announcements of future rounds.

ABGC's Kathryn Dryden and Amelia Foster visiting Josephine and Chris Borsato at their Innisfail farm to discuss best practice.

The Banana Best Management Practice project (2023-2026) is funded through the Queensland Government's Reef Water Quality Program and delivered by the Australian Banana Growers' Council in partnership with growers.

10 YEARS OF BMP

It's been 10 years since the banana industry adopted its very own Best Management Practice (BMP) Guideline, written by growers, for growers.

The BMP is a self-assessment that was developed in 2013, a voluntary checklist designed for growers to assess their own land management practices. This was a proactive approach to help growers lift the standard of practice across the industry and reduce the impact of environmental regulations should the ever be introduced by government.

As growers know, regulations have commenced, and they align well with the guidelines.

"By taking a proactive approach, the industry has been able to inform government in the development of the regulations so to influence realistic, achievable, and appropriate land management actions that growers are most likely able to adopt," said Michelle McKinlay, ABGC's Industry Strategy Manager.

Freshcare Environmental also aligns very closely with the BMP, which is very useful for accredited growers.

The BMP team will be celebrating with cake at Congress, along with highlighting some of the fantastic things growers are doing on their farms to improve practices. The Future Farming Award will also be announced at the Banana Ball, putting one particularly outstanding grower in the spotlight to share and celebrate their successes with the industry.

Keep an eye out in the next edition of Australian Bananas magazine for more on the story of Banana BMP and how far the industry has come.

The BMP written by growers, was facilitated by the Department of Agriculture and Fisheries and funded by Hort Innovation. The Banana Best Management Practice project (2023-2026) is funded through the Queensland Government's Reef Water Quality Program and delivered by the Australian Banana Growers' Council in partnership with growers.

One of the grower meetings developing the Banana BMP back in 2013.

RIGHT TIME FOR EARTHWORKS

The dry season is the right time of year to be doing earthworks such as cultivation, inter-row renovations, and road and drainage maintenance.

Efforts are being made by many growers to get this type of work done as early as possible in the dry season, so that ground cover can have time to re-establish before the wet. Some growers are capitalizing on the farm planning advice being offered by ABGC's Best Practice Team to guide their ideas on farm layout and paddock design.

By getting the timing right, growers retain the topsoil on their farms so they can grow healthy plants in the long-term. If disturbance of the soil occurs too close to the wet season, it is at a high risk of being lost. Timing of earthworks is a part of the Banana Reef Regulations and growers leaving ground exposed during the wet season are considered non-compliant.

Kathryn Dryden is one of ABGC's Best Practice Extension Officers for the Wet Tropics region. She said, "We've seen a great uptake of growers actively encouraging healthy ground cover on their farms.

"This has contributed to a large portion of the industry embracing the importance of roots in the ground where possible to hold the soil in place," she said.

Further to ground cover, some growers are better planning their farms and paddocks for soil conservation.

"In order to slow water flow and minimise soil loss, slopes of more than 3% should be contoured with appropriate drainage incorporated," Kathryn said.

There are also a range of structural measures that growers can consider such as inter-row profiles, diversion banks, vegetated waterways, and reinforced traffic areas. Flatter blocks can benefit from laser leveling and row profiles where possible to help keep wheels out of the water. This minimizes bogs and ruts.

ABGC's Best Practice team are building capacity to offer guidance to growers on soil conservation and farm planning.

If you've got a block you'd like to discuss, contact them via bmp@abgc.org.au

An exposed paddock during the dry season with time before the wet season for planting and ground cover to establish.

Grower Will Darveniza with ABGC's Extension Officer Kathryn Dryden.

SIGHTS SET ON BETTER NUTRIENT MANAGEMENT THROUGH PROJECT

Jack Singh plans to get the most out of his nutrient inputs with support from the ABGC's Molly Blake who is one of the Best Practice Team members working in the nutrient management space.

Having worked his 60 acre Cassowary Coast farm for three years, he has ambitions to progressively improve the health of his crop.

Jack has been involved in growing bananas in Australia for fourteen years and has learned from other growers in both organic and conventional farming systems.

"One of the main things I'm doing on my farm is making sure I have good ground cover. I also use natural predators for red spider instead of spraying pesticides. The ground cover helps catch nutrients and holds the soil strong, and I have not had to spray much at all," Jack said.

"I think by doing this, it is good for my crop, and it also reduces losses to waterways."

With the high cost of fertilisers, Jack has his sights set on improving his nutrient management practices and has expressed interest in the Nutrient Management Planning project with Molly.

"I don't want to waste too much money on the fertiliser. I want to put on only what the tree needs," he said.

Molly has visited Jack to get to know his farm, talk about his goals, and look at his soil maps. Information was gathered on inputs and practices including the rate he uses, when, how and where the fertiliser is applied, and what nutrients are used.

Next, as part of the project, Jack will learn about how to read soil and leaf tests along with better understanding plant nutrition and health, by participating in a Nutrient Management Workshop delivered by an independent agronomist. He'll work with the agronomist to take soil and leaf tests on his farm and come up with a clear picture of what nutrients his plants and soil need for the next twelve months, based on the results.

This will take shape to be Jack's Nutrient Management Plan, specifically in response to the needs of his crop.

Dilpreet Singh, Jack Singh, and ABGC's Molly Blake on their Cassowary Coast farm.

Jack said, "I'm feeling pretty confident to do this project. It will help for the future and growing good bananas."

Molly said, "I'm happy that Jack is onboard with the project and I invite other growers to participate."

There are places in the program for 20 more growers. If you're interested or would like more information, contact Molly on 0419 602 864 or molly@abgc.org.au.

The Cassowary Coast Reef Smart Farming program is funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation.

NUFFIELD SCHOLARSHIP APPLICATIONS OPEN

Nuffield Australia offers Australian primary producers a chance to travel and study, expanding on a topic that adds value to your farming business and the wider farming community.

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QBAN SCHEME FACILITIES

Mission Beach Tissue Culture Laboratory and Nursery	07 4068 8553	sdlavis4@bigpond.com	Lindsay Road (PO Box 326), Mission Beach QLD 4852
Lowes TC Pty Ltd Laboratory and Nursery	02 4389 8750	Greg@lowestc.com.au Patricia@lowestc.com.au Natasha@lowestc.com.au	202 Tumbi Rd, Tumbi Umbi NSW 2261
SIVAL FARMING TISSUE CULTURE NURSERY	07 4068 8559	sdlavis4@bigpond.com	Dati Road, Walkamin QLD 4872
Yuruga Laboratory and Nursery	07 4093 3826	admin@howefarms.com.au	5970 Kennedy Highway, Walkamin QLD 4872
Ausplant Nursery	07 4662 4934	brady@ausplantnursery.com.au	72 Winton St (PO Box 766), Dalby QLD 4405

A CHAMPION CAMPAIGN FOR AUSTRALIA'S FAVOURITE FRUIT

Fueling families for the return to work and school at the start of the new year is no mean feat.

Luckily, there's one fruit we all know to be more than up to the task – and this year, Australian Bananas ensured consumers across the country were reminded of this natural fuel for back to school or work.

The campaign for The 'Champion' Banana was all about giving Australians the energy they needed to start 2023 on the right foot.

As part of the public relations media outreach and social media activity, consumer research was conducted into Australians energy needs, and the key statistics were used as a part of a pitch to media. The pitch highlighted ways in which Aussies can use Australian Bananas to fuel their new year's resolutions and rebuild healthy routines as families went back to work and school.

To support the research, which included national and state-by-state statistics, and to get Aussies in the 'Back to School' spirit, a series of supporting assets were deployed alongside a press release:

- A hero video showcasing national 'Champion' Jana Pittman heading back to school
- Imagery of Jana Pittman heading back to school
- Talent interviews with Jana Pittman and Australian banana grower, Josephine Borsato

Olympic champion Jana Pittman went back to school earlier this year to demonstrate the benefits of bananas.

As one of the first brands to talk about back to school, Australian Bananas were able to secure coverage with media before the landscape became saturated.

Back to school is a topic that is spoken about across various media and has an emotive connection to families. As a result of a strong cultural hook and pre-pitching, top-tier coverage was secured across all key media channels.

Key messaging for the campaign included:

1. To provide Australians with the fuel for going back to school and help Aussies get back into the everyday rhythm, Australian Bananas has launched The 'Champion' Banana.
2. Olympic champion Jana Pittman is backing The 'Champion' Banana and demonstrating its powerful effects by heading back to the schoolyard.
3. New research by Australian Bananas shows that heading back to school, work or routine is a struggle for many Aussies, with almost 60% finding it hard to start the year strong.

The campaign, which ran from 16 January until mid-February, resulted in 54 million opportunities to see the campaign, with the key messaging included in 90% of coverage, exceeding KPI's across all metrics.

SUNRISE

24,200,000 reach

Jana Pittman appeared on popular breakfast television program Sunrise in January, to speak about the benefits of bananas.

Watch the video here:

BOUNTY PARENTS

500,000 reach

The campaign appeared on the Bounty Parents website, as well as number of other online publications including The Daily Mail and Eativity.

THE DAILY TELEGRAPH

3,980,000 reach

Jana Pittman spoke about bananas as a healthy, nutritious way of keeping your energy levels up, as part of a piece in The Daily Telegraph.

WA'S GREAT GRAZE

Sunday 26 March

The perfect grazing board has a balance of sweet, savory, creamy and crunchy culinary delights.

The team from the Sweeter Banana Co-Operative, along with Benny Banana, ticked the sweet and creamy boxes at the Great Grazing Market this year, with their award-winning banana gelato and fresh bananas.

The market day at Cottesloe Civic Gardens, by the ocean in Perth, was part of WA's Great Graze - a state-wide foodie celebration showcasing the state's amazing food and beverages and the people who help grow and harvest them.

As the Sweeter Banana team gave out bananas, they had plenty of opportunities to chat to consumers about the banana season and answer questions like 'Why are your bananas so big now?'

"It was a great chance to discuss seasonality and how the weather impacts size, colour and just about everything to do with bananas," Sweeter Banana's Business Manager Doriana Mangili said.

"We found people were happy to learn more about the growing process."

The event was a great success with a special visit from Hon. Jackie Jarvis MLC, Minister for Agriculture and Food, Forestry and Small Business, who enjoyed the famous banana gelato.

The event is one of many attended by the Co-Operative, with awareness helping to drive high banana consumption in WA.

DOUBLE TAKE FOR APRIL FOOLS

1 April was the perfect opportunity for the Sweeter Banana Co-Operative to showcase the latest development in their banana breeding program: the double-bunch banana tree.

Alas, while the double bunch was real, the breeding program was definitely not.

Despite plenty of support and interest from their Facebook followers, the Co-Operative eventually owned up to the joke.

"The line about the banana only growing in WA conditions was a bit of a red flag, along with the fact that there is no banana breeding program in WA," Ms Mangili said.

"The social media post was a great way to educate consumers that a tree only provides one bunch."

AUSTRALIAN BANANAS RIVER FEAST Sunday 26 March

Refreshing, creamy banana smoothies went down a treat at this years' Australian Bananas River Feast.

The 3-day Feast of the Senses event, which celebrates the smorgasbord of food grown in the Cassowary Coast Region, culminated with hordes of market goers on the last Sunday in March.

Thousands of people strolled the Innisfail river front for the fun foodie affair.

Yellow was definitely the colour of the day, with bright yellow shirts standing out amongst the sea of people.

Over $1800 was raised for charity at the Australian Bananas stall through shirt and smoothie sales, which will be donated back into local community charities.

The large bunch of bananas dangling in front of the stall lured people in to guess the weight for their chance to win at $100 at the best Italian restaurant on the Cassowary Coast.

Big thanks to the Cassowary Coast Banana Growers Association for their efforts once again in organising, setting up and working at the stall and connecting the community with the banana industry.

TEAM SHARES TR4 MESSAGE WITH CROWDS

Geoff Wilson and Skye Orsmond from the ABGC's Panama TR4 team were on hand to share information with locals and visitors to the area. It was a great awareness raising exercise and provided an opportunity for the ABGC Panama TR4 team to talk to community members and banana growers.

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