

Australian Bananas



Australian
Banana
Growers

ISSUE 69 | DECEMBER 2023

MISSION POSSIBLE

Field inspectors
ready on front line

#ABGCatWork

PAGES 10-11

NSW Roadshows

PAGES 28-29

National Banana Day

PAGES 39-41

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Hort Innovation BANANA FUND

FROM THE CEO

Leanne Erakovic



I'm very proud to work for the Australian Banana Growers' Council but I also know there are

plenty of you who sometimes wonder what it is, exactly, we do.

As you should – after all, we exist solely to represent growers. You deserve to know who's on our team and how we are working together to achieve a more sustainable and profitable banana industry now and into the future. You deserve to know exactly where your funds are going – whether it's ABGC-run projects funded by your compulsory levy, or work made possible by our members' voluntary contributions.

I don't think we've done a good enough job of sharing this with you in the past, but it's time to change that. Together with our Stakeholder and Engagement Manager, Kathryn Dryden, and my colleagues based across Australia's banana growing regions, I'm looking forward to sharing more about

#ABGCatWork. You'll get to know the people, the projects and exactly where their funding comes from. More importantly, you'll find out what we have achieved and what we're working on right now to better this industry. Check out page 10 to get started.

Compliance concerns

Most growers I speak to understand that some compliance measures must exist to ensure a successful farming business – they ensure safety, quality and environmental standards are being maintained, both in your own backyard and across the board. Those accreditations carry across supply chain and ultimately to the consumer. However, ABGC is hearing unanimously that the time and resources needed to manage these requirements are increasing, and that there is duplication across some programs.

In December, we called on ABGC members to attend a workshop (in person or online), to unpack these issues and find a way to inform our advocacy on this going forward. We want to know what we can do to improve this, while maintaining the high standards Australian banana growers are known for.

Advocating for better workforce outcomes

ABGC continues to advocate for consistent, sustainable workforce options for the Australian banana industry – both in our own right and as part of groups like the National Farmers' Federation Horticulture Council.

In October, ABGC Members were given the opportunity to sit down with Steve Burdette, the Executive Officer of Approved Employers Australia, to discuss some of their most pressing concerns, including changes to the PALM Scheme. This was the first time we've made a workshop like this available to members and, with a strong turnout and positive feedback, it won't be the last. Read more about the session – and how ABGC members can access a recording – on Page 12.

Christmas, all over again

In the December 2022 edition of Australian Bananas, I was writing to you here, for the first time, as CEO. What a huge 12 months it has been. A heartfelt thank you to all those who've given up their time to speak with me and invite me to their farms and businesses throughout 2023. To all involved in this tough, wonderful, sometimes rollercoaster of an industry – stay safe this holiday season. I hope you find some time to celebrate and rest with your loved ones. Bring on 2024.

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.

① Most commercial banana growers in Australia pay the banana levy – but there are some exceptions. Essentially, a producer of bananas (the person who owns the bananas immediately after harvest) is liable to pay the levy. A producer will NOT be liable for levies if, in a financial year, the total quantity of bananas sold by retail sale amounts to less than \$100 of levy.

More detail on exemptions from paying the levy and other information can be found at agriculture.gov.au/ag-farm-food/levies/rates/bananas

Please note, the previous edition of Australian Bananas stated the volume for 2023 was 317,000 tonnes. This should have read 371,000 tonnes, as reflected in this edition.

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
2023	371

BANANA LEVY RATE

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

Levy 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 Strait Exotic Fruit Flies Eradication Response, PHA membership/meetings and Government levy collection.

Further information: [Leanne Erakovic, leanne@abgc.org.au](mailto:Leanne.Erakovic@abgc.org.au)

Phone – 07 3278 4786. More info on the levy rate:

<https://www.agriculture.gov.au/ag-farm-food/levies/rates/bananas>

FROM THE CHAIR

Leon Collins



It's hard to believe we are drawing to the end of another year, but at least 2023 concludes on a

much cheerier note than this time last year.

After years battling through some of the toughest financial and operational challenges the industry has ever had to face, it's a relief to have experienced some hope and positivity over the past few months.

In these more buoyant times of late, we can only hope that this positive outlook continues and 2024 becomes a year of great opportunity for growers in all production areas.

Board changes

At the recent November Board meeting and AGM, I was happy to resume my role as ABGC Chair. I have enjoyed my first eight months in the role and look forward to continuing to address our wide and varied industry challenges in 2024.

I'd like to take this opportunity to offer a heartfelt

thank-you to outgoing Directors Ben Franklin and Paul Inderbitzin, who both stepped down from the Board last month. Their individual contributions to industry and the ABGC during their eight-year incumbencies were significant and sincerely appreciated.

They each brought a depth of knowledge and commitment to the Board, that I know will be sorely missed. However, we have welcomed two new Directors into the fold, who also bring their own wealth of industry know-how and experiences to the role - Far North Queensland grower, James Howe, and Costa Group Supply Chain Manager, Gary Fattore. Welcome to both.

TR4 transition

By now, North Queensland growers should have received a consent letter from Biosecurity Queensland to allow data sharing between the ABGC and BQ, allowing our TR4 Control Program to continue.

Thank you to those who have signed and returned their forms. After almost a decade of running a world-leading, successful control program, these consent forms are essential to allow the ABGC to continue to manage TR4 into the future – buying valuable time for the entire industry.

The form is seeking your consent for BQ and the ABGC to exchange information about you and your property. Information that will remain highly confidential between both parties.

Crucially, in order to confirm your consent, all legal entities associated with your farm, including all owners and occupiers, must sign the form.

Once you have returned your consent form to BQ, the ABGC will be notified and we will contact you to discuss the first steps in being part of the industry led TR4 Control program.

The ABGC certainly appreciates all on-farm biosecurity actions that growers have undertaken to date – particularly infested properties. However, if we do not receive continued support for our TR4 Control Program, the future of it and the industry are at stake.

If you haven't received a consent form, or have any questions or concerns, please contact the TR4 Control Program Manager, Geoff Wilson on 0418 644 068 or geoff@abgc.org.au

Season's greetings

With this being the last magazine for the year, I'd like to wish everyone a very merry Christmas and a healthy and happy New Year. See you in 2024!

Early detection through regular surveillance and on-farm biosecurity practices will help limit the spread.

Report suspect plants to 13 25 23.



**211
infected plants
detected**

**2,691
samples
collected since
March 2015**



**9
infested
properties**



ABGC Chair Leon Collins (left) with Panama TR4 Team Leader Dylan Smith.

HANDS UP IF YOU'RE A BANANA FAN!

Banana lovers across the country celebrated their favourite fruit – and those who grow it – as part of National Banana Day on October 18.

In Australia's banana heartland of Far North Queensland, the team at MBL Bananas (Mission Beach) got into the spirit and, not far away, kids from the suburb's local primary school were also in fine form.

You can find out more about National Banana Day and the results it delivered for growers from Page 40.



DID YOU GET YOUR #BANANASUP4FLEG?

Thomas Flegler fans brought a bit of the banana farm to Brisbane for the former Bronco's last game with his club and his first as captain.

Prompted by Broncos support page 'Fans 4Life', the Australian Banana Growers' Council joined in the calls to put #BananasUp4Fleg in the game against the Melbourne Storm on 31 August.

Those who couldn't make it to Suncorp Stadium still got into the spirit, with Mission Beach Tavern punters amongst those showing their support of the Queensland and Australian representative player. Flegler scored the opening try in the game against the Storm, much to the crowd's delight.

The son of North Queensland-based banana growers, Flegler will play for the Dolphins from 2024.



CHEERS TO USING MORE 'SECONDS'

Here's some news you can drink to!

Bananas that don't make the cut for grocery store distribution are being used to make vodka in Western Australia.

Damaged Goods Distilling Co has already taken more than 300 kilograms of bananas, with minor imperfections, from the Carnarvon Sweeter Banana Co-Op.

The spirit, 'Going Bananas Vodka', is marketed as tasting just like traditional vodka, only better. Those with a discerning palate will notice a touch of vanilla and the creamy texture – the only pointers to its banana-based origin. It is, according to the creators, 'deliciously disguised'.



WONDER STUDENTS

Four Year 6 students from Mourilyan State School in Far North Queensland took home third place at the Wonder of Science State Conference in Brisbane on 24 November for their experiment involving the decomposition of banana skins.

The boys progressed to the Queensland finals after winning the regional contest in Cairns in October. Their experiment involved testing whether an onion accelerated the breakdown of a banana skin.



Pictured (L-R) Mourilyan State School students Harrison, Daniel, Riley and Tavish came 3rd at the recent Wonder of Science State Conference for their experiment involving the decomposition of banana skins.



Cassowary Coast Banana Growers Association president Dean Sinton (pictured right) presented a \$500 cheque from the CCBGA to four Mourilyan State School students to help them attend the Wonder of Science State Conference.

ABGC BOARD CHANGES

The ABGC's Annual General Meeting saw some significant changes to the ABGC's Board, including a new Treasurer, two long-serving Directors stepping down and two new faces joining the Board.

The ABGC's quarterly Board meeting and AGM were held at South Johnstone on 15-16 November. Following both meetings, Leon Collins (QLD) retained his position as Chair, Stephen Lowe (QLD) continues as Deputy Chair and Andrew Serra (QLD) was elected new Treasurer.

The Treasurer position was vacated by Ben Franklin (QLD) who stepped down from the Board, along with Paul Inderbitzin (QLD). Mr Franklin and Mr Inderbitzin both served eight years on the Board and were thanked for their significant contributions to both the industry and the ABGC over their tenures.

Their vacated positions were filled by James Howe of Howe Farming Group, and Gary Fattore of the Costa Group.

Other directors that continue their role on the Board are: Stephen Spear (NSW), Doriana Mangili (WA) and Tayla Mackay (QLD).

Mr Fattore joins the Board with 40 years' experience in the banana industry, starting in 1983 with a cadetship at the Committee of Direction of Fruit Marketing of Queensland (COD), where he began as a ripener, while studying a Diploma in Business part-time.

By 1990 he was well on the way to a long and diverse career in the banana industry, going on to work a short stint at LaManna, before moving to the Chiquita Group in 1994 and then the Costa Group where he currently serves as National Category Manager.

While not a grower, Gary believes he brings a different skill set to the ABGC, focussing on grower engagement and more directly to supply chain issues from farm gate to retail stores and marketing. "Growers are the backbone of the industry. However, it is important that the whole supply chain work together for the overall betterment of the industry and ultimately the growers," Mr Fattore said.

"I hope to bring my experience across the supply chain for that betterment and growth, and strengthen the growers' control of the industry.

Mr Howe is a third-generation farmer whose family-run business, Howe Farming Enterprises, is one of the country's most diverse primary producers.

"We currently grow bananas, avocados, sugar cane, coffee, peanuts, cotton, and recently: mandarins, lemons, and lychees – but bananas are, by far, the pillar of Howe Farming Enterprises."

Mr Howe grew up on the family farm and began working full time in the business in 2013, serving as Operations Manager since 2019. After farming bananas for over 10 years and witnessing how significantly the industry contributes to the community, he decided to join the Board "to contribute something back".

"Ever since I joined the 'Next Gen' banana growers' program in 2012, I'd always hoped to one day be worthy of becoming an ABGC Director," Mr Howe said. "Having been awarded an ABGC scholarship to complete a Diploma of Horticultural Business two years ago, I am gratefully indebted to our industry."



The Board – Pictured from L-R – Stephen Spear (NSW), Gary Fattore (QLD), Treasurer Andrew Serra (QLD), Chair Leon Collins (QLD), Deputy Chair Stephen Lowe (QLD), Doriana Mangili (WA) and Tayla Mackay (QLD). Absent: James Howe (QLD).

BIG SHOES TO FILL

Having both served eight years on the ABGC Board, former Directors Ben Franklin and Paul Inderbitzin felt it was their time to step down from the Board at the recent AGM.

Both Mr Franklin and Mr Inderbitzin leave big shoes to fill, having brought a wealth of experience to the Board, contributing significantly to the Board and industry.

Mr Franklin served on various committees during his two-term tenure, as well as serving as Congress Chair (2017), ABGC Deputy Chair (2016-2017) and most recently Treasurer (2017-2023). He said the decision to step away from the Board, was a difficult one.

"I enjoyed my time on the Board immensely. And, I said to someone yesterday (about stepping down), it's bittersweet. But on reflection, I'm not sure it's sweet at all. It just feels a little bit bitter for me right now," Mr Franklin said.

"I've really enjoyed it. It's been a great bunch of people to work with, a lot of passionate growers, who make their views felt in their various ways. And I really enjoyed working with ABGC staff,

growers and hopefully just doing my little bit to give back to the industry that has given me so much over quite a few decades," he said.

Mr Franklin said he was particularly grateful to the Costa Group for allowing him the opportunity to serve on the Board. However, he felt it was now time "for a number of reasons" to step away.

"Just the way things have worked out with work, I'm no longer so involved in the banana industry at the moment," he said.

"And, it's been two terms. I think it's an opportunity for new people to join the board with myself and Paul stepping away. A bit of new blood."

Mr Inderbitzin, of Kureen Farming, offered similar sentiment as he too stepped down, believing it was the "right time".

"I thought after eight years, two terms, it's good to keep the Board fresh and to keep different points of view coming in and a different mix of leadership. So yeah, I thought it's a good time to step away and give someone else a crack," he said.

The Lakeland grower has become widely



Outgoing Directors (L-R) Ben Franklin (former Treasurer) and Paul Inderbitzin (Congress Chair).

regarded by industry as a popular ambassador of bananas having served as Congress Chair from 2019-present, and also frequently stepping up to promote industry through various media campaigns such as National Banana Day and other ABGC communications activities.

He also served on several committees during his two terms, including the Marketing SIAP, Risk and Audit Committee and the ABGC's Feral Pig Eradication Program.

"My time on the Board has been very interesting and rewarding," Mr Inderbitzin said. "There's always pros and cons to everything you do. There's definitely some challenges to being a Director in the banana industry, but overall it's been fantastic."

SONIA DEPARTS ABGC

After almost 8 years with the Australian Banana Growers' Council, including six leading the industry's communications project, Sonia Campbell has made the tough decision to depart the organisation.

Sonia, who was a successful journalist prior to her time with ABGC, has steered the project through some of the industry's hardest times. She has delivered three Banana Congresses, provided valuable contributions to the TR4 program's transition to industry management and developed a number of campaigns to raise awareness of issues facing banana growers.

Sonia's willingness to pick up the phone at any time of day, her knowledge of communications, and her genuine warmth and passion for the industry, will see her sorely missed by colleagues and by growers.

"Sonia brought such energy to the role, along with knowledge and experience," ABGC Chair Leon Collins said. "It will certainly be sad to see her go."

CEO Leanne Erakovic agreed, adding: "Sonia has been a valued member of the executive team and is admired for her incredible commitment, positivity and creativity. On behalf of the banana industry, I wish Sonia all the best for the next chapter in her career in the horticulture sector."

Sonia's last day is December 20. Should you need to reach out to the ABGC Communications team after this time, please get in touch with amy@abgc.org.au or call 0439 005 946.



Communications Manager Sonia Campbell finishes with ABGC later this month.

CHANGES TO POST ENTRY QUARANTINE FOR BANANAS

When new banana plant material is imported into Australia, rigorous Post Entry Quarantine (PEQ) disease screening is undertaken to protect the banana industry against known and emerging biosecurity threats.

While changes to banana quarantine services are currently under way, the same strict standards that growers and other industry stakeholders rely on are being maintained.

Since 1987, the PEQ process has been handled by Queensland's Department of Agriculture and Fisheries (DAF) with support from the federal Department of Agriculture, Forestry and Fisheries (DAFF) and the banana industry research and development levy via Hort Innovation.

After careful consideration from DAF, DAFF, Hort Innovation and the Australian Banana Growers' Council (ABGC), this process will be transitioned to the state-of-the-art DAFF Mickleham PEQ facility in Victoria where trial grow-outs have already proved successful.



Bananas growing at the DAFF Mickleham PEQ facility in Victoria.

To find out more, including what it means if you import plant material, please scan the QR code.



NEW LEVY NOT WARRANTED

The Australian Banana Growers' Council has prepared an official response as part of the Federal Government's consultation process on the new Biosecurity Protection Levy.

This new levy, due to come into place on 1 July, 2024, will mean an additional cost for all levy-paying banana growers.

The ABGC does not support the introduction of the Biosecurity Protection Levy and firmly believes banana growers already make a significant contribution to biosecurity activities through existing levies. In addition, the ABGC's submission expressed concern over inadequate consultation and lack of transparency around how the funds will be spent.

The ABGC asked Government to tax the main risk creators rather than banana growers, who pay their fair share and, in many cases, are already financially stretched.

Growers are welcome to contact ABGC with their thoughts and can find out more about the levy by visiting Department of Agriculture, Fisheries and Forestry: <https://haveyoursay.agriculture.gov.au/biosecurity-protection-levy>



RIVERFEST 2023: Did you spot these familiar faces celebrating all things Innisfail on October 7? The group represented Australian Bananas at the riverside event.

NEW DISPLAY TRIALLED TO TARGET CONVENIENCE SHOPPERS

By Andrew Burns, ABGC Supply Chain Engagement Manager



A little project that will hopefully lead to bigger things - the 'air display' - is currently in its infancy stages within a number of IGAs.

We all know that bananas are usually located in a highly visible location in each and every supermarket, and that position is visited and shopped frequently by the many consumers who shop for bananas.

But what if the customer hasn't got bananas on their list? And what if they are intending to do a convenience shop that doesn't include a walk through the produce sections? We know that on a weekly basis approximately 30 per cent of households purchase bananas, however that leaves a massive 70 per cent that don't. Does that large number mean that 70 per cent of households don't want to buy bananas or were they just not top of mind?

We have learnt from a previous project that if you locate another banana display away from the main location, that the potential incremental lift can increase by around the 20 per cent mark, providing us with those incremental and possible impulse sales.

As a result, we have approached a number of IGAs up and down the eastern seaboard and have sought placement of the units shown in the pictures in high traffic areas, frequented by convenience shoppers. We're aiming to entice those customers who potentially were not thinking about buying a banana to do so.

The units are a new display item to Australia, designed to allow the banana hands to hang from hooks on a 360 degree accessible mobile display stand. The unit has the ability to hang around 100 hands of bananas with a shelf at the bottom to locate single bananas for the eat now needs. The stands also allow and support additional stock weight on the shop floor, ideal for those busy periods when replenishment is challenged. Another upside may be the potential benefits attributed to hanging bananas, which could assist in providing a longer shelf life (though this would need to be verified).

The units have just been allocated to stores and are currently (at the time of writing) being installed and positioned, however it's pleasing to report that some of the early incremental sales numbers achieved and provided are very promising.

The units are being trialled over a 12-week period, with stores asked to provide sales updates every four weeks. Final results are expected around mid-February, and will be shared with supporting stores and industry.

Hort Innovation BANANA FUND



The units, which are new to Australia, allow banana hands to hang from hooks on a 360 degree mobile display stand. They are capable of hanging around 100 hands, with capacity to hold single bananas too.

BANANAS HEAD TO JAPAN

Queensland-grown bananas and melons have been shipped to Japan, in an Australia-first trial aimed at breaking into the potentially lucrative Japanese market.

The red-wax-tipped Ecoganic® bananas, grown in north Queensland by Pacific Coast Produce, have been sent to a banana tasting and promotion event in high-end Tokyo retail store Yaoko.

Department of Agriculture and Fisheries (DAF) horticulturalists have been working with industry partners for four years to analyse the impact of shipping and supply chain conditions such as

storage temperature, and ripening conditions, on the appearance and flavour of the fruit.

In another first, the banana shipment was airfreighted directly from Cairns instead of being transported to Sydney before export, saving time and costs.

Direct air travel also makes it easier to maintain optimum supply chain conditions, reducing the risk of food waste and ensuring the fruit arrives in the best condition. Data from this shipment will look at the possibilities and obstacles of exporting bananas as airfreight from Cairns.



Mark Furner, Minister for Agricultural Industry Development and Fisheries, with Frank Sciacca, Managing Director of Pacific Coast Produce.

DAF horticulturalists will also conduct blind tastings with the Japanese public to identify consumer preferences and compare the Australian-grown bananas with imported fruit.

Head to Page 37 to read more about the project looking into consignment monitoring.



GET TO KNOW YOUR ABGC

In this edition of *Australian Bananas* we launch a new campaign - #ABGCatWork - designed to give you a greater insight into Australian banana growers' exclusive peak industry body, and the people who make it tick!

We at the ABGC are excited to shine a spotlight on our dedicated team so you can make connections, and we can introduce them to you and outline what they do.

Questions will be answered about funding arrangements, along with key projects and activities that the ABGC is working on to support growers and a sustainable industry.

As part of the campaign roll out, projects and their delivery teams will be featured here in your industry magazine, as well as in our e-bulletins, and on the ABGC website and social media channels.

In a nutshell, ABGC seeks to build relationships with growers and other industry stakeholders, provide leadership, services, and communications across the industry, and advocate on key issues that are important to our members.



**We are starting with the TR4 Control Program.
Enjoy getting to know the crew!**

TR4 CONTROL PROGRAM

Protecting Australian bananas, together



PROJECT PURPOSE: Ongoing management of Panama disease Tropical Race 4 following transition from Government to industry.

FUNDED BY: Plant Health Australia



Geoff Wilson

Panama TR4 Program Manager

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Jennifer McKee

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Nat Hayward

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Jess Portch

Panama TR4 Grower Support Co-ordinator

Purpose: Assisting growers in meeting legislative requirements for farming with TR4 and continuing access to markets
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Skye Orsmond

Communication and engagement officer

Purpose: Keeping growers and the community informed on TR4 matters
skye.orsmond@abgc.org.au



Brendan Ambrum

Panama TR4 Field Team Leader

Purpose: Checking for presence of symptomatic plants



Dylan Smith

Panama TR4 Field Team Leader

Purpose: Checking for presence of symptomatic plants



Richard Wimbis

Panama TR4 Field Team Leader

Purpose: Checking for presence of symptomatic plants



Darryl Henderson

11P Property Manager

Purpose: Property maintenance of the initial TR4 infested property purchased by industry (11P)

Check out the latest from the TR4 Program on Page 14.

CEO SEES AND HEARS MEMBERS

In her first year as ABGC's CEO, Leanne Erakovic has spent time working in Far North Queensland every couple of months, home to 90% of the Australian banana industry.

While in the region, she makes it a priority to reach out to members and see their farming operations first-hand.

"I really enjoy being out on-farm and meeting with growers who I haven't met before, or who I've talked with on the phone over the years," Leanne said.

From these visits, Leanne learns about members' farming operations, and she hears directly from growers about their individual challenges, issues and ideas.

"Building relationships and knowing the issues in a practical sense helps us as the exclusive banana peak industry body, to better look after the industry. I'm always open to any invitation from members to visit their farming business in the future," she said.

Leanne has worked her way up through the ranks at ABGC and was previously the Executive Officer prior to her appointment as CEO in September 2022. She is keen to offer members opportunities to have their stories and concerns heard to inform the ABGC Board to prioritise and mobilise potential action.

Kathryn Dryden has stepped into a new position introduced by Leanne, which focusses on membership services and advocacy. Leanne and Kathryn are planning on visiting wider and further next year, with grower visits extending to the most Southern and Western banana growing regions.

To reach out to Leanne or Kathryn, growers can email members@abgc.org.au.



ABGC CEO Leanne Erakovic with grower and ABGC member Mark Gallagher at his FNQ banana farm.

COMPLIANCE STANDARDS AND BUSINESS SUSTAINABILITY

In Australia, compliance has become a necessary undertaking for many growers depending on the destination of their product.

ABGC recognises that there are a range of compliance standards and requirements that are important in order to present a high quality product to the market, and to protect people and resources. The administrative and practical demands that go with them, however, are known to be creating challenges for growers to achieve a sustainable business.

"We are hearing from our members that there is some duplication across programs and concerns about the time and costs involved with audits," ABGC's Stakeholder Engagement and Advocacy Manager, Kathryn Dryden, said.

A workshop that took place in early December was the result of increased capacity for industry to facilitate a discussion with ABGC members, and to hear their key issues. Members were able suggest ideas and recommendations for the ABGC Board to consider for action.

Kathryn said, "A workshop in December allowed us to unpack the issues raised by members and establish a plan of action whilst still maintaining high industry standards."

Contact members@abgc.org to find out more about the workshop, raise your own issues or find out about ABGC membership.



WORKFORCE CHALLENGES? YOU'RE NOT ALONE

ABGC Members were invited to an informal session with Approved Employers Australia's Executive Officer, Steve Burdette on 17 October.

Steve gave an update on the PALM scheme and related implications for businesses because of changes to the Deed and Guidelines. Other workforce issues front of mind to growers were also raised.

Feedback about the session from those who attended suggested that as a result, they:

- Felt more prepared for changes to their workforce management obligations;
- Felt better equipped to make informed decisions about the future of their workforce; and
- Benefited from talking with other growers in dealing with workforce challenges.

Several growers who were there agreed that one of the biggest things they got out of the session was they no longer felt alone on the issue, and that managing a sustainable workforce on-farm is a challenge faced by many producers across the broader horticulture industry.

The session was held at South Johnstone and available to members across Australia via an online meeting link.

ABGC's CEO Leanne Erakovic attended the session and noted, "This is the first time we have made something like this available to our members, and it was great to see a good number take up the opportunity."

"The format worked really well, and growers were comfortable to participate in the discussion, no doubt getting answers to questions that they were all looking for."

A recording of the 2-hour session is available to ABGC members via the Members' Portal at abgc.org.au. Contact members@abgc.org.au if you would like to learn more.



NATIONAL BANANA FRECKLE EMERGENCY RESPONSE

An update from the National Banana Freckle Response Team

Phyllosticta cavendishii (Banana Freckle) was again detected in the Northern Territory (NT) in 2022 and an eradication campaign is underway.

This plant pest disease is listed in Schedule 13 of the Emergency Plant Pest Response Deed (EPPRD) as a Category 3 Emergency Plant Pest (EPP). Banana Freckle remains a declared pest under the NT Plant Health Act 2008.

Detection

A suspected case of Banana Freckle was brought into the Berrimah Agricultural Laboratory in Darwin in May 2022. Initial testing identified the presence of Banana Freckle. Verification from two independent laboratories outside of the NT confirmed the identification.

Through the EPPRD, a National Banana Freckle Response Plan was endorsed in July 2022. This is an agreement between the Australian Government, all states and territories, and industry bodies.

The joint government and industry response aims to eradicate Banana Freckle from the NT.

Quarantine measures for banana plants, fruit and materials, such as banana leaves, are currently in place to stop the spread of Banana Freckle both

within the NT and also between other the NT and jurisdictions.

Quarantine measures in place

Within the NT, quarantine measures have been designed to limit the movement of bananas, banana plants and materials from properties with infected plants. Field teams are undertaking delimitation of properties within close proximity of Infected Properties (IPs) to contain the disease within these zones. If banana plants are identified within these close proximity zones, they are then checked for symptoms of the disease. If a property is confirmed to have Banana Freckle, all banana plants, regardless of cultivar are removed and destroyed.

Restricted inter-state/territory movement of bananas and banana plants remain in place with a permit required to import bananas, banana plants and materials across state and territory borders. Both Queensland and New South Wales require permits to move banana plants, fruit and materials into their banana growing regions with movement

under strict quarantine controls; the NT requires a permit to import banana fruit, plants and material.

Why is Banana Freckle so important to eradicate?

Banana Freckle is a serious threat to the Australian banana industry. The eradication of *P. Cavendishii* is considered to be of vital importance to protect the Australian Banana Industry.

The disease decreases plant health and productivity by reducing the amount of healthy leaf area, affecting the appearance of the fruit, and reducing yield. Blemishes on fruit also reduces the marketability of the fruit. The plant pest disease would also increase production costs through the use of additional fungicide sprays and the management of the fungal pathogen through removal of infected plant material. Increase production costs will impact the economic viability of farming bananas.

For more information on the National Banana Freckle Response go to nt.gov.au/bananafreckle



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[abgc.org.au](https://www.abgc.org.au)

THE LATEST FROM THE TR4 CONTROL PROGRAM



A message from the TR4 Program Manager

Since 1 July, our TR4 Control Program team has been working hard to streamline elements of the previous Biosecurity Queensland (BQ) program into the hands of industry.

We are committed to continuing the control and containment efforts that have enabled growers to farm successfully in North Queensland since the initial disease detection in 2015.

Australia's ability to restrict the spread of TR4 has been a stand-out in the international community, so we believe we need to continue these components under ABGC leadership. Grower buy-in is key to this, with uptake of on-farm biosecurity measures and early detection and treatment through regular surveillance key features.

Early detection of symptomatic plants is the best way to ensure the ongoing viability and prosperity of your farm as well as protecting the wider banana industry. With the support of growers and thorough biosecurity practices, we can carry on the TR4 Program's success for future generations.

Our small team of skilled and experienced staff are willing to assist and support growers and the broader community in keeping TR4 front-of-mind and a high biosecurity priority.

Please get in touch if you'd like to discuss anything relating to the TR4 Control Program.

Regards,

Geoff Wilson

0418 644 068 | geoff@abgc.org.au



Information exchange forms

All growers in the Northern Banana Biosecurity Zone should have received a letter in the mail from the Department of Agriculture and Fisheries regarding disclosure of information for the TR4 Control Program.

This consent form is seeking your consent for BQ and the ABGC to exchange information about you and your property. Information that will remain highly confidential between both parties.

If you have not received a letter please contact Geoff Wilson, or anyone in the TR4 Control Program team.

Please note that all legal entities of the property (landowner/leasee/director) need to sign the form.

The 14-day indicated return date is preferable, but is not a deadline, and the forms can be returned by either post, email or contacting the ABGC to arrange collection.

Without the return of these forms the ABGC has limited ability to be able to assist you in the unfortunate circumstance that TR4 spreads to your farm. BQ will not advise the ABGC that you have a positive detection and therefore our experienced staff will not be able to help you to meet legislative requirements to get up and running again with fruit returning to market as soon as possible.

Thank you to those growers who have already signed and returned their consent forms.

Meet the TR4 Control Program team as part of #ABGCatWork.

Check out page 11 of this magazine to find out more about those working on the ground to contain this disease.



Grower and ABGC chair Leon Collins (second from left) with the TR4 Control Program surveillance team.

Boots on the ground

In an important milestone, the first surveillance under the ABGC-led TR4 Control Program kicked off on a Tully Valley farm owned by ABGC Chair Leon Collins.

Our experienced surveillance team were eager to get in the field under the new leadership of the ABGC.

Surveillance remains the key to success for disease control and containment, with early detection essential in limiting the spread as shown by the effective containment of the disease so far – much better than was initially feared with the emergence of TR4 in 2015.

Our team of trained eyes are highly experienced and follow strict biosecurity protocols and operating procedures for decontamination.

Surveillance is underway in Tully, the Tablelands and Lakeland, with Innisfail and other remaining areas to follow.

Punjabi farmers talk TR4 in new translated video

A new video is helping spread the word on Panama TR4 with our Punjabi banana growers.

The video has received over 500 views in the last two months and is available on the Australian Banana Growers' Council YouTube channel.



SOUTH AMERICAN VISITORS TR4 TOUR

By Skye Orsmond

Researchers, scientists and government officials from South America gained an insight into how Australia is managing TR4 during a seven-day tour of Far North Queensland and Brisbane in October.

TR4 researcher Professor Elizabeth Aitken from the University of Queensland and ABGC's Research and Development Manager, Dr Rosie Godwin, hosted the nine participants for the tour which was funded by the International Atomic Energy Agency (IAEA).

IAEA support was provided to give Latin American countries the opportunity to exchange experiences about the disease management strategies that are being applied in Australia, which is recognised as a successful leader in TR4 control and containment.

"Sharing knowledge of effective containment measures is a faster and more efficient way to safeguard banana production in countries new to the disease and maintain their significant export industries," said Dr Godwin. "There is no benefit in reinventing the wheel."

Of the nine participants attending the workshop tour, two each were from Venezuela, Brazil, Peru and Colombia and one was from Ecuador.

The three-day tour of Far North Queensland included a mini-science symposium at the South Johnstone Research Station, a day with the ABGC's TR4 Control Program team in Moresby and farm visits in Tully and on the Atherton Tablelands.

Tour participants were greatly appreciative of growers who accommodated on-farm visits and shared their TR4 management strategies and experiences.

Presentations on the latest research, variety trials, extension and management approaches were amongst the topics of discussion at the mini science symposium.

A presentation by Tegan Cavallaro (Department of Agriculture & Fisheries) provided insights into how growers have been encouraged to implement on-farm biosecurity practices through extension activities.



Left to right - Back row: Esther Dagger, Janay Serejo, Rosie Godwin, Elba Vallejo, Jeff Daniells, David East, Liz Aitken, Tony Pattison, Juliana Alexandre, Andrea Ramos, Katie Robertson, Carlos Torres. Front row: Danilo Vera, Kathy Grice, Gustavo Rodriguez, Jose Galarza.



Jeff Daniells presenting variety trials at the South Johnstone Research Facility.

"Prior to the detection of Panama disease in north Queensland in 2015 most growers did not have biosecurity practices in place," Ms Cavallaro said.

"A dedicated extension program was developed to rapidly equip growers with knowledge of the disease and encourage them to implement on-farm biosecurity practices. Each farm layout is different and has different challenges, so a personalised and interactive approach was taken to help growers consider the biosecurity practices they could implement.

"As time went on, cost and time were recognised as the largest barriers for growers adopting biosecurity

measures. Eight years on, the industry's extension program continues to share examples of different on-farm biosecurity practices which growers have implemented including a focus on low-cost options such as converting 1000L pods into footbaths and spray down units."



Tegan Cavallaro (Senior Development Horticulturist, Department of Agriculture and Fisheries) presenting on the grower extension response to TR4.



Tony Pattison (Senior-Principal Nematologist, Department of Agriculture and Fisheries) presenting on how to make better TR4 management decisions.

Tony Pattison presented on 'building banana soil bioprotection beyond biosecurity' and how to make better Fusarium wilt management decisions.

The conclusions presented were; soil microorganisms are the first line of defence to slow an incursion of TR4, soil bioprotection can suppress disease through addition or through conservation practices to enhance the 'core' microbiome and that whole farm planning and knowledge sharing, particularly smallholder growers is required for greater industry protection.



Kathy Grice, Principal Experimentalist (Plant Pathology) Department of Agriculture and Fisheries presenting at the mini symposium.

Kathy Grice, Principal Experimentalist (Plant Pathology) Department of Agriculture and Fisheries, presented on the efficacy of disinfectants for Race 1 Panama disease. Twenty-seven different products were tested in various concentrations during the trials, and it was found that not all products were equally effective.

Ms Grice provided an overview of the products trialled and what were proven to be the most effective.

Recommendations included being proactive, ensuring soil is removed before using disinfectant, change footbaths regularly and use test strips to check concentration levels, and remembering that disinfectants are only part of solution.

Other presentations from DAF staff included *Trichoderma virens*: a potential biocontrol agent of Fusarium wilt in banana presented by David East and a TR4 resistant varieties presentation from Jeff Daniells and Katie Robertson.

For further information on on-farm biosecurity plans and case studies, disinfectants, and more visit www.betterbananas.com.au

After the group left North Queensland, they continued onto the Brisbane component which included a series of scientific talks with banana researchers and facility tours at the University of Queensland (UT), Redlands Research Station and the Ecosciences Precinct talking to QDAF staff at the TR4 diagnostic testing laboratory.

How ABGC is leading the fight against TR4



TR4 Control Program staff discuss ABGC's approach to disease management.

The Moresby TR4 Control Program office hosted the tour group for robust discussions and presentations from the TR4 Control Program team.

"The workshop certainly provided a wealth of information, ideas and approaches that participants can consider in their own countries. For example, surveillance strategies, destruction zone design, diagnostics, performance of improved germplasm, breeding strategies, extension and communication approaches, and suppressive farming practices," Dr Godwin said.



Boot exchange at Mackay's Bolinda farm.

"The standard of the presentations and robust discussions, and the generosity shown by Australian growers who gave up their time and hosted the group on farm tours to illustrate their farm and biosecurity practices, were major highlights of the tour," Dr Godwin said.



Nicola Mackay and Jason Vipiana provided the group with an insight into Mackay's Bolinda Farm's biosecurity procedures and a destruction zone.



On farm learnings: A visit to a destruction zone on Mackay's Bolinda Estates Farm was a highlight of the NQ tour.



TR4 Control Program Grower Support Coordinator Jess Portch with surveillance staff at the Sandy Creek wash-down facility demonstration.



Vehicle wash-down demonstration.

Professor Liz Aitken said the workshop provided an opportunity to share experiences to help develop best practice and minimise mistakes.

"I think the visitors left Queensland a little bit more optimistic about the long-term consequences of TR4 after seeing what is being done here to curtail the spread of TR4," Prof Aitken said.

"What particularly impressed the visitors was how much industry pulled together in their biosecurity approach," she said.

Dr Rosie Godwin added, "The workshop was a highly collaborative exercise with new networks and relationships built between Australian and our Latin American counterparts."

Bananas are the eighth most important food crop in the world, and the fourth most important in the least developed countries, according to Food and Agriculture Organisation Statistics data.

How Brazil is preparing for TR4



Juliana Ribeiro Alexandre - Brasilia, Ministry of Agriculture and Livestock (MAPA), Chief of Division - Prevention and Surveillance of Quarantine Pests.

Brazil hasn't detected Panama TR4 within its borders, but it's only a matter of time, with the disease spreading through three neighbouring countries on its doorstep.

Ms Juliana Alexandre from the Ministry of Agriculture and Livestock (MAPA) is the Chief of Division for Prevention and Surveillance of Quarantine Pests.

"Brazil has a list of 800 quarantined pests. Of those 800, 20 are top priorities for MAPA," Ms Alexandre said.

"Fusarium is in the top 20 pest and disease priorities for the federal government. We have created a prevention and surveillance program for each pest. In addition to Mapa inspectors, we count on the support of researchers from the Brazilian Agricultural Research Corporation (EMBRAPA) and universities to develop our programs."

"Peru, Colombia, Venezuela all have TR4 – that's why we're in a hurry to be prepared. Because it's a question of how long we have until it comes."

Brazil is fourth largest banana producer in the world, producing more than six million tonnes a year.

"We have banana farms in all the states of Brazil – from the Amazon in the north, to the greatest production areas of Sao Paulo and Santa Catarina in the south."

Some of the challenges the country will face when TR4 enters the country include finding partners in the industry. Brazil does not have a national banana industry association. Unlike what happens in Australia, all administrative and financial responsibility for organizing and executing phytosanitary prevention and emergency plans lies with MAPA, without the support of industry.

"Some production chains are more organised than others."

The large border Brazil shares with neighbouring countries is also a concern for the Government.

"Most pests are introduced from the North, at the Amazon, where the countries with TR4 are," Ms Alexandre said.

"When we had to restrict our actions during the COVID pandemic, there were two programs considered essential services and could not be stopped. One was for TR4 – including surveillance in the field, education, and biosecurity for the disease."

"This shows how highly we prioritise this risk to the banana industry."

"There will always be new pests and diseases on the horizon, our job is never boring there's always something happening, we need to continually learn and adapt."



(L-R) Andrea Ramos Portilla from The Colombian Agricultural Institute (ICA) with Mr Gustavo Rodriguez from The Colombian Corporation for Agricultural Research.

Information exchange important for TR4 research

Colombia is the fifth largest banana exporter in the world (after Ecuador, Philippines, Guatemala and Costa Rica).

TR4 was first detected in the northern region of the country in August 2019, triggering a national emergency response from The Colombian Agricultural Institute (ICA).

Colombia currently has eighteen farms in quarantine with TR4.

Senior PhD researcher, Gustavo Rodriguez, has focussed on research and trials with TR4, and found the results presented at the mini science symposium an interesting comparison.

"This exchange of information is important for science. We have a similar approach to disease management in Colombia but in practice it's different in some ways, especially in the implementation of eradication protocols for symptomatic plants," Mr Rodriguez said.

"It's been a very interesting and useful experience for me. Especially the demonstration of strategies adopted by banana farmers and the results of the research carried out in Australia."

BANANA BENCHMARKING NOW UNDER WAY

A note from the team at Aglytica, the company behind the Hort Innovation-funded project.

Benchmarking is a term and practice that can resonate, or repel depending on your thoughts around its use, its relevance, or even its legitimacy or place within your business.

As a company that was born from 30+ years of benchmarking results within the broadacre cropping and livestock industries, Aglytica has a great understanding of the wide-ranging thoughts and adoption of the practice.

The word benchmarking is what drew Aglytica to the opportunity that has presented within the banana industry, it is after all the function that our company was born from, and we continue to do within other industries.

However, what we aim to do, working with the banana industry over the course of the next 5 years and beyond, is not benchmark. Rather, we aim to provide invaluable insights in financial, production and sustainability performance through data.

Insights that will help to shape, mould, or ground truth decisions. Insights that will assist in driving business efficiency and profitability. Insights that will see the banana industry carry a strong voice in environmental sustainability. Insights that are all born of data.

We are here to help you make smarter decisions by making complex data easy to understand.

Simply, we will grow your insights.

Your time is valuable – here's what you're committing

At the heart of our data insights is the understanding that banana growers, like your peers in other industries we work with, are incredibly time poor, and are often wearing multiple hats within a highly complex business.

That is why we have developed data gathering that is easy to complete, without significant additional time impost to your incredibly busy lives. A commitment that will take approximately 2 – 2.5 hours of your time per year gathering data, some of which could be outsourced to your accountant or bookkeeper.

What you will gain from your involvement

This investment in your business will provide peer comparable insights through anonymised results that will allow you to understand where practice difference lies. Gain a window into best practice across the metrics that will be assessed, and establish a baseline for Carbon Emissions for your business.

While the below is from a set of Broadacre Cropping data, and the chart axis will not bare any relevance to your operations in their measures, the insights gained through this chart led to business 285 remarking 'I would love some of whatever number 94 is doing. Whatever it is, he is getting two tonnes more a hectare than me!'

There's no doubt this is an extreme example, with many variables in play that could impact the yield differentiation that both farmers achieved off their annual rainfall of just under 300mm in the growing year. But this simple comparison has farmer 285 asking some questions of the practice, inputs and yield results of his business. As this farmer said, "Gee, you don't know what you don't know."

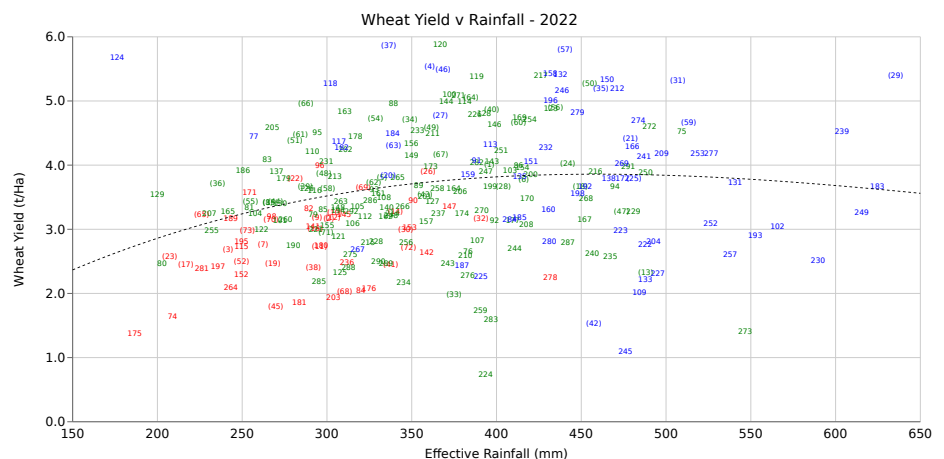
The way in which we are designing the comparative charts and measures for the Banana Benchmarking project alongside key stakeholders within the

industry are intended to provide "lightbulb" moments, just like the one described for grower 285.

No one solution will ever have all the answers, or provide the silver bullet to success, that is not what we are looking to build with your support. We are looking to provide insight and challenge, designed to help make a difference to your operation.

Alongside this intended challenge, the project will bring an opportunity to baseline the Carbon Emissions of your business.

While the apparent need to calculate or report on business level emissions is not yet here, an ability to build a data story, and an annual accredited emissions audit as an output of the data gathering, will see you ahead of the curve when this requirement is called for.



Rainfall Zone	Effective Rainfall (mm)	Wheat Yield (t/Ha)
L	288mm	2.85/Ha
M	352mm	3.71/Ha
H	445mm	4.05/Ha

All regions had lower effective rainfall averages than in 2021. Despite this, there were some HRZ farms with higher effective rainfall. Clients in the LRZ and MRZ increased their wheat yields from the previous year as conditions were ideal. Good establishment in combination with cool finishing conditions allowed crops to achieve their potential. Some growers in the HRZ were too wet, which led to the HRZ average yield being lower than in 2021. Each of the zones exceeded the five-year average.

Will you take part?

All of the above will not be possible without the data that will drive it.

This is where we need you as a grower to get involved, present your data, which will be anonymised and further contribute to a Banana Industry that:

- Evaluates industry and individual performance
- Encourages collaboration
- Improves outcomes and competitiveness
- Advocates for best practice and continuous improvement through data insights
- Creates a line in the sand moment for financial and environmental sustainability

For more information, or to express your willingness to participate please do not hesitate to contact:

Glenn Briggs
0438 976 910
gbriggs@aglytica.com

Eric Schluter
0400 707 352
eschluter@aglytica.com

CHLORPYRIFOS COUNTDOWN: WHAT YOU NEED TO KNOW AHEAD OF THE APVMA REVIEW OUTCOME

Products containing chlorpyrifos are currently under review by the Australian Pesticides and Veterinary Medicines Authority (APVMA). Timelines indicate the outcome of this review is due late 2023/early 2024. Pending the review outcome, it is possible registrations and permits for products containing chlorpyrifos may be immediately suspended or phased out.

Already, Adama who manufactures Strike-Out®WP (active ingredient chlorpyrifos) have announced they are halting production of the product. The reasons given for this are the uncertain future of chlorpyrifos in the light of the review and some manufacturing upgrades required to produce the product.

What is industry doing about this?

- The ABGC has highlighted the impact the cancellation of chlorpyrifos would have on the banana industry to Hort Innovation who have secured funding for the inclusion of a new active constituent in trials. These trials will gather data for potential registration in bananas for bunch pests. These trials won't be completed before 2026.
- ABGC will coordinate a submission to APVMA on the impact the loss of chlorpyrifos would have on the banana industry if it is withdrawn from use.
- New methods of bunch pest control, including softer options and biologicals, are being researched in the 5-year Banana Integrated Pest and Disease Management Program being

delivered by the Department of Agriculture and Fisheries (DAF) and funded through the Hort Innovation banana fund (R&D levy).

- As part of the National Banana Development & Extension Project, bunch pest management was raised as a priority issue for growers. As a result, a series of field trials have been undertaken to better understand how to effectively manage bunch pests with the current chemistries registered for control of bunch pests.
- Relevant information is being delivered to growers through the National Banana Development and Extension Project and Banana Industry Communication Program.

Can I still dust bunches?

Supplies of Strike-Out®WP are limited. If you have any of the product, the minor use permit (PER14240) to apply chlorpyrifos products (containing 500g/kg chlorpyrifos) in a dust mixed with talc is valid until 31 July 2024, **pending the outcome of the chlorpyrifos review**. Please note that the talc itself is not under review.

What chemicals can I apply to the bunch to manage the main bunch insect pests?

The table below lists registered (or permitted) chemical actives for bunch application. Chlorpyrifos is still registered for use in bananas (pending the outcome of the APVMA review). While the supply of Strike-Out®WP is limited, there are other formulations that contain chlorpyrifos registered for bananas. However, ensure you check the label for use directions and considerations and keep in mind that emulsifiable concentrate (EC) formulations may cause fruit burn.

The table groups the actives by chemical mode of action. To reduce risk of pests developing chemical resistance, it's important to rotate chemical groups. The information in the table is only a guide and current as of November 2023. Always check the registration status of chemicals and use them in accordance with label directions. Up-to-date information can be found on the APVMA website: www.apvma.gov.au.

Chemical actives registered or permitted for application to the banana bell/bunch for the main insect bunch pests

Active ingredient	Chemical group mode of action	Registered or permitted application via bell injection	Registered application via bunch spraying	Permitted via bunch dusting
Acephate	1B	✓	✓	
Chlorpyrifos	1B		✓ EC formulation may cause fruit burn	✓ (Permit 14240)
Diazinon	1B		✓ Has been reported to cause fruit burn.	
Bifenthrin	3A	✓ Only SC formulation is registered for bell injection.		
Spinetoram	5	✓ (Permit 87198)	✓	
Spinosad	5		✓	

Points to consider about the chemicals listed on Page 20:

- The rate for bell injecting spinetoram, listed in the minor use permit (PER87198), is different to the label rate for bunch spraying with spinetoram. Ensure the correct rate is used to achieve control and reduce risk of resistance developing.
- Only suspension concentrate (SC) formulations of products containing bifenthrin are registered for bell injection.
- Consider resistance management. Rotate chemical groups and avoid bell injecting and bunch spraying with products in the same chemical group.
- Consider pesticide resistance when selecting chemicals to use for bunch, stem injection, stool, stem and band application.
- Check storage requirements of chemicals and only mix volumes required for immediate use.
- Product registrations vary between states. Always check your product label before use.

What other chemical actives are available to manage rust thrip populations?

Chemical control can be directed at both soil-dwelling pupal stage as well as adults and larvae on the fruit and plant. The table below lists registered (or permitted) chemical actives for stem injection, stool treatment, stem spray and band application. To avoid a build-up of resistance, it is important to rotate between chemical groups. For more information visit –<https://www.croplife.org.au/resources/programs/resistance-management/banana-banana-weevil-borer-and-rust-thrips/>

The information in the table below is only a guide and current as of November 2023. Always check the registration status of chemicals and use them in accordance with label directions. Up-to-date information can be found on the APVMA website: www.apvma.gov.au

I currently dust bunches, what do I need to know if I would like to try bunch spraying?

- Good bunch spray coverage is important to get effective control of bunch pests.
- Consider if other elements of bunch pest management may need to be changed to achieve maximum control of bunch pests including fungal organisms – for example, practices to increase air flow in bunch covers.
- Staff training is important for the calibration and application of pesticides. Additional training will be required for farms transitioning from bunch dusting to spraying.

What integrated pest management R&D is occurring?

Bunch pest management research is being undertaken as part of the Banana Integrated Pest and Disease Management project. This medium-long term research is focused on investigating 'softer' biological approaches for managing bunch pests including the use of biologicals and entomopathogens. Laboratory, pot and field trials are underway, investigating aspects of these potential alternative management strategies.

Contact Kathy Grice for more information about this project:

Kathy.grice@daf.qld.gov.au

What research has there been on managing bunch pests with the current registered chemicals?

Applied research on aspects of bunch pest management using current registered products and rates has recently been undertaken as part of the National Banana Development & Extension Program. The team has undertaken trials to improve knowledge about practices for effective bunch pest management including:

- Timing of bunch cover application and its effect on bunch pests
- Volume, timing and rate trials for bunch protection
- Bunch spray technologies

Contact the National Banana Development & Extension team for more information:

tegan.cavallaro@daf.qld.gov.au or (07) 4220 4152.

Are there any new chemicals in the pipeline?

As mentioned above, trial work is underway to generate efficacy and residue data for a new active constituent for the control of bunch pests. The commencement of these trials was delayed due to low pest pressure and they will not be completed before 2026.

Workplace health and safety considerations

You must comply with WH&S directions on labels and permits when applying chemicals, including wearing personal protective equipment. Incorrect use of agvet chemicals can lead to health issues and harm livestock, pets, crops and the environment. The incorrect use of agvet chemicals is monitored and enforced by the police, Safe Work Australia and state government authorities. Furthermore, some of the approved safety and use directions on the label are legally binding – incorrect use can lead to fines, litigation and in some circumstances criminal prosecution.

Before use of any chemical:

- Confirm the registration status by checking the Australian Pesticides and Veterinary Medicines Authority website portal apvma.gov.au
- Check product label and permit rates.

For more information about the Chlorpyrifos chemical review visit - <https://apvma.gov.au/node/12451>

Chemical actives registered for controlling banana rust thrips using methods other than bunch treatment.

Active ingredient	Chemical group mode of action	Registered for stem injection	Stool treatment (30cm radius around plant and up to a height of 30cm on the stem)	Stem spray (Directed at base of stem up to a height of 30cm)	Band application
Fipronil	2B		✓		✓
Bifenthrin	3A		✓		✓
Clothianidin	4A	✓		✓	
Imidacloprid	4A	✓			
Imidacloprid + Spirotetramat	4A + 23	✓			

For more information about the lifecycle of rust thrips, monitoring and management, visit Better Bananas and follow the rust thrips links.

SCREENING NEW VARIETIES FOR YELLOW SIGATOKA RESISTANCE AT SOUTH JOHNSTONE

By Katie Robertson, Jeff Daniells, David East, and Carole Wright, Queensland DAF

Two screening trials have recently been completed assessing new varieties' resistance or susceptibility to the fungal leaf disease, yellow Sigatoka. In the first trial, varying degrees of leaf spot resistance were observed among the Cavendish (highly susceptible), Lady Finger (intermediate resistance) and CIRAD hybrids (resistant). The second trial screened selections from the Goldfinger mutagenesis program. Most of the selections had a similar reaction to yellow Sigatoka as the Goldfinger control, however GMS 766 was significantly more resistant, while four others were significantly more susceptible. This latter result demonstrates that mutagenesis can significantly change a plant's level of yellow Sigatoka resistance.

An estimated \$25-30 million per year is spent on controlling yellow Sigatoka leaf spot (*Pseudocercospora musae*) in Australian banana plantations. Identifying varieties with better resistance to the disease, provided they are otherwise commercially viable, would be of great benefit to the industry, by reducing input costs and reliance on fungicides.

Over the 2023 wet season, two yellow Sigatoka screening trials were conducted at the South Johnstone Research Facility. The first was after the agronomic assessments on 15 varieties had been completed in the 2020 Variety Evaluation and the block was nurse-suckered (first ratoon results were presented in *Australian Bananas* Issue 68, pp. 22 – 23).

The second was on the top-20 Goldfinger selections which had been developed through DAF's mutagenesis project. This block had also been nurse suckered to standardise plant development stage.

In both blocks, leaf disease control ceased a few months prior to nurse suckering to build up inoculum levels and to ensure adequate disease pressure. Plants were assessed for severity of leaf spot disease on three occasions, at monthly intervals leading up to bunching.

The assessment consisted of determining the Youngest Leaf Spotted (10 or more mature necrotic lesions) (YLS), and the Youngest Leaf with greater than 33% of the leaf lamina destroyed by disease (YL33).

The Total number of Functional Leaves (TFL) was recorded if the disease was not present or had not progressed to the >33% necrosis severity level. For the purposes of this article, only the YLS and TFL data will be discussed.

New Variety Selections

Four of the varieties had comparable disease severity to the very susceptible reference variety, 'Williams', which had an average YLS of 4.5. These included the TR4 resistant Cavendish 'Asia Pacific #1', along with the two tetraploid 'High Noon' selections (one with a 'clean' rachis [HNC] and one with a 'dirty' rachis [HND]), and the Pendulous Lady Finger selection.

The other four Lady Finger varieties demonstrated slightly better resistance and were statistically similar to 'Pacific Plantain' (YLS = 6.2), which has a documented intermediate level of resistance to leaf spot. Overseas, the hybrid 'CIRAD 925' has demonstrated both yellow and black Sigatoka (*Pseudocercospora fijiensis*) resistance (Risède et al. 2019).

It was anticipated that the other three CIRAD hybrids may also possess this characteristic, which proved to be the case. Although no leaf spot was present, 'CIRAD 925' and 'CIRAD 918' only maintained around seven functional leaves throughout the assessments, with older leaves snapping due to petiole weakness, while 'CIRAD L9' and 'CIRAD X17' sustained over 10 functional leaves.

The common leaf fungi, Cordana leaf spot (*Neocordana musae*) and banana leaf speckle (*Mycosphaerella musae*), were likely present on all varieties, but more obvious along the leaf margins of the CIRAD hybrids due to the absence of yellow Sigatoka. 'Dwarf Ducasse' was included as the resistant reference variety and supported an average of 13 functional leaves with no yellow Sigatoka present.

Goldfinger Mutant Selections

While Goldfinger has resistance to black Sigatoka, this is not the case for yellow Sigatoka, to which it is better described as having an intermediate reaction. Of particular interest was how the new selections compared to Goldfinger and the possible effect mutagenesis may have had on the plants' reaction to this disease.

The average YLS of Goldfinger was 6.4, which was similar to fifteen of the twenty mutant selections. 'GMS 766' was the only selection that demonstrated better resistance to leaf spot than Goldfinger, having an average YLS of 7.9.

On the other end of the spectrum, 'GMS 602', 'GMS 211', 'GMS 145', and 'GMS 255' had average YLS values of between 5.4 and 4.4, demonstrating they were significantly more susceptible to the disease.

Although not the original objective of the project, these results demonstrate mutagenesis can significantly change a plant's level of yellow Sigatoka resistance. The dwarf Lady Finger selection 'Dwarf Rossi' was planted as a single guard plant at the beginning of each row of Goldfinger.

The level of disease was comparable to the 'Dwarf Rossi' plants in the variety evaluation, allowing comparisons to be made between the two trials. It was not significantly different to Goldfinger in its reaction to yellow Sigatoka.

References

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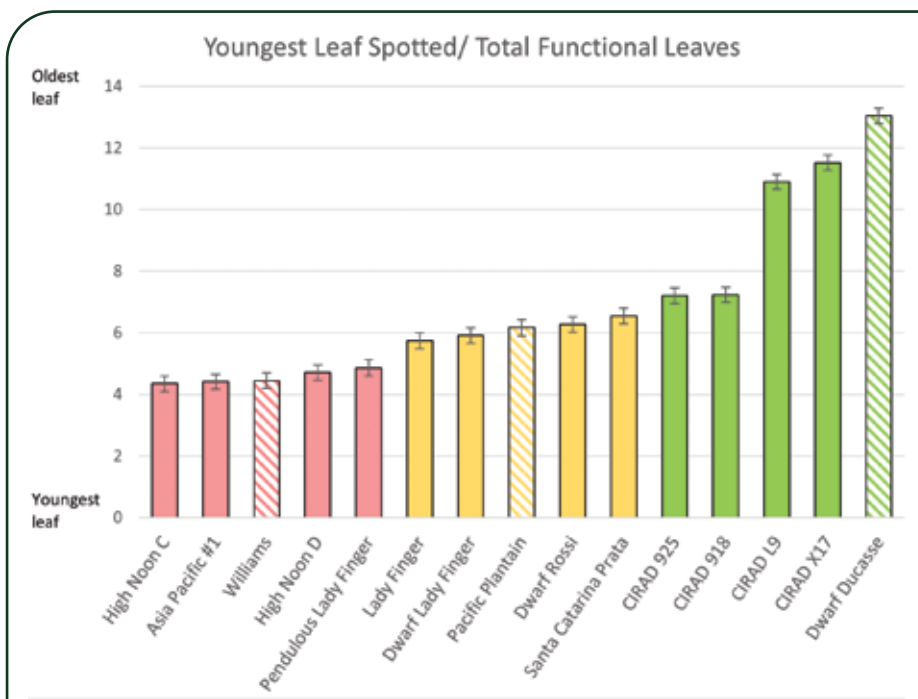


Figure 1. Youngest leaf with 10 or more necrotic lesions (YLS) for 15 varieties at South Johnstone (average of 3 rating occasions; error bars represent ± 1 standard error). If the YLS stage was not reached for a variety (i.e. the CIRAD hybrids and Dwarf Ducasse) the leaf number represents the total number of functional leaves present. Williams (very susceptible), Pacific Plantain (intermediate), and Dwarf Ducasse (highly resistant) were used as references to assess the disease reaction of the new varieties. The different coloured bars illustrate varieties that were statistically similar to the reference varieties (patterned fill).



While the CIRAD hybrids remained unaffected by yellow Sigatoka (CIRAD X17 pictured here), there were other common pathogenic fungi, primarily Cordana and banana leaf speckle present on some older leaves.

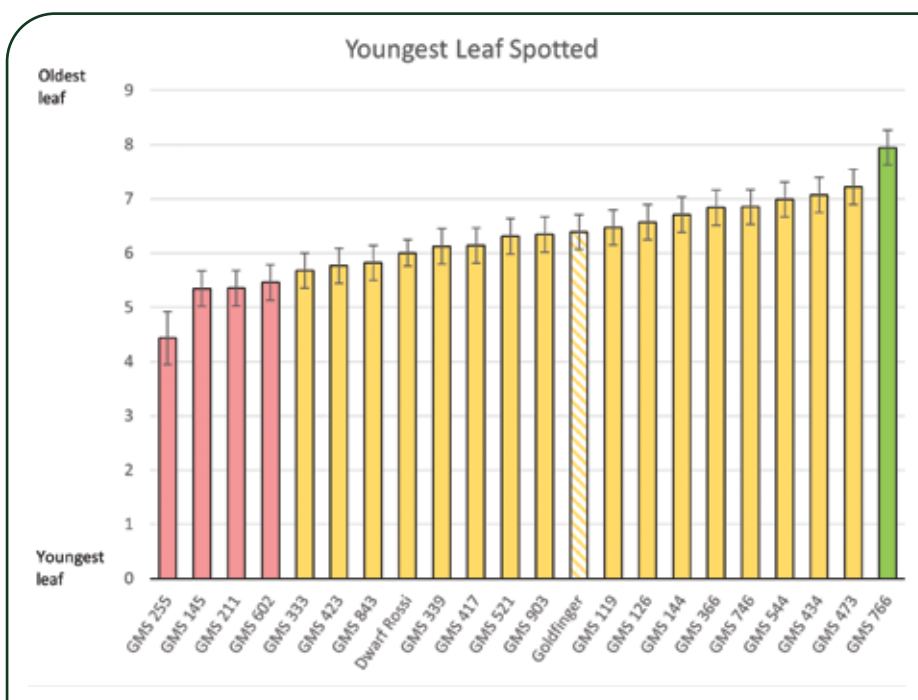


Figure 2: Youngest leaf with 10 or more necrotic lesions (YLS) for the 20 Goldfinger Mutant Selections, standard Goldfinger, and the Lady Finger variety 'Dwarf Rossi' (average of 3 rating occasions; error bars represent ± 1 standard error). The different coloured bars indicate varieties that were statistically similar (yellow) or significantly different (red/green) to Goldfinger (patterned fill).



The TR4 resistant Cavendish 'Asia Pacific #1', was as susceptible as Williams to yellow Sigatoka.

BANANA TIME IN ECUADOR

By Dr Tony Pattison, from the Department of Agriculture and Fisheries

Bananas are big business in Ecuador, the world's largest banana exporter, with annual exports estimated to be worth US\$3.3 billion.

There are an estimated 80,000 banana growers in Ecuador that grow bananas over 164,085ha of land, more than 10 times the size of the Australian banana industry. However, Ecuador is facing a number of crises, Panama disease Tropical Race 4 (TR4) being one of them.

The Association of Ecuador Banana Exporters (AEBE) held their annual international conference between October 25-27, and invited Dr Tony Pattison (DAF) to present on Panama disease TR4 research in Australia.

Although TR4 has not been found in Ecuador, the disease threatens the banana export trade, being found in the neighbouring countries, Colombia, Peru and Venezuela. The preparedness of Ecuador's banana industry to deal with an incursion is a priority for banana growers, exporters, and governments.

Case studies from Colombia have shown a slow spread of the disease between farms, but in neighbouring Peru there were unofficial reports of up to 500 smallholder banana growers being affected by the disease since it was first reported in 2021. Contrary to most countries with TR4, Australia is seen as world best practice at containing the disease, meaning Ecuador is keen to learn from our experiences.

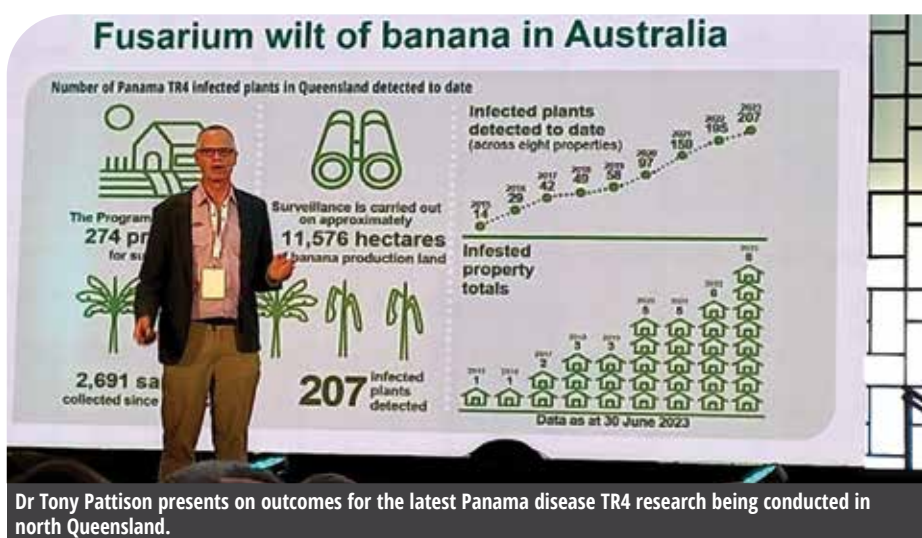
Panama disease TR4 is only one of the challenges facing the Ecuador banana industry. Climate change is expected to impact the main export banana production areas in South America.

Climate modelling is playing a part in preparing banana growers, with warnings that the current El Niño condition will possibly lead to very heavy rainfall in the region. Europe is the main destination for Ecuador's bananas, with the European community increasing their demands from banana growers on traceability, climate and worker accountability.

Technological innovations are seen as one way of overcoming the challenges being faced by banana producers. Over 80 different businesses were present at the conference trade display, with increasing technical advances - like drones, connectivity and product traceability - seen as the best ways to manage the production challenges for the world's biggest banana exporter.



Banana Time, the hashtag for Ecuador's international banana conference representing the world's biggest banana exporters.



Dr Tony Pattison presents on outcomes for the latest Panama disease TR4 research being conducted in north Queensland.

SOIL PHOSPHORUS AND BANANA HEALTH: UNRAVELLING MICROBIAL MYSTERIES

By Tony Pattison, Hazel Gaza, Department of Agriculture and Fisheries, South Johnstone
Anna-Belle Clarke, Paul G. Dennis, The University of Queensland, St Lucia

Adding phosphorus (P) to soil helps to increase banana production. Have you ever wondered though what P addition might be doing to all of the microorganisms associated with roots? This is one of the questions we have unravelled by examining the microbiome of bananas.

In a field experiment, we determined whether adding 40 kg P/hectare/year, (roughly equivalent to one cup of single superphosphate fertiliser per plant) led to changes in plant and soil microorganisms. Applying the P fertiliser to the soil led to a four-fold increase in soil P, which had little impact on soil microbial communities, but led to an increase in fungi related to *Fusarium oxysporum*. Our research has shown that this diverse group of fungi are common members of the banana microbiome. However, the species also includes *Fusarium oxysporum* f. sp. cubense (Foc), which is the fungus that causes Panama disease. Therefore, if we are to increase the bioprotection of bananas against Panama disease, it's important that we are all aware of management practices that favour *Fusarium oxysporum*. Knowing what *Fusarium oxysporum* likes and dislikes can help banana growers to protect farms without Panama disease and slow the spread on farms with the disease.

Our research has demonstrated that banana roots act as a 'filter' to soil organisms, as the number and diversity of soil organisms sharply decreases once you cross the barrier from the soil into the root. However, our research on the banana microbiome has also shown that some microorganisms can 'cheat the system' and cross into the roots to

exploit the plant. The fungi belonging to *Fusarium oxysporum* group are good examples of organisms that like to cheat the system, with Foc, the fungus that causes Panama disease being the 'ultimate system cheater'. Even in soils receiving as little as 40 kg P / ha / yr the *Fusarium oxysporum* can exploit the change in soil phosphate to help it pass through the root barrier, becoming 4-times more abundant in banana roots compared with soils receiving no P.

If adding 40 kg P/hectare/year can lead to a four-fold increase in *Fusarium* within the roots, what happens if you go even higher? In a recent survey of banana farms the amount of soil P ranged from 31 to 460 mg /kg, with a median of 120 mg/kg. Bananas typically don't need a lot of P to grow. Therefore, having P soil levels greater than 50 mg/kg is excessive and could be making banana plants more vulnerable to root diseases by weakening the root barrier defence that filters soil organisms.

While it is good to have nutrient rich soils that support good plant growth, care needs to be taken not to add too much of a good thing. Whenever there is too much of anything, there are always cheaters ready to exploit the system, just as we have shown that *Fusarium* can take advantage of the extra soil P and increase its abundance in the roots of banana plants.



Excessive nutrients like phosphorus can make plants more susceptible to root diseases, like Panama disease, by disrupting plant's defences and the beneficial interactions between the plant and soil microbes.



Fertilisers are required for plant growth, but too much can make it easier for microbes, like *Fusarium* species to pass from the soil into the roots of the plant.



Fertilisers containing phosphorus can help with productivity but needs to be balanced with plant needs.

HAVE YOU GOT SOIL HEALTH COVERED?

By Hazel Gaza, Harry Cosgrove and Tony Pattison, Department of Agriculture and Fisheries, South Johnstone

Healthy soils are the backbone of long-term banana productivity.

Maintaining ground cover has been previously shown to be one way of promoting soil health, by increasing the diversity of plants around bananas. However, what happens on commercial banana farms? The level of vegetation ground covers found in banana plantations in north Queensland can vary dramatically between farms. To highlight the positive impact vegetative ground cover has on soil health, a survey of commercial banana farms in north Queensland was undertaken.

The survey evaluated vegetative ground covers in the inter-row; the row where bananas are planted; and the inter-plant area (the space between plants in the row) (Figure 1A). At the same time, soil samples from these sites were collected and analysed for physical, chemical and biological properties.

The banana farms surveyed were classified into three categories: low ground coverage (<30% ground cover), moderate ground coverage (30-60% ground cover), and high ground coverage (>60% ground cover), moving from the centre of the interrow to the centre of the banana bed (Figure 1). Most farms maintained high ground cover in the inter-row area, between 45 to 80% coverage (Figure 1B). Additionally, 57% of farms had ground covers between 25-50% coverage in the row, and 28% of farms had from 6-30% ground cover between the banana plants.

Results from the physical soil tests showed that soils from farms with high vegetative ground cover had improved aggregate stability (Figure 2A). Additionally, these soils had lower nitrogen concentration, reducing the potential for losses of soil nitrogen from the farm (Figure 2B). Soils with more vegetative ground cover showed greater organic matter recycling potential, with greater labile carbon, the form of carbon easily used by soil organisms, and greater abundance of enzymes (xylosidase) produced by soil organisms during the break down of organic matter (Figure 2C and D). Additionally, soils from farms with increased ground cover showed more activity of enzymes involved in nitrogen (chitinase) and sulphur cycling (sulfatase) (Figure 2D). The increased chitinase activity indicates more nitrogen being released from organic sources into the soil, which corresponds with the low mineral nitrogen in the soils with ground cover.

What was also apparent from a farm with low ground cover, was the big difference between the soil in the interrow and the soil around the banana plants. Most notably, the interrow soil had improved bulk density, higher labile carbon, and increased microbial activity compared to the row and inter-plant soils. These differences in soil properties among the interrow, row and interplant were not observed in soils from farm with high ground cover.

The effectiveness of vegetative ground covers to support healthier soils in bananas lies in their ability to release exudates from their roots.

The root exudates serve as a valuable carbon source for soil microorganisms and enhancing microbial activity. The diversity of plants releasing different exudates means, a more diverse soil microbial community.

Ground covers, whether in the interrow or around the banana plant are proving a valuable strategy to support healthier banana soils. The findings from our survey highlight that the biologically healthier soils are found in areas with vegetative ground covers. Soil health is something that can only build over time, and for banana growing, maintaining ground cover is a practice that can nurture healthier and more productive banana farms for years to come.

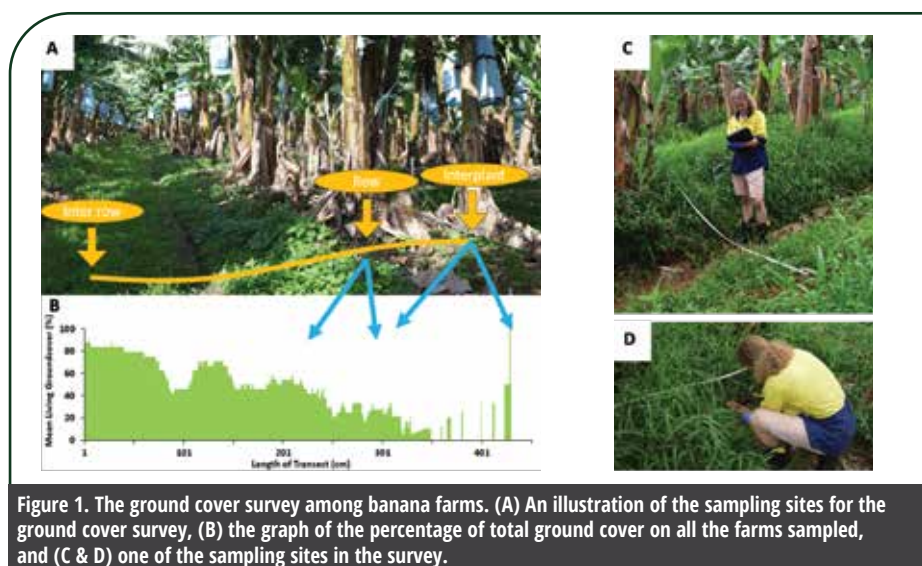


Figure 1. The ground cover survey among banana farms. (A) An illustration of the sampling sites for the ground cover survey, (B) the graph of the percentage of total ground cover on all the farms sampled, and (C & D) one of the sampling sites in the survey.

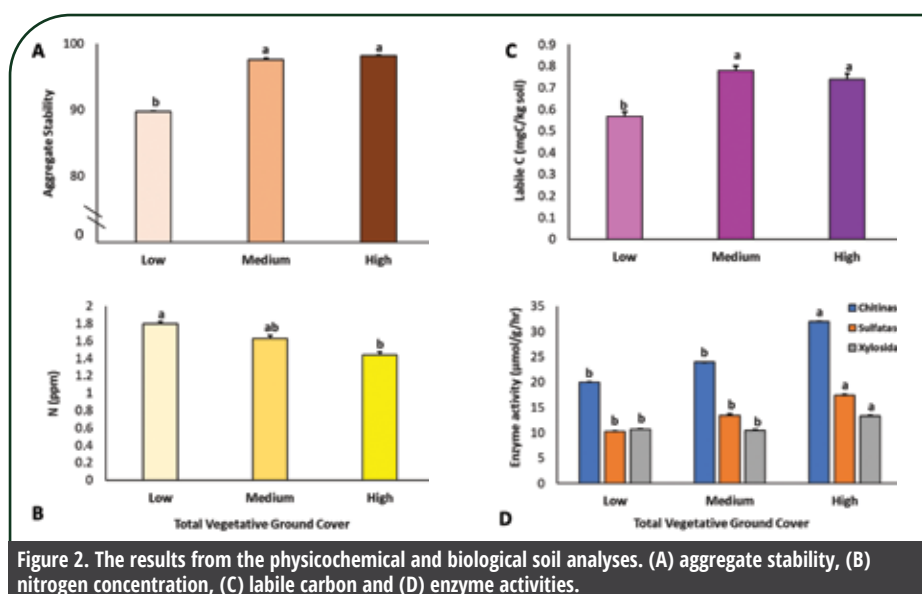


Figure 2. The results from the physicochemical and biological soil analyses. (A) aggregate stability, (B) nitrogen concentration, (C) labile carbon and (D) enzyme activities.

SHARE YOUR PEST PRIORITIES

The Strategic Agrichemical Review Process (SARP) is currently underway for the banana industry, as well as other some other horticultural industries.

The Banana SARP report is an important document that identifies priority areas to focus on, to ensure the ongoing availability and access to effective chemical controls and to address any needs, gaps and risks.

Your input is needed to identify those priority areas.

Please share your thoughts by 22 December by scanning the QR code.



AG CAREERS IN FOCUS

A new report by AgriFutures Australia found that more than 98 per cent of New South Wales teachers and career advisors perceived agriculture to be important for the country's future.

However, 66 per cent noted that their curriculum is too busy to teach about careers in agriculture, with almost 50 per cent saying they lacked confidence in their ability to educate about careers in this field.

The Cultivating the Next Generation project was funded by the Department of Agriculture, Fisheries and Forestry. The report's recommendations include developing video case studies and providing more opportunities for both industry incursions and excursions.

Read the full report: www.agrifutures.com.au

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Yuruga Laboratory and Nursery	07 4093 3826	admin@howefarms.com.au	5970 Kennedy Highway, Walkamin QLD 4872
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ROADSHOWS ROLL INTO NSW

Over 40 growers from Northern and the Mid North Coast of New South Wales got an insight into the latest banana research in September, as part of the 2023 Mini Banana Roadshow Series.

The events, held in Coffs Harbour and Murwillumbah, were facilitated by the National Banana Extension and Development team. Topics featured at the events included presentations and discussion about banana weevil borer management, as well as pesticide resistance and insights into an on-farm trial undertaken in Far North Queensland using predatory mites to manage mites. Variety development was also a focus with a pre-recorded 'virtual' tour of the current ladyfinger trial in FNQ with Jeff Daniells, updates on Goldfinger mutagenesis development and the local pre-commercialisation trials. ABGC's Supply Chain Engagement Manager, Andrew Burns, also provided some insights into consumer marketing.

Tegan Cavallaro, senior development horticulturist with the Department of Agriculture and Fisheries, said they focused the program on issues that NSW growers had identified as priorities.

"It was also a great opportunity to take some of the relevant information we have gathered from work in FNQ, like the insights on mite management and share that with the growers in NSW."

NSW Industry Development Officer Steven Norman added that it was great to see so many growers in both regions come along to the Roadshow events.

"Varieties are a hot topic in NSW and it was good to be able to share and discuss the variety trials happening in FNQ as well as the pre-commercialisation trials on-farms in NSW," he said.

Ms Cavallaro noted that a key part of their work was ensuring that growers felt connected with researchers, and up-to-date on information that could help their business. While websites and print publications have an important role to play, face to face conversations – like those facilitated by Roadshows – are invaluable.

Mr Norman said there were plenty of questions and comments on the research discussed at the events.

"I've since held a couple of extension activities and it's been great to continue the discussions. Furthermore, since the events I've also been undertaking a trial on a farm using predatory mites to manage mites." You can read more about the extension events and the mite trial on Page 30.



ABGC's Supply Chain Engagement Manager, Andrew Burns, shares consumer marketing insights in Coffs Harbour.

Ms Cavallaro acknowledged the work of her colleagues in the National Banana Extension and Development program in putting on the event and gave a special shout out to all growers who took the time to attend. There was also a special thanks given to the Bunchy Top team who helped encourage attendance at the Murwillumbah event.

"I've yet to meet a grower who has spare time, so we really do appreciate you stepping away from your farms for a few hours to take part in these events," she said.

To get in touch with Steven Norman, NSW Industry Development Officer, call 0432 680 532.



From left to right, from the National Banana Extension and Development team: Ingrid Jenkins, Sarah Williams, Stewart Lindsay, Steven Norman, Tegan Cavallaro and Katie Robertson.

96% of those that attended said they learnt something new that would assist their business.

96% gained insights into consumer/customer market trends.

'A very well-run Roadshow'
Coffs Harbour Grower

'Enjoyed the afternoon, very informative'
Coffs Harbour Grower

Keep an eye out in industry communications and on the Better Bananas website for the latest research updates.

INDUSTRY NEWS



**Hort
Innovation**

**BANANA
FUND**



**Department of
Primary Industries**

The mini-roadshow events are part of the National Banana Development and Extension Program (BA19004), which is funded by Hort Innovation, using the banana research and development levy, co-investment from the Queensland Department of Agriculture and Fisheries, New South Wales Department of Primary Industries and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture.



NSW GROWER BARBEQUE

There's no escaping the sheer amount of time it takes to properly complete banana variety trials. It's a tough reality – for all involved at times – but necessary to get through the process correctly.

So an opportunity to see, touch and even taste some of the progress was welcomed by Mid North Coast growers in early November. A pre-commercial trial site featuring the Lady Finger variety JV4241, located on Clinton Welsh's farm, produced its first two bunches. Working with New South Wales Industry Development Officer Steven Norman, one of the bunches was ripened to coincide with a grower BBQ, put on by Mr Norman at Park Beach Bowling Club in Coffs Harbour.

While slightly too early to properly taste test, the fruit looked promising and Lady Finger growers in the room were able to exchange ideas about how to get the most out of the plant and resulting bunches.

"This was a really informal get together – a great chance to catch up really – but it also demonstrated, once again, the value of having these trials on NSW farms. The conditions are different from up north, and no one knows how to make the



Steven Norman, Industry Development Officer with the NSW Department of Primary Industries, with banana grower Clint Welsh.

most of this more than those who are out there, on the farm, every day."

Mr Norman said growers who had taken samples home had provided positive feedback on taste but look forward to tasting the 2nd and 3rd ratoon to get a more in depth look at the fruit.

The barbeque, held on 8 November, was also an opportunity to discuss accessing and growing tissue culture from flasks.

Hort Innovation BANANA FUND NSW Department of Primary Industries



CALIFORNICUS CALLING: TRIALLING PREDATORY MITES IN NSW

It's a mite-eat-mite world out there, but do New South Wales' subtropical growing conditions give the right mite a mighty chance of success?

What is Californicus? A predatory mite (*Neoseiulus californicus*) that feeds on spider mites, amongst other things, and can survive in a range of conditions.

Research is currently under way in Far North Queensland to determine the efficacy and best approach for using *Neoseiulus californicus*, more commonly known just as Californicus, for control of spider mite.

It's an approach that many growers are interested in, including some from New South Wales, who were given an update on the work as part of the 2023 Mini Roadshow Series.

However, one key question remained after the event: given the vastly different growing conditions in the two regions, would Californicus have the same effect on subtropical banana farms in NSW as it does in tropical Queensland?

New South Wales Industry Development Officer, Steven Norman, has begun a trial on farm located on the Mid North Coast of New South Wales, complimenting the work under way further north by his colleagues in the National Banana Development and Extension Program.

"Coming out of the Roadshows, there was lots of interest in biological control for mites but we didn't quite have an answer as to whether

Californicus would work for NSW growers," he said.

"We have now established a pilot trial to examine Californicus effectiveness."

Working with supply from Bugs for Bugs, Mr Norman will look at two application methods: a sachet between banana leaves on a single plant and a loose vermiculture option.

"We'll need to target individual plants to start with, and observe effectiveness on newly emerging leaves. If the results are positive we will expand the trail to investigate application rates, timing and frequency," he said.

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SAMBOS TAP INTO EXTENSION OPPORTUNITIES

After taking over their Daradgee farm late last year, Ray & Jacintha Sambo were eager to hit the ground running. With over 14 years of experience in the banana industry, the couple are ready to put everything they've learned into practice and make a mark on their own farm.

To set up an action plan, they sought help from the ABGC Best Practice Extension team, who were able to help them to develop a farm priority plan aligned with the goals and vision for their farm.

One of their first priorities was to upgrade their fertiliser spreader, which wasn't up to regulation specifications.

"Our old spreader was really inefficient, and we were wasting a lot of valuable fertiliser. Upgrading it was a clear priority for us to set up our farm for long-term success," Ray said.

To achieve this, they decided on a twin worm directional spreader, which would improve precision in the rate and placement of fertiliser applications.

With the help of the Best Practice team, the Sambos were able to access funding for a new spreader through the Banana Best Practice Fund which co-invests with growers for improved water quality. This funding is provided through the Queensland Government's Queensland Reef Water Quality Program.

"It's great," Ray said. "The fertilizer is now only going where it's needed – around the plant. We're not wasting inputs, our plants are getting the nutrition they need and it's saving us time to spend elsewhere on the farm".

The next priority for the Sambos was to improve their understanding of crop nutrition and soil health.

"Knowledge is power. We wanted to have a better awareness of our crop health to make sure we're working towards our long-term goals of increasing production and improving fruit quality," Jacintha said.

So, they signed up to the Cassowary Coast Reef Smart Farming project, which has been helping them develop a nutrient management plan tailored to their farm.

After identifying their goals as part of the project, they attended one of ABGC's Nutrient Management Workshops where they learnt every farm is different and every crop has different needs.

"Our soil type, topography, even our proximity to the waterways, all impact on how our bananas take up nutrients. Now that we've taken soil and leaf tests across the whole farm as part of the project, we're able to see that firsthand," Jacintha said.

A 1-on-1 consultation with the CCRSF agronomist helped the couple break down their soil and leaf test results, and put together an action plan with priorities for the short and long term.

"We need to get our pH up first so that our plants can make the most out of the fertilisers we are

applying," Ray said. "Then our plants will be able to take up all the nutrients and trace elements they need to grow the best quality fruit."

For information and support on nutrient management and how the Best Practice team can support you, contact the Best Practice Extension Team via bmp@abgc.org.au.

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



Ray and Jacintha Sambo have worked with the ABGC's Best Practice Extension Team on plans for their Daradgee farm.

STEPHANIE JOINS ABGC TEAM



Stephanie Ruiz is the BMP team's new Extension Officer.

What does your role with ABGC involve?

As an extension officer, I work closely with

growers to improve water quality through nutrient and sediment runoff reductions. The focus of my role is to help growers identify their own goals and practice changes that will improve farming sustainability and long-term profitability.

What did you do before going bananas?

I started out as a research scientist in biochemistry and microbiology, then moved on to science

education and communication. My last job was working as a training officer with Australia's Nuclear Science and Technology Organisation (ANSTO), which operates a nuclear research reactor just outside of Sydney.

What is it that appealed to you about working with the BMP team?

I've recently moved up here from New South Wales. I really liked the idea of using my skills to contribute to my new community, an important industry, AND the local environment. It's a triple win.

You've moved to Far North Queensland for this role, how are you settling in after a few months?

Has the humidity been kind?

I'm definitely glad to have air-con and a pool! I'm loving it up here, although I don't think I can say I'm fully settled in until I've gone through at least one wet season.

How can growers get in touch?

Call or text me on 0457 924 518, or you can email stephanie@abgc.org.au.

Favourite banana recipe:

I love a banana, peanut butter, and honey sandwich. I lived on these for breakfast one road trip up the East Coast. It's super easy, nothing needs to be refrigerated, and they keep you going for ages. Plus they're delicious.

CLOSING THE LOOP IN BOOGAN

For Michael Russo, sustainability and improving his farm's biodiversity are key contributors to his passion for farming.

For the past two decades, the Boogan grower has been working to make improvements to his bananas, now totalling almost 500 acres, including automating all irrigation and fertigation systems, and creating his own compost.

Working with experts, including Fabian Gallo (an irrigation agronomist) and Mexican company Mashumas, Michael has toured other farming businesses in Australia and abroad to firm up his own farming philosophy.

It was Jairo Restrepo Rivera from Mashumas who taught him the three Ms – matter, microorganisms and minerals (plus a bonus M – management).

His diversified cover crop has made the single biggest impact on this, and on his farm more broadly, and he's spent many years changing blends to get the right mix.



"There is not a single product that's going to make farming sustainable," he said. "It's about changing the system."

He noted this means that change is years in the making, rather than days or even months. His focus on revegetation and reducing sediment loss is also part of this process.

Michael is a Banana Best Management Practice grower, and Chemcert trained. Through using the EcoProtocol he has reduced nitrogen and herbicide usage by 40 per cent. Integrated Pest Management has encouraged natural barriers and

limited insecticide usage, while N leaf testing has contributed to nutrient efficiencies.

He also creates his own compost, using waste from his own farm, and makes biofertilisers.

"The end goal is not to be reliant on anyone else," he said. "We want to get as close as possible to a closed looped system."

Keep an eye on coming editions of Australian Bananas magazine for more stories about growers who are farming for the future.

Want to improve your crop nutrition & soil health?

FREE workshops available for North Qld Banana Growers

ABGC's Best Practice Extension Team is offering banana growers in the Wet Tropics region **FREE** workshops to help improve management, profitability & meet water quality regulations

Soil health & increasing carbon ✓

Nutrient management ✓

Meeting the regs ✓

To find out more contact Molly on 0419 602 854 or molly@abgc.org.au



YOUR VOICE AT THE TABLE

A three-year project focussed on biosecurity and sustainability (BA19005), funded by Hort Innovation and lead by Michelle McKinlay, has just concluded. With another already under way, we speak to the Industry Strategy Manager about what has been achieved through the project and her position, and what growers can expect in the future.



Michelle McKinlay, ABGC's Industry Strategy Manager.

How do you describe your role when meeting someone for the first time?

That's a good question! One of the major roles I had in this project was to share and translate knowledge between growers, industry, government and scientists in a way that each person could understand and apply to their business or work. I effectively give growers a voice at the policy development table because growers themselves are busy farming and producing wonderful bananas. However, I also bring growers to the negotiation table at critical times so that they can describe their own reality to government. It is really important to highlight the unintended consequences of government decision making.

During this project I have had a lot of success influencing government's agenda. Big ticket wins included the environmental regulations for new cropping land; attracting nearly \$5m worth of government investment and shaping the early look and feel of the industry led TR4 Control Program.

How does a project/position like yours guide and represent industry during a transition like we've seen with the management of TR4?

It was my job to work with the ABGC Board, staff, growers and Biosecurity Queensland representatives to find common ground and map a way forward so that the industry was protected as much as possible. A transition like this hasn't been done before in Australia and so it was always going to be challenging. It's been a long journey to get us to this point and there are still issues to be resolved. It's great to now have a small team to be working through the complexities. I am now the only staff member still at ABGC when TR4 was first detected so part of my role is to provide the

corporate history of what has been done previously and why certain decisions were taken.

What other focusses have you had when it comes to biosecurity?

I spent a lot of time during this project working in the "preparedness" space – the fruits of which I hope we never need to use. Though my role, the ABGC is an active participant on the strategic biosecurity stage and we work closely with Plant Health Australia and other industry groups to make sure that the banana industry is well prepared to activate an emergency response should an exotic disease be detected.

Did you see the importance of sustainability continue to grow over the past three years?

The sustainability agenda of government and 'the market' continues to expand. It is a really broad term – so broad it can at times be very confusing. From a banana industry perspective, I have focused on influencing water quality improvement as that has been a focus of the Queensland Government. It is really important that the practicalities of farming in the Wet Tropics is clearly explained to the policy makers who live in Brisbane.

However environmental sustainability can also include carbon footprints, impact of climate change on banana farming, renewable energy and lowering greenhouse gas emissions. Sustainability underpins profitability which is something all banana growers are interested in.

What will be different about the new project now under way?

I am so pleased to be able to continue to work with banana growers. My fundamental role of influencing policy and program development and brokering knowledge between growers and stakeholders won't change but the content of the issues I get involved in will definitely change. Based on discussions with growers and Hort Innovation, there is a growing interest in some of the broader sustainability issues already identified so this will guide my focus for the next five years.

Would you like to give a shout out to anyone involved in your project?

I'd like to thank all those growers and Board Directors who have taken the time to explain their perspective and experience on issues. Also to those government stakeholders who have been prepared to listen and accommodate change to their policy, and also to the SIAP and Hort Innovation for making this role a funding priority. I'd also like to thank Jim Pekin and Leanne Erakovic for their strategic guidance and, of course, there are my ABGC colleagues who together make the ABGC the best team to be a part of.

View a larger version of this graphic by scanning here:



NEW NITROGEN AND PHOSPHORUS RATES TRIAL PLANTED AT SOUTH JOHNSTONE

By Alex Lindsay, Catherine Chung and Andres Morera, Department of Agriculture and Fisheries

The second phase of the Banana Nutrient Rate Trials (BNRT) project is underway with the planting of 1,680 tissue culture plants during late October in a replicated block design trial at the Department of Agriculture and Fisheries (DAF) South Johnstone Research Facility.

The aim of the trial is to provide publicly available information comparing the productivity and profitability of bananas grown under different rates of nitrogen and phosphorus fertilisers, and better understand the environmental footprint of each regime.

The new trial supersedes the original trial planted in January 2019. The Cavendish plants in the new trial are planted wider apart than in the previous trial, and there are more plants per plot, and greater replication than in the original trial. The trial also features a commercial pressurised vat fertigation system, replacing the previous small-scale bespoke system. Fertiliser will be applied twice per month, either via fertigation or surface granular application in wet conditions.

Nitrogen and phosphorus rates

The nitrogen trial has ten treatments in a factorial design, combining different rates in the first year with different rates in later years, along with a nil nitrogen control. The rates being tested are:

- 160, 280 and 400 kg of nitrogen per hectare per year in the first year; and
- 280, 400 and 520 kg of nitrogen per hectare per year after the first year.



After the lysimeter was placed into the ground teams of workers manually replaced and packed the soil with wooden rods to replicate the undisturbed soil conditions.

The phosphorus trial includes plots where 60 kg per hectare of phosphorus was applied as pre-plant fertiliser, and others without pre-plant phosphorus fertiliser. The trial treatments are to use soluble MAP (mono-ammonium phosphate) either monthly or annually, or no phosphorus fertiliser after planting.

Measurement and monitoring program

The focus of the trial is on productivity and profitability. Yield will be evaluated through bunch weight and fruit characteristics, including post-harvest assessment. Yield data will be used by the DAF Economics group to undertake an analysis of each treatment.

A key feature of the trial design has been to include extra plots where the subsurface water will be studied in detail. Soil moisture probes have been installed in each of the extra plots, to monitor the water usage across the site and between treatments. The probes will guide the application of irrigation during the dry season. Piezometers have also been installed, to record the influence of wet season groundwater at the site.

In each of the extra plots there are three lysimeters, installed a metre below ground, to estimate the

amount of water and dissolved nutrients passing down through the soil. Installing the lysimeters involved an excavator with auger and many hours of manual labour, as the soil around and above the lysimeters had to be re-packed at the same depth, and to the same density, as it was before.

Plant nutrient status will be assessed using foliar sampling and associated techniques. Soil nutrient levels will be assessed through regular soil sampling. DAF's Nematology and Soil Health team will monitor changes in the soil microbial community, in selected treatments.

Collaborating Paddock to Reef Paddock monitoring trial site

The new BNRT trial is also collaborating with the Paddock to Reef (P2R) Paddock monitoring team to better understand off-site movement of nutrients, pesticides, and sediments. Adjacent to the replicated block trial is a new large-scale trial where surface water runoff and deep drainage will be studied by the P2R program. This site was planted at the same time as the BNRT trial and is currently being prepared to collect runoff samples for this coming wet season. This site was also installed with lysimeters to better understand drainage of nutrients and pesticides below the root zone, as well as in the inter-row area. The site will be managed collaboratively with DAF, using the same crop management practices, and fertilised at the regulated rate of nitrogen and phosphorus.

About the project

The banana nutrient rate trials are funded through the Queensland Government's Queensland Reef Water Quality program and is being delivered by the DAF. The project started in 2018 following agreement between the Queensland Government and banana industry representatives that transparent, high-quality research under contemporary farming conditions was needed.

The project is guided by a Project Reference Group of local commercial growers, representatives from ABGC, DAF and the Department of Environment and Science (DES). Phase 2 of the project commenced in March 2023 and runs until June 2026. Further trials are planned to be planted in 2024, at South Johnstone Research Facility and on commercial farms.



An excavator was used to auger a narrow hole for the lysimeter to a depth of 2.1 metres, in 20 cm increments. The soil was placed into labelled tubs for re-packing the hole.

BUNCHY TOP BATTLE CONTINUES

ABGC EXPANDS ITS REACH IN THE FIGHT AGAINST BUNCHY TOP IN COMMERCIAL AND RESIDENTIAL PLANTATIONS

On-farm grower workshop

The Australian Banana Growers' Council (ABGC) has further extended its education and awareness activities in New South Wales and Queensland to support prevention, preparedness, containment and response to Banana Bunchy Top Virus (BBTV) under Hort Innovation Project BA21003.

The *Multi-pest surveillance and grower education to manage banana pests and diseases project* commenced on 1 July 2022 and is now in its second year of project activity. The project is aimed at BBTV containment and grower education in NSW and SE QLD, and the management of banana pests and diseases in North Queensland.

In the second year of the project, two on-farm workshops are planned where commercial growers can participate and be informed in key elements of Bunchy Top prevention, detection and control.

The first of these workshops was delivered on 25 October 2023 at Coorabell in Northern NSW. The ABGC's BBTV Project Officer in NSW, Carena Rose, gave a talk on the history of BBTV and its impact on the industry since being introduced. Ms Rose also explained the mode of infection and how to prevent its spread, along with the methods and chemicals used in the control and containment of this potentially devastating disease.

ABGC's NSW Bunchy Top Team Leader, Wayne Shoobridge, also displayed infected and uninfected leaf samples, while showing growers how to properly view a sample for symptoms. Information was also provided on what other symptoms to look for when looking at the whole of the plant, rather than a leaf sample.

The workshop was supported by the New South Wales Department of Primary Industries through Steven Norman (Sub Tropical Horticulture Development Officer for Northern NSW), who provided information on tissue culture plants along with a display of several varieties of young banana plants.



Bunchy Top inspector Amardeep Singh shows workshop attendees how to look for symptoms.

Steven had also brought a mini greenhouse set-up, with a few overhead irrigation lines, so growers could get an idea of how they could house tissue culture orders as they are maturing. The varieties on display were Ducasse, Pisang Ceylon, High Noon and Horn Plantain which outlined the multiple varieties available for purchase as tissue culture plants.

The second workshop is planned for early next year.

Organic growers learn about Bunchy Top

The Project also plays a role in raising awareness within the community and educating the public on how they can assist in the control of Bunchy Top within its established containment zones. This is to reduce the bunchy top disease risk that rural residential and backyard bananas pose to commercial plantations.

Education and awareness activities directed at the community were further enhanced through a presentation provided by Samantha Stringer in South East Queensland to the Brisbane Organic Growers Group on 2 November 2023. There were approximately 30 attendees at the meeting and Ms Stringer spoke for an hour and then answered questions for another hour. Ms Stringer reported that all those in attendance were very interested in

the topic and asked many great questions.

Notably, as a result of community engagement activities, over 5,000 people have now viewed the project's *Bunchy Top Disease in Backyard Banana Plants* YouTube video. The video provides information on Bunchy Top and how to deal with it on your own property and has resulted in a significant decrease in community calls for assistance.

Education and awareness campaigns implemented by the project alongside the implementation of grower involvement policies, have reduced project expenditure on chemical usage to approximately one sixth of monthly costs incurred under the previous project (BA18000). In addition, this approach has facilitated an overall budget reduction of 20% from the previous project, while building additional capacity and capability to deal with and contain Bunchy Top within areas where it is known to occur.

Hort Innovation BANANA FUND



Samantha Stringer presented to the Brisbane Organic Growers Group in November.



Wayne Shoobridge at the training event in Northern New South Wales.



Carena Rose, Bunchy Top Project Officer, on farm at Coorabell.

REAL-TIME CONSIGNMENT MONITORING

Unpacking the costs and benefits

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

Monitoring supply chain performance is critical to delivering more consistent product quality

Banana fruit quality and shelf life are sensitive to fluctuations in storage and transport temperature, relative humidity, ethylene gas levels and vibration events. We recently monitored 35 banana consignments along the Australian domestic supply chain and found that 25% of loads experienced temperatures below the recommended minimum of 13-14°C¹. Exposure of fruit to less than 13°C during consolidation, transport or unloading at the dock can trigger development of under-peel chilling injury. This highlights how any slip-up in cold-chain logistics can quickly degrade a valuable product, making it difficult to sell and contributing to food waste. This is a triple loss for consumers, growers and the planet.

Consignment monitoring technology

A range of technologies are available for monitoring supply chain handling conditions. Hard-wired tracking systems in trucks can provide information on fruit temperature during transport. Portable temperature dataloggers can be included in boxes of fruit to record conditions from packing to retail. Manual download dataloggers cost as little as \$12 each. The data they collect can help identify areas for improved handling practices in future consignments. However, retrieving these loggers from consignments can be challenging. Without the data, this can become a costly and futile exercise. Modern autonomous reporting dataloggers fitted with a SIM card retail for \$50-90 each. These loggers capture consignment temperature and location plus other variables like vibration, in real-time. Whilst the unit cost is relatively higher, less time is required to pinpoint handling issues.

What are the real costs and benefits of consignment monitoring?

Cost	Benefit
Datalogger hardware and associated software	Improved quality assurance, traceability, compliance
Staff time to activate dataloggers and monitor consignments	Data driven decisions to avoid loss or divert product to other markets or use
Staff commitment to interpret monitoring data and follow up with supply chain partners	Better communication, collaboration and practices along the supply chain
May uncover the need for investment in better practices and infrastructure	More consistent product quality and shelf life and improved customer satisfaction

A domestic supply chain scenario

Bananas that arrive in the market below 13-14°C risk being rejected and diverted to another customer at considerable economic loss. Our research has shown that exposure to 10-12°C for 8 hours may not damage fruit. However, exposure to these low temperatures for 24-48 hours will result in significant injury and food waste. While chilled fruit may be diverted to a food processor, the total retail value of an average 20-pallet consignment would reduce from about \$80,000 to as little as \$13,000, which would not cover production and transportation costs. A \$50-90 investment in a standard real-time temperature datalogger that provides notification of chilling events could help avoid this loss and guide rapid decision-making if redirecting rejected fruit is required.

An export supply chain scenario

Two out of nine Pacific Coast Eco Bananas export consignments were recently rejected due to chilling injury. Dataloggers in the affected consignments indicated that fruit were held at 3-5°C for 4-8 days at the freight forwarder and importer. Sharing this information prompted improved handling to limit exposure to below 13°C to less than 8 hours in subsequent consignments. The grower is now also activating the dataloggers to trigger low temperature alerts that immediately notify supply chain partners when to move fruit to a warmer storage environment. Based on our chilling injury risk models, if fruit are moved within 24 hours of exposure to 3-5°C then damage could be reduced by up to 65%. If the fruit cannot be moved in time, the export consignment could be cancelled, saving up to \$4,620 per pallet in airfreight alone. If the damaged fruit were redirected to a local cake

processor, then up to \$9,000 could be saved less the cost of loggers (\$100) and time to monitor. This would also save 1,980 kg of fruit going to waste.

These scenarios highlight the potential economic benefits of using real-time dataloggers and associated decision aid tools to monitor and manage banana consignments. Recognising the cost, effort and cooperation required to realise the full benefits, we recommend focusing monitoring on the highest risk supply chains first.

"This work has been critical in identifying common weaknesses in the transport and logistics section of the supply chain. With profit margins being non-existent, never has the time been more urgent to address and eliminate waste issues for all parties in the supply chain." Dianne Sciacca, Managing Director, Pacific Coast Eco Bananas



Figure 1. QA testing showing bananas at <13°C that led to consignment rejection.

For further information, contact John Archer at John.Archer@daf.qld.gov.au or visit the DAF Supply Chain Innovation webpage.

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.

References

1 Archer, J., Nguyen, M., Macnish, A., Veivers, S. (2023). Modern monitoring technologies for improving supply chain performance. Australian Bananas 67 (April 2023), p 35.

NATIONAL MAP OF BANANA PLANTATIONS

Researchers at the University of New England's Applied Agricultural Remote Sensing Centre (AARSC) working with ABGC have updated the national map of commercial banana plantations under a new project to 'spatially enable horticulture tree crop industries in Australia'.

The Australian Tree Crop Map (ATCM) was originally developed under Phase 1 of the 'Multi-scale Monitoring Tools for Managing Australian Tree Crops' project, which then included all commercial avocado, macadamia and mango orchards greater than 2 ha. First published in 2017, the ATCM provided each industry with an accurate 'baseline' of the extent and distribution of production area. Under the Phase 2 project, AARSC has built on these foundations by updating the map at greater detail (> 1 ha), and also included all commercial citrus orchards, olive groves and banana plantations.

Australian Tree Crop Map Dashboard

(www.une.edu.au/webapps)

This dashboard-style web application features the latest map and includes metrics for avocado, banana, citrus, macadamia, mango, olive and truffle orchards (area of production in hectares). At national scale, clicking the map will return the total area of orchards by state and territory in a pop-up (Figure 1), while zooming in to the map will show Local Government Areas (LGA). Navigating around the map can be achieved by using the bookmark tool, or the user can simply type an address or place name into the search box and/or simply pan and zoom the map. The dashboard will update the summary statistics for each tree crop (at bottom) on-the-fly, based on the map view extent.



Figure 1: The ATCM Dashboard is a great tool to understand where Australia's tree crops are grown.

At state-level, Queensland has the largest production area of banana plantations with 12,399 ha (91%), followed by New South Wales with 866 ha (6%). Completing the national total is Western Australia with 265 ha and the Northern Territory has 140 ha.

The Cassowary Coast in far-north Queensland is the largest LGA with 8,353 ha (61% of the national total) followed by Mareeba with 1,275 ha (9%). Cairns has 1,019 ha (7%), Tablelands 957 ha (7%) and Cook has some 669 ha (5%). Coffs Harbour has 416 ha (3%) and Carnarvon currently has 217 ha (2%).

In this latest update of the mapping published in May, AARSC have completed field validation in Central Queensland (April) and the Northern Rivers and Mid-north Coast of NSW (May). Since October 2022 when the map was last updated, analysis for change shows the Coffs Harbour LGA has exhibited the greatest area of new plantings with 118 ha added, whilst in the Cassowary Coast had 227 ha removed. Some of these metrics are available via the ABGC Members' Portal.

The AARSC mapping team continue to update the national map, including the interpretation and action of all feedback received, with the next scheduled update will be published in November.

National Map supporting industry knowledge

With ongoing support secured for the next 3 years to 'spatially enable horticulture tree crop industries in Australia' AARSC will continue to maintain the national map and additionally support the development of 'industry-only' maps. Funded by the Future Food Systems CRC, Hort Innovation, UNE, Avocados Australia Ltd, Australian Banana Growers Council, Citrus Australia and the Australian Macadamia Society – AARSC will work with each to develop 'industry-only' maps. Applications of the spatial information further underpin the traceability, biosecurity, natural disaster recovery, market and sustainability challenges for horticulture in Australia – including bananas.

Each industry body will work with their respective grower base using an AARSC developed 'Block Builder' mapping application (app) to assign additional information at greater detail (e.g., variety, planting date, management, etc). The industry-only maps will capture more detailed spatial, temporal and attribute data that will significantly enhance industry level decision-making. In order to achieve this level of data collection, the AARSC will train staff from each industry body on how to utilise the spatial information, an essential

step as not only does this enable the industry bodies to collect their own grower data, but by building in-house capacity ensures the on-going update of the mapping into the future. Importantly, all data within is managed and secured by AARSC under strict sign-in access only user accounts.

Help maintain the national map!

The change in plantations highlights the need to maintain the map. Mapping the new crops is best informed with the engagement of industry and growers using location-based tools built by the AARSC.

Figure 2 shows an example of ATCM survey submitted for a new banana plantation, which has since been actioned and updated in the map – with the extent of the new plantation shown. Scan the QR code to head to the survey.



Figure 2: Growers can help maintain the accuracy of the map by submitting new plantings through the ATCM Survey.

BANANA INDUSTRY MAP

Visit abgc.org.au to view a banana-only version of the Australian Tree Cropping Map. Simply click on the Resources menu and follow the links.

The *Multi-scale monitoring tools for managing Australian tree crops* initiative was led by the University of New England, and supported by Hort Innovation under the Australian Government's Rural Research and Development for Profit program.

The *Spatially enabling Australia's horticulture tree crops* project is funded by the Future Food Systems CRC, Hort Innovation, UNE and industry partners including Avocados Australia, Australian Banana Growers Council, Citrus Australia and the Australian Macadamia Society.

Craig Shephard, Senior Researcher, Applied Agricultural Remote Sensing Centre, University of New England. craig.shephard@une.edu.au

NATIONAL BANANA DAY

DRIVING DEMAND AND FUELING ACTIVE AUSSIES | 18 OCTOBER 2023

The Australian Bananas marketing program is funded by Hort Innovation using grower levies.

National Banana Day 2023 aimed to spark a national movement.

Celebrating Australia's favourite yellow snack and its growers, National Banana Day 2023 called on every Aussie to make their body sing again by purchasing a banana and taking part in a virtual relay on 18 October.

Research conducted by Australian Bananas prior to the event revealed Australians' level of physical activity was at an all-time low, compared with three years ago (prior to and during the pandemic).

Using a range of tactics, including public relations, social media, retailer activations and primary school activities, National Banana Day was promoted as a day to combat the slump, while celebrating the

perfect nutritious snack to help do this and, of course, those who grow it.

Media coverage began in September ahead of the main event, with Olympian Jana Pittman on board to encourage Aussies to get involved.

Key to this year's success was retailer focus and collaboration on the event. Here's how it played out:

PUBLIC RELATIONS

① *Strategic communication to the public to maintain or cultivate public image. Often involves liaising with media organisations to secure coverage (for example, in a newspaper or on television).*

Partnering with Olympic athlete **Jana Pittman**, Australian Bananas promoted National Banana Day on 18 October as a chance to get moving, calling on Australians to take part in a virtual relay. The task was simple: grab a banana, film yourself being active, then pass the banana 'baton' left or right and share on social channels using #BananaDay for friends, family and followers to join in.

In the weeks leading up to 18 October, pre-pitching was conducted with media outlets, involving brand ambassador Billy Slater and Far North Queensland grower, Paul Inderbitzin, who both provided authentic, trusted voices promoting Australian Bananas' key messages. This helped to achieve mass media coverage and reach new audiences through social media.

SNAPSHOT:

Pieces of Coverage/ Total Reach

127 pieces of coverage reaching 5.5 million Aussies

Positive Sentiment

100%

Key Message Inclusion

3 key messages in 96% of clips

Call To Action Inclusion

85%

Highlights:

<p>ABC News Afternoon</p> <p>Publication: ABC News Afternoon Reach: 57,838 Coverage includes: Spokesperson commentary, multiple brand mentions Link: HERE (View from 0:27 onwards - 1:03 minutes)</p>	<p>The Daily Telegraph</p> <p>Publication: The Daily Telegraph, syndicated x11 times Reach: 196,368 inc. syndications Coverage includes: Video, brand mentions, high-res imagery Link: HERE</p>	<p>News.com.au</p> <p>Publication: News.com.au, syndicated x11 times Reach: 717,368 inc. syndications Coverage includes: Video, brand mention Link: HERE</p>	<p>ABC Radio Brisbane</p> <p>Publication: ABC Radio Brisbane Reach: 302,000 Coverage includes: Spokesperson commentary</p>	<p>2GB</p> <p>Publication: 2GB Reach: 756,000 Coverage includes: Spokesperson commentary</p>
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WATCH THE VIDEO

Leveraging hero partner Jana Pittman, Australian Bananas ambassador Billy Slater, growers, Healthy Harold, and influencers, a hero video compilation was created and shared both with media and across Australian Bananas social media channels to promote the virtual relay and National Banana Day. Check it out ...



SOCIAL MEDIA

① **Digital platforms such as Facebook or Instagram, that allow the sharing of ideas and information, including text and visuals, through virtual communities.**

On the Australian Bananas social media pages (Facebook, Instagram and TikTok), a variety of posts were shared including the hero video featuring Jana Pittman and Billy Slater, as well as key campaign imagery to both announce and celebrate National Banana Day and the virtual relay throughout the campaign.

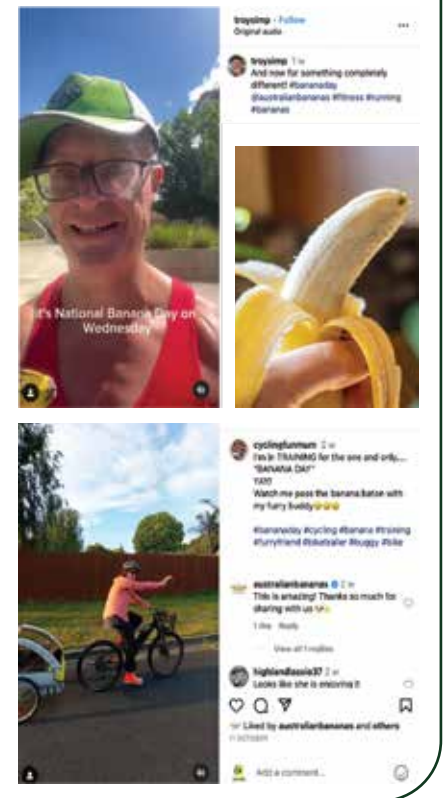


A consumer competition was run across all platforms, encouraging Aussies to grab a banana and film themselves being active (for example, skipping or running on the spot), then passing the banana 'baton' left or right.

Australian Bananas partnered with social media influencers to promote National Banana Day and share key banana messages on their own pages to reach new audiences. Brand ambassadors Jana Pittman and Billy Slater also lent their support on their own social channels, encouraging their audiences to get involved with the virtual relay.



Consumer Competition Winners



RETAILERS, WHOLESALERS AND MARKETS

Woolworths

- ✓ Australian Bananas shirts and caps distributed to all stores and worn by Fresh staff in October
- ✓ National Banana Day Relay and Brainiac Banana poster in all stores



IGA

- ✓ Catalogue panel week commencing October 18
- ✓ 1000 merchandise and poster kits distributed to stores for use throughout October
- ✓ Support Office kit distributed to excite team members and drive participation nationwide



Aldi

- ✓ ALDI website home page banner
- ✓ Inclusion on Camp Quality webpage
- ✓ eDM (email) banner
- ✓ Facebook post
- ✓ DAT screen (store digital screens)
- ✓ Australian Bananas recipes featured on the ALDI website



MARKETING

Coles

- ✓ Partnership with Little Athletics National Banana Day celebrations
- ✓ Catalogue feature for National Banana Day x Little Athletics
- ✓ Full page advertisements in key metro newspapers reaching over 2.8 million people
- ✓ 700 Australian Banana prize packs distributed to Little Athletics centres around the country

Fresh Markets Australia

- ✓ Promoted National Banana Day through independents and enhance the #BananaDayRelay virtual event
- ✓ Activation of 500 posters distributed to each state to be utilised in the independent markets
- ✓ 125 in store activations, where FMA team educated staff members on the day, to pass onto consumers, and set up posters
- ✓ Activation of the #BananaDayRelay in the Melbourne Market
- ✓ A Better Choice magazine features



Wholesalers

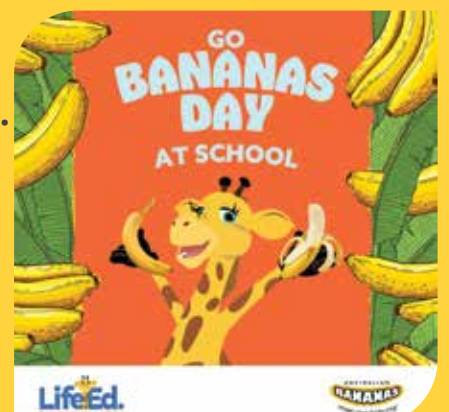
- ✓ Briefing session held with wholesaler in September, to share point of sale options and info on the PR activation
- ✓ Assets shared to wider team for disbursement to the wholesale network
- ✓ 1,000 virtual relay posters ordered and dispatched to wholesalers for use in their store fronts



HEALTHY HAROLD GETS IN ON BANANA DAY ACTION

As part of Australian Bananas' school partnership, Life Education (Healthy Harold) celebrated National Banana Day through 'Go Bananas Day' in Australian primary schools, with 14,000 students involved.

Students were encouraged to dress up in yellow to celebrate bananas and lessons aimed at encouraging healthy eating habits (including the benefits of bananas) took place. Merchandise was also provided to students on the day, including banana themed school pencil case packs.



BUY WEST EAT BEST

Founding member Carnarvon Sweeter Banana joins 15th anniversary celebrations.

Carnarvon Sweeter Bananas has this year joined more than 240 other members of the Buy West Eat Best program in celebrating its 15th anniversary.

The program began in 2008 with just 38 founding members, including the Co-Operative, and was designed to provide consumers with clear state-of-origin food labelling.

Sweeter Bananas Business Manager, Doriana Mangili, said they were proud to be part of the program.

"We believe that supporting local means supporting quality, freshness and sustainability," she said. "And what better way to do that than by enjoying the delicious, homegrown goodness of Western Australian produce?"

She added that consumers who choose to purchase Buy West Eat Best labelled products weren't just supporting a single business. Rather, they were supporting entire communities.

In order to display the Buy West Eat Best logo, strict criteria must be met including:

- Fresh produce, such as fruit, vegetables, meat and seafood, must be 100 percent grown, fished or farmed in Western Australia.
- Grocery items, such as sauces, yoghurts, cheese, bread or beverages, must feature main ingredients grown, fished or farmed in Western Australia, and the product must be processed and transformed in Western Australia.
- Western Australian restaurants must commit to using a minimum of 70 percent local ingredients on their menu to join the program.

The program has proved to be successful, with its research showing almost nine in 10 Western

Australians trust the Buy West brand and believe it is integral to the local economy. Membership is evenly split between Perth and regional areas, and represents a range of businesses, as well as industry associations and peak bodies.

As part of the program, Sweeter Banana representatives also attended the annual 'Meet the Buyer' event, which featured over 80 exhibitors and more than 250 delegates.

"The Buy West Eat Best team, along with all the participants, really showcased the passion and dedication that goes into producing local products," Ms Mangili said. "We are thrilled to see the hard work paying off and look forward to continued support for our vibrant WA food industry."



Doriana Mangili, centre, represented Carnarvon Sweeter Banana as a founding member of the Buy West Eat Best campaign.

ABGC AGM

The ABGC thanks those ABGC Members who joined the AGM in person and via Teams last month. It was a great chance for Members, Directors and ABGC staff to catch up before Christmas/New Year. The meeting heard from ABGC Chair Leon Collins and ABGC CEO Leanne Erakovic. Presentations were also made by Supply Chain Engagement Manager Andrew Burns, while banana benchmarking was discussed with Glenn Briggs of Aglytica.



BANANA INDUSTRY RACE DAY

30 September, Innisfail

There was a distinctly yellow feel trackside for this year's Banana Industry Race Day in Innisfail, supported by Australian Bananas.

A huge shout out to those who manned the all-important barbecue, and to all those attendees – growers or otherwise – who added a touch of banana-fun to their outfits. A great day had by all.



IT'S SHOW TIME

How many Carnarvon Sweeter Bananas does it take to fuel punters at the Perth Royal Show? More than 10,000!

The team from the Western Australian co-operative were well stocked heading into the September event, with an additional 600 litres of gelato ready to satisfy sweet tooths.

As always, the fresh produce was a huge hit and showgoers welcomed the chance to chat to a Sweeter grower as well as Matteo Becocci of Gelatino, who creates award-winning banana gelato from fruit that would otherwise go to waste.



The calm before the show storm: Lily Baker, Caitlin Smith, Sophia Alston, Thomas Alston and Kaya Edwards.



Brining the farm to the city: Just some of the Sweeter Banana display at the Perth Royal Show.



Carnarvon banana growing family Valerie Shrubbs, Eddie Smith and Caitlin Smith at the show.



Benny Banana was a huge hit at the Kids' Kitchen.



The hugely popular gelato stand.



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