# Australian Bananas



ISSUE 70 | APRIL 2024

# **RAIN OR SHINE**

Feeding Aussie families despite extreme weather



Protecting crowns, improving fruit

**PAGES 14-15** 

BANANAS

Fusarium wilt Race 1 resistance trials

**PAGES 26-27** 

Nutrient management across generations PAGES 37

# Zero in on weevil borer.





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Front page: Max and Jack Orsmond enjoy bananas at a wet Feast of the Senses in Innisfail.







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## FROM THE CEO

#### Leanne Erakovic



It's been wonderful to recently welcome some new **ABGC** grower members who will have

#### started receiving their member benefits by now.

ABGC members are the growers we thank because they directly support ABGC to:

- be an industry voice and have influence on the big issues that affect banana farming businesses,
- deliver innovative projects that build industry sustainability and resilience,
- · build industry capability, and
- communicate with growers and partners on industry initiatives and updates.

These growers acknowledge the importance of, and invest in, a strong and prosperous industry that continues well into the future. Without our members, ABGC would not exist!

It's important to note that member fees are different to the banana levies covered by all growers. Banana levies of 32.85 cents per 15kg carton go towards industry-related research and development (R&D), biosecurity, and communications initiatives – all growers pay these levies which are managed by Horticulture Innovation Australia Limited and Plant Health Australia (PHA).

Member fees are 3.3 cents per 15kg carton and directly fund the operation of ABGC and our role in advocacy. Without this, banana growers would not have an industry body to support levy funded projects, or to advocate for their causes.

Members receive many added benefits including exclusive access to industry information such as transport statistics, discounted business management tools and event tickets. Members are a priority and have a seat at the table on important issues. We have also recently welcomed Emma Castle to the role of Membership Admin Support, further demonstrating our commitment to our members.

Here's a great example of us representing you. Earlier this year, Kathryn Dryden (Advocacy Manager) and I travelled to Parliament House to join with other horticulture peak industry and state bodies of the National Farmers Federation Horticulture Council (NFFHC), to represent the sector on issues that matter most to the banana industry, including competition and the Biosecurity Protection Levy.

We're grateful to have this access to a network of professionals in the NFFHC and to be able to contribute the banana growers' perspective to this collective voice.

We can only effectively represent you in this way however, if we know your perspective. Therefore, I encourage you to share your thoughts, opinions, and ideas with us. You can contact Kathryn on 0455 553 596 or via members@abgc.org.au to chat about what's important to you and your business, and

while you're at it, ask about coming onboard as an ABGC member. We'd love to have you join us if you're not already part of the crew.

More on our advocacy efforts is covered in the story 'ABGC Advocates' on page 9.

On another note, I can proudly say that we continue to work hard for growers in R&D, TR4, biosecurity, sustainability, pests and diseases, and communications. All of which you'll find some great stories and updates on, in this and in future editions of the Australian Bananas magazine.

Disaster recovery is on many growers' minds, including in Far North Queensland (FNQ) following some wild weather early in the year. ABGC recently hosted Queensland Minister for Agricultural Industry Development and Fisheries, Mark Furner, during a visit to the region. A big thank you to the ABGC Chair, Leon Collins, and other growers who gave their time to explain and show the impacts to the Minister (see page 5).

I hope by now you have started to get acquainted with our staff and their projects via the #ABGCatWork campaign on our Facebook page, ebulletins, and website. See page 10 for a special introduction to our Leadership team who are overseeing projects and driving membership services and advocacy.

I hope you can find a comfy seat and enjoy reading the latest industry news in this edition of the Australian Bananas magazine.

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

Years ending 30th (in '000 tonnes):	h June
2013	341
2014	371
2015	371
2016	393
2017	414
2018	388
2019	372
2020	382
2021	403
2022	375
2023	371

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

0.50c /kg

1.69c /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.

Hort Innovation (HIA) levy. The Department sends the funds to HIA for R&D and Marketing: 0.54 c/Kg is for Banana R&D, which is matched dollar for dollar by the Department and 1.15 c/kg for Banana Marketing

Total = 2.19c /kg\* (32.85c per 15kg carton).

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

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

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

## FROM THE CHAIR

#### **Leon Collins**



Over the coming months, growers in **Far North Queensland** will have the opportunity to

share their thoughts on proposed changes to destruction zone requirements relating to Panama disease Tropical Race 4.

The disease is still contained to the Tully Valley. The efforts we have all made to slow the spread are the envy of many other banana producing countries. But the reality is that it's been nine years since the first detection. Those farming with TR4 have carried a huge burden and have done so admirably, essentially protecting the rest of our \$600 million industry. Now, it's time to make living with a TR4 infected property more workable. We're still talking best practice – no one wants this thing to move - but with more ability to farm and plan for the

future. After almost a decade, all growers have had time to implement biosecurity on their farm.

Please keep an eye out for your chance to have your say. This is an important one, and we welcome feedback both on this and how the TR4 Control Program can help you more broadly – as we do with all aspects of ABGC business.

Thank you to those growers in Tully and Innisfail who gave up time during a rare break from the rain to attend workshops on the topic recently and really kick start this process. Please reach out to TR4 Program Manager Geoff Wilson via geoff@abgc.org.au if you'd like to get in touch.

And on the topic of rain, it's starting to feel like growing bananas in Far North Queensland has become some kind of aquatic endurance sport. The rain has been relentless, with few breaks since December last year and, at the time of writing, we're still in the midst of what is traditionally our wettest month (March).

I want to particularly acknowledge those who are dealing with the fallout of some of the more serious weather events, including those growers in the

Kennedy Valley who are featured from page 12 of this magazine.

There are, of course, implications for our fruit in such prolonged periods without sun. If you're affected, no doubt you've been communicating with your wholesalers or agents. We've also been spreading the word through our Supply Chain Engagement manager and the Hort Innovation marketing team – while the fruit may be dull, it's still nutritious and tasty. I imagine we'll be monitoring this and other wet weather impacts on production for some time yet.

From one extreme to the other, and in Carnarvon growers faced heatwave conditions in February, with one day soaring to 49.9°C. You can read more about this on page 13, along with some of the conditions in NSW.

The good news is prices, for the most part, remain relatively stable providing some relief in an otherwise challenging time. Here's hoping they continue.

# **FURNER** ON FARM

**Queensland Minister** for Agricultural Industry **Development and Fisheries, Mark** Furner, visited Leon Collins at his Tully farm to view flood damage and discuss key issues facing the banana industry.

The visit, on 29 February, provided an opportunity for the Minister to see first-hand the ongoing impacts of weather events and hear about the challenges in accessing assistance.

Other topics discussed included Panama TR4 and workforce issues.

Acting Director General of Biosecurity Queensland, Bernadette Ditchfield, joined the Minister for the visit, along with Adam West (DAF, Regional Director for Rural Economic Development) and Dan McIntyre (Chief of Staff, Minister Furner).





#### **INDUSTRY NEWS**

## **PACKED HOUSE FOR BRISBANE BOARD MEETING**

The ABGC Board and leadership team met face-to-face in Brisbane on 15-16 February to tackle some of the key issues facing the banana industry.

Among the issues discussed were TR4 Management and plans for Banana Congress 2025.



Pictured from left to right, standing: Geoff Wilson (TR4 Program Manager), Michelle McKinlay (Industry Strategy Manager), James Howe (Director), Doriana Mangili (Director), Stephen Lowe (Deputy Chair), Tayla Mackay (Director), Gary Fattore (Director), Leanne Erakovic (CEO) and Leon Collins (Chair). Seated, left to right: Stephen Spear (Director), Dr Rosie Godwin (R&D Manager) and Andrew Serra (Treasurer).

## **HORT STATS HANDBOOK**

The annual Australian Horticulture **Statistics Handbook offers the** most comprehensive and up-todate data available on more than 75 horticultural products including bananas.

Drawing on data from several supply chain sources, including international trade statistics and industry peak bodies, the Handbook includes information on retail and foodservice use, exports and imports, share of production by State and Territory, wholesale value, and

**BANANAS - 2022/23** 

Source: Australian Horticulture Statisitics Handhook

**TOTAL PRODUCTION:** \$583.3m

**PER CAPITA** CONSUMPTION: 14.2kg

**AVERAGE PER SHOPPING TRIP: 796g** 



### FUNDING FOR DEVELOPMENT NUFFIELD LOOKING FOR NEXT SCHOLARS

Farmers and agriculture industry professionals are invited to apply for a 2025 Nuffield Scholarship. Successful applicants receive \$40,000 to fund 15 weeks of study overseas, across 18 months.

"The scholarships offer a unique opportunity to visit, learn from and collaborate with some of the world's leading agricultural businesses," Nuffield Australia CEO and 2013 Nuffield Scholar Iodie Redcliffe said.

"In opening these scholarships, we're encouraging farmers and other industry participants to think big and see what's possible for their business and industry in 2025 and beyond."

Nuffield Australia awards around 20 scholarships each year, with a focus on advancing sustainable and profitable primary production.

Applications are currently open and close 31 May. Visit www.nuffield.com.au for more.

#### TRAVEL THE WORLD TO PURSUE YOUR PASSION

#### Can your passion for Australian horticulture take you around the world?

Hort Innovation and the Winston Churchill Trust invite you to apply for a Churchill Fellowship. Churchill Fellowships fund Australians from all walks of life so they can travel overseas and investigate an issue or topic they are passionate about, and share the knowledge gained when they return.

Design your own itinerary and travel at a time of your choosing, for four to eight weeks. No formal qualifications are required to apply – in fact you don't even need to have finished school. The options are virtually limitless, providing your project will benefit Australia and you are willing to share your findings when you return.

Aside from general fellowships, up to three Hort Innovation Churchill Fellowships are also available nationally for projects that to cultivate new ideas in horticulture.

Keen to know more? A series of information sessions have been recorded and are available on their website, including a dedicated session for the agriculture and horticulture sectors hosted by former ABC Rural national editor Leigh Radford.

Applications are open until 1 May. To find out more visit www.churchillfellowships.com.au

In February, the Australian Government issued Queensland University of Technology (QUT) a licence to commercially release QCAV-4, a genetically modified (GM) variety of Cavendish banana.

Food Standards Australia New Zealand (FSANZ) had also notified the Food Ministers' Meeting (FMM) that itapproved QCAV-4 as suitable for human consumption. The ABGC has watched this process with interest and will ultimately be

guided by commercial growers, the supply chain and the consumers who love Australian bananas as to its position going forward.

QUT have advised ABGC that they currently have no plans to commercialise GM bananas in Australia. This means GM bananas will not be grown to sell to consumers in Australia at this time.

Find out more by scanning the QR Code.



# **MINI ROADSHOWS BACK IN 2024**

The National Banana Development & Extension team are in the process of securing the dates for the Mini Roadshows in August and September.

The roadshows will be held in Tully, Innisfail, Tablelands and Carnarvon. Roadshow extension events in NSW are also in the pipeline. At these events you have the opportunity to hear directly

from researchers on a wide range of research topics. They offer the opportunity to stay up-to-date with the latest research findings relevant to your day-to-day operations as well as keep your finger on the pulse with insights into emerging research.

If you have attended past roadshow events, you will know that we challenge the presenters to short, sharp presentations. By doing this we can fit more into the agenda, maximising your time away from the farm. Plus, we are aiming to allow more time for talking with the researchers and other growers on the research presented – something growers have said they find valuable.

Make sure you keep an eye out in the e-bulletins, ABGC social media pages, the Better Bananas website and on your text messages for more info about these events.

We look forward to seeing you there!











The mini roadshow events are part of the National Banana Development and Extension Program (BA19004) which is funded by Hort Innovation, using the banana industry research and development levies and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture. The Queensland Government has also co-funded the project through the Department of Agriculture and Fisheries.





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Find out about how membership fees are DIFFERENT to banana levies.



#### **KATHRYN DRYDEN**

Stakeholder Engagement & Advocacy Manager members@abgc.org.au or 0455 553 596



# ABGC ADVOCATES!

#### ABGC has had a strong start to the year advocating for our members. Key areas include compliance, competition, disaster assistance and workforce.

ABGC members are encouraged to contact Kathryn Dryden (ABGC's Stakeholder Engagement & Advocacy Manager) via members@abgc.org.au or 0455 553 596 to learn more or chat about any of the issues affecting them.

We treat all conversations with us as confidential. ABGC Members have access to more detailed

updates on our advocacy efforts, and an opportunity to voice their issues and experiences.

#### **COMPLIANCE**

ABGC is hearing from some grower members that compliance continues to be an issue, particularly around increasing requirements and audit costs.

ABGC held a members-only workshop to better understand the issues affecting a range of farm sizes, locations, and business structures.

Overall, growers recognise the importance of compliance measures so that the industry continues

to maintain a high standard of safety, quality, and environmental commitments. However, while meeting the standards, members identified areas they think could be improved around building efficiencies in process and reducing the cost to

One grower noted that, in meeting their standards, there is some duplication and requirements that aren't relevant to bananas.

"We are hoping to get collective action on this issue across all of horticulture," ABGC's CEO, Leanne Erakovic, said.

ABGC would like to hear more from members about their experiences.

"Good anecdotal evidence drawn from growers' stories and experiences, will best equip us to put issues forward and work towards some potential results," Kathryn Dryden added.

"It was so valuable to have grower members share their time and thinking with us at our recent workshop."

Contact Kathryn via members@abgc.org.au or 0455 553 596 to chat confidentially about compliance or any other topics that affect your business.



ABGC CEO, Leanne Erakovic (back row, centre) and Stakeholder Engagement & Advocacy Manager, Kathryn Dryden (bottom left), representing the banana industry with other NFF HC members at Parliament House in Canberra.

#### **NEW BIOSECURITY LEVY**

The Biosecurity Protection Levy, due to come into place on 1 July this year, has progressed to the Senate. The Levy was opposed by the Coalition, Greens and independent MPs in the lower house on 27 March.

The ABGC believes the new levy is slugging banana growers twice, as they already contribute money to fund banana specific biosecurity activities.

Read more by scanning the QR code.

## **ABGC CONNECTING GROWERS** TO INDUSTRY EXPERTS

ABGC has started rolling out monthly Friday lunchtime webinars, connecting growers to industry experts, latest information, and opportunities for members.

The short 30-minute webinars are designed to be accessible, relevant, and informative to all banana growers around Australia.

"This is proving to be a great way to extend ABGC's reach to all of our growers, and ensure we are taking more opportunities to share industry information that is relevant to banana businesses," said ABGC's Stakeholder Engagement and Advocacy Manager, Kathryn Dryden.

"We're looking forward to gaining further momentum with these sessions, particularly by attracting growers from all states and regions," she said.

Three webinars have taken place already this year:

January - Chlorpyrifos Update -Dr Rosie Godwin (ABGC)

- 2. February (ABGC Member-only) Banana Waste Value-add Business Opportunity – Jon Lorraine (Carbonovia)
- 3. March Understanding the GM Cav Prof James Dale (QUT)

For those who are interested but unable to attend, the sessions are recorded and published on the Australian Banana Growers' YouTube channel and/or the Members' Portal (ABGC.org.au\signin\) for members-only sessions.

ABGC's CEO, Leanne Erakovic said, "It's important to us that we connect with growers despite distance, and equip them to be part of a stronger industry."

Growers can keep an eye out in ABGC's regular e-bulletins and/or on the ABGC Facebook page for upcoming webinar topics and dates. If you would like to see a particular topic presented and discussed at an upcoming webinar, or if you need assistance to set up and join, contact Kathryn via members@abgc.org.au or 0455 553 596.



banana waste on an FNQ farm (ABGC member) following the webinar session.



ABGC has a small yet efficient leadership team boasting a combined 40 years of experience working in the banana industry. They bring a broad range of expertise across business and project management, research and development, strategy and policy, engagement, and communications and marketing.

The team is responsible for effective delivery of a range of projects that contribute to a strong banana industry. Meet the ABGC's Leadership Team here if you haven't already:



#### **Leanne Erakovic, Chief Executive Officer**

**Responsible for:** Leading all aspects of ABGC operations, with a view to ensuring a profitable and sustainable future for Australia's banana industry.

**Funded by:** Membership fees **Based in:** Brisbane Markets

**Highlights/Background:** Leanne has over two decades of experience in management and business development spanning stakeholder engagement, project management, and strategic planning. She has worked in the banana industry for nine years and was ABGC's Executive Officer for six years prior to taking on the CEO position.

Contact: ceo@abgc.org.au



#### Kathryn Dryden, Stakeholder Engagement & Advocacy Manager

**Responsible for:** Improving ABGC member services and driving advocacy for the industry.

**Funded by:** Membership fees **Based in:** South Johnstone, FNQ

**Highlights/Background:** A communications and community engagement professional with approximately 25 years of experience across a range of sectors including agriculture. For 2.5 years, she worked with ABGC's BMP team.

Contact: members@abgc.org.au



#### Michelle McKinlay, Industry Strategy Manager

**Responsible for:** Brokering and influencing the best possible policy, science and leadership outcomes for growers.

Funded by: Hort Innovation & External Partners

**Based in:** Brisbane Markets

**Highlights/Background:** 25 years of experience in policy development for state government; 9 years with the ABGC focusing on biosecurity and sustainability policy issues.

Contact: michelle@abgc.org.au



#### Dr Rosie Godwin, Research & Development Manager

**Responsible for:** Increasing the relevance, pace and impact of R&D in the banana industry.

Funded by: Hort Innovation
Based in: Brisbane Markets

**Highlights/Background:** A research scientist for more than 25

years before joining ABGC in 2015. **Contact:** rosie@abgc.org.au



#### Geoff Wilson, TR4 Program Manager

**Responsible for:** Leading the ABGC's management of Panama TR4 on behalf of industry.

Funded by: Plant Health Australia
Based in: Moresby, FNQ

**Highlights/Background:** A local since 2005, experienced manager with local government, state government and public health program implementation. Raised on a cattle property in Central Queensland.

Contact: geoff@abgc.org.au



#### **Amy Spear, Communications Manager**

**Responsible for:** Keeping Australian banana growers informed about industry R&D and other relevant news and developments, as well as helping to coordinate the Australian Banana Industry Congress.

Funded by: Hort Innovation Based in: Brisbane Markets

**Highlights/Background:** Amy is a former journalist who spent more than ten years working across radio, print and online in various locations around Australia. She's been with the ABGC for six years and feels lucky to combine her love of communications with a family background in bananas.

Contact: communications@abgc.org.au



#### **Andrew Burns, Supply Chain Engagement Manager**

**Responsible for:** Developing and organising activities involving key supply chain stakeholders to build interest, excitement, and an understanding of the Australian Banana Industry, ultimately to increase the demand and consumption of Australian Bananas.

**Funded by:** Hort Innovation **Based in:** Northern NSW

**Highlights/Background:** Andrew has worked for a number of high-profile fast moving consumer goods companies, including businesses like the Norco Dairy Cooperative and Arnotts. He's worked in a range of leadership roles across sales, account management, marketing and exports and currently also provides services to the mango industry.

Contact: andrew@abgc.org.au

You can go to abgc.org.au/abgc-at-work/ to see #ABGCatWork and meet more of the team delivering outcomes for industry.

# **DECADES OF STEWARDSHIP** AND SCIENCE IN ACTION

Adrian Crema grew up watching his father Angelo cultivate sugar cane and bananas, sparking his passion for farming and driving him to go to university to study agriculture.

After being involved in research showing specific nutrient deficiencies correlate with sigatoka incidence in the 1990s, Adrian adjusted his nutrition program to improve disease control on his banana plantations. Since then, he has maintained excellent disease control with 5 fungicide sprays per year.

His 80-hectare banana farm was one of the first adopters of the Metagen bio-stimulant range, improving long-term production, nutrient efficiency and crop health. The farm packs well above the Wet Tropics' industry standard of 28 tonnes/ha, having never produced lower than 40 tonnes/ha. He achieves these increased yields with 220 kg/ha of nitrogen annually. This is over 40% increase on the average yield with only 55% nitrogen. The lower nitrogen production reduces the farm's carbon footprint by 1.1 t/ha of carbon equivalent every year.

The farm has not received a single phosphorus application in the last 18 years. The soil's huge phosphorus reserves are plant-available, unlocked by Metagen Digestor which stimulates the soil to release its inherent phosphorus reserves.

Under Adrian's system and stewardship, ratoons are retained longer, with sections of the farm 18 years old continuing to be highly productive.

Adrian has worked with Anita Davina, the senior agronomist at Total Grower Services for over 24 years. Together they monitor soil chemistry. Calcium, magnesium, potassium and trace elements are carefully monitored and replenished as required.

For Adrian, the demonstrated suppression of fusarium in other crops and lady finger bananas through the Metagen system is a convenient additional guard for his crop. Adrian sees the recent research partnership between Syngenta and Metagen as a natural expansion of regen farming recognition internationally.

Contact Anita PH: 0429 885 063 E: anita@totalgrower.com.au



Anita Davina and Adrian Crema have been working together for 24 years.

# METAGEN, WE GROW WITH YOU

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Sustainable production has been achieved at the Flegler Group farms for over 20 years.

# HERE COMES THE RAIN, AGAIN

# In the Far North of the Sunshine State, blue sky has become a rarity.

Since December, Australia's banana growing heartland has been battered by rain, floods and extreme wind. It's the wet season and then some.

Tropical Cyclone Jasper caused widespread, but varied, damage late last year. Growers within the same catchment reported everything from minimal to substantial damage, with some businesses noting it would be up to a year before they were back at full production.

In January, Tropical Cyclone Kirrily crossed the coast further south, at Townsville, but saw destructive winds reach farms in the Kennedy Valley.

Since then, multiple weather systems have continued to raise rivers, inundate paddocks and

dull the colour of the industry's normally vibrant fruit.

The Australian Banana Growers' Council, and the Hort Innovation marketing team, have worked closely together to ensure that consumers know that the much-loved produce is just as tasty and nutritious on the inside.

Farming is not for the faint-hearted but, as always, growers continue to ensure Australian families have access to top-quality bananas.

Here, Skye Orsmond speaks to some of the growers who have been hard hit by weather events in the last few months.



A farm in Far North Queensland inundated with water in December 2023.

## **KENNEDY VALLEY BANANAS**

# Second-generation banana farmer Brett Oberthur described the impact of TC Kirrily as "another blow."

The pristine Kennedy Valley that hugs the Kirrama Range south of Tully was impacted by winds of up to 120km/hr on 25 January this year when the category 3 system made landfall north of Townsville at about 10pm.

Brett said the intense winds caused havoc on his 185 acre property, which experienced crop loss on about 125 acres.

"I've gone from sending about 60-66 pallets a week to around 14-15 pallets a week."

"I'm currently picking off around 60 acres. The wind took out anything a bit over half grown."

It's a challenging time for Brett, who has been working on the farm since he was 14.

"I was on the comeback trail. This is a blow I didn't need."





#### **TIPS AND LINKS**

- If affected by extreme weather, growers can visit www.abgc. org.au to find out about disaster funding and other available resources
- You can also head straight to the QRIDA website: www.qrida.qld.gov.au
- If you experience damage, take photos and keep records of any work or repairs undertaken
- Useful information can also be found at www.betterbananas.com.au and www.panamatr4protect.com.au

# **DICKO'S BANANAS COP A BATTERI**

### The winds caused by TC Kirrily toppled a large proportion of Jeff Dickinson's 45-acre farm in the Kennedy Valley.

But he remains optimistic, with a positive attitude and the need to "keep going" in the face of adversity.

Jeff lost 40-50% of his bunched plants and 20% of his unbunched plants in the severe winds that "barreled down the hill."

He can recall his parents saying that if a cyclone was expected to make landfall between Rollingstone and Ayr, to be prepared to be hit by wind in the Kennedy Valley. And they weren't wrong.

"It was pretty gut wrenching at the time as the crop

would have been ready to cut leading into Easter, when the prices are generally good."

"We're now sending around 3 - 7 pallets a week, when we should have been sending around 20 -25 pallets a week."

His eagerness to produce high quality fruit packed with flavour is unwavering and will always remain his highest priority when growing bananas.

"Growing quality fruit with a great taste is a win-win for me, and for our buyers."

He also has the next generation in mind, with two sons in their early twenties eager to come back to

"You've just got to keep going. Put one foot in front of the other and try and do the best you can under the circumstances."





## **BIOSECURITY**

After flooding in the banana growing regions of FNQ, the potential for Panama TR4 to spread through soil and water is a subsequent risk, making on-farm biosecurity of paramount importance.

**Early detection through regular** surveillance is critical to controlling and containing the disease. It's essential that people and machinery come clean and leave clean, to reduce the risk of spreading contaminated soil and water.

## **ACROSS THE** COUNTRY

#### Western Australia

Carnarvon growers sweltered through a record-breaking heatwave in February, with the Western Australian growing region claiming the title of hottest place in the world – for a day at least.

On February 18, the temperature gauge hit 49.9 degrees and, while it was thankfully short-lived, needless to say both farmers and their fruit were not fans of the extreme heat.

While the peak was only for one day, growers copped temperatures in the 40s for longer.

Business Manager of Sweeter Banana Coopertive, Doriana Mangili said the impacts ranged from immediate burning through to reduced production for at least nine months.

"It really depends on the farm location – those closer to the ocean, and therefore the seabreeze, weren't as badly affected."

Ms Mangili, who is also an ABGC Director, said it serves as a reminder that these extreme events are something all those involved in the banana industry will need to be better prepared for in the future.

#### **New South Wales**

NSW Director Stephen Spear, who farms on the Mid North Coast, said it's hit and miss in growing regions there, and unfortunately the latter at his own farm.

"It's a green drought at the moment. It looks good, but there's not been enough rain to saturate the ground.

"For the first time since 1974, the gullies on this property haven't flowed above ground over summer."

Some places around Coffs Harbour, and into the Northern Rivers, have received enough rain. As always, it sometimes feels as though it depends which cloud you're under.

"Here, I wouldn't have thought we'd be up for a bushfire so soon after 2019. But if we don't get rain from now on, it won't be looking

# PROTECTING CROWNS IMPROVES FRUIT QUALITY FOR SELLARS BANANAS

Ingrid Jenkins - Department of Agriculture and Fisheries



#### Sellars Bananas are renowned for producing premium quality bananas.

However, frustratingly, even when supplying the best quality fruit at the farm gate, fungal organisms can wreak havoc with consignments down the supply chain. This has been the recent experience of Sellars Bananas and feedback from market agents is, they are not alone.

Crown end rot (CER) is caused by several fungal species and symptoms develop on the cut surface of the crown. Symptoms can differ in terms of severity depending on the causal fungal organisms present. Less severe damage includes superficial white/fluffy fungal growth on the cut surface. These symptoms rarely progress into the fingers of the fruit or affect eating quality (Figure 1). However, the more severe form of CER, commonly known as Chalara, results in a black rot that extends from the crown into the fruit stalk and into the fingers, severely impacting fruit quality (Figure 2).

Feedback from the market is that CER continues to be a problem and symptoms start to develop as the fruit is ripened. It is hard to pick up before fruit is sent to retailers as not all cartons may be affected, and it may only impact one or two clusters across several cartons in a consignment.



Figure 1 CER symptoms showing superficial white/ fluffy fungal growth on the cut surface. This rarely extends into the fingers or affects the eating quality.

The good news is, there are post-harvest fungicides registered for use in bananas that can control CER.

Naomi Brownrigg from Sellars Bananas shares their experience with the problem and what they have put into place to manage it.



Figure 2 Symptoms of Chalara. Black rot extends from the crown surface into the fingers, severely affecting fruit quality.

#### **INDUSTRY NEWS**

Good shed hygiene and the use of

## Chalara, a recent issue for Sellars

The symptom of superficial fungal growth on the cut surface of crowns has always been a minor problem from time to time for Sellars Bananas, predominately in the summer months. Naomi became more concerned when she started to see symptoms of Chalara approximately 3 years ago, causing more significant damage to fruit quality. "We never thought we had to treat it until Chalara started to turn up. At first, it was just now and then in the winter months, and then it started to appear most weeks of the year over a period of 2 years," Naomi said. 'If you have never seen Chalara, it's like CER on steroids. It will quickly rot the fruit from the crown down once the ripening process begins. Not all cartons are affected, it may be only one or two boxes or some clusters in a single box."



## chlorine didn't fix the issue Before implementing the post-harvest spray system,

Sellars Bananas tried different practices to resolve the issue. "Initially, we tried sanitising the shed and used a high-pressure cleaner in all of the wet areas. Although it's a good practice, it didn't work," Naomi said. "We then tried an inline chlorinator that used chlorine tables, that also didn't work. Finally, at the Congress last year, I spoke to Kathy Grice and David East from the Department of Agriculture and Fisheries on the issue and they were pretty clear that the only way to control it was with a postharvest spray. So, we set about implementing a post-harvest fungicide spray, using prochloraz that treats all the fruit on the wheel."



Figure 4 200 L Silvan spray tank and pump

#### The packing wheel required some family ingenuity

Naomi enlisted the expertise of her brother-in-law Mark Nissen to come up with a spray system that would work for their 3-tier banana wheel (Figure 3). Once they had designed the frame at the right height and angles, Mark welded the steel frame together. The next step was attaching the spray system. "We set up a spray rig with three nozzles, one for each tier on the wheel, and attached a 200 L Silvan tank to it with a spray unit (Figure 4)," Naomi said. "The spray unit puts out 7 L/min and each nozzle puts out 300 mL/min. The pressure is regulated, and any excess chemical solution is returned to the tank." As per the label instructions we do not catch any of the solution from underneath the wheel once it has been sprayed on the fruit. We use the product Protak® and the label rate is 110 mL/200 L. For our operation, this means we are using 250 mL of Protak® each day."

#### Tips for placement of spray booths:

- Spray booth should be placed after the fruit wash.
- Position spray nozzles and clusters to ensure the crown surface is sprayed (Figure 5).
- Set the speed of the wheel or belt (trough systems) to allow a 30-second spray.
- Position the spray booth at the furthest point possible away from packers and use spray shields to minimise spray mist (Figure 6).
- Place spray booths in a wellventilated area.



Figure 5 Clusters are placed upwards on the wheel to ensure cut surface of crowns are treated.

#### **INDUSTRY NEWS**

#### Implementation didn't require changes to existing practices

No changes were required in terms of Sellars' packing procedures. "We were already placing the fruit with the crowns up," Naomi said. "There seems to be no mist from the spray, as there is a protective shroud around the spray unit (Figure 6). We are using Protak®, so there is no smell, and our packers all wear gloves."

#### The benefits outweigh the cost

All up the cost of the spray unit itself excluding labour, was approximately \$2000. This includes the tank, pump, inverter, hoses, nozzles, connections etc. and steel for the frame. The only ongoing cost, apart from electricity costs for the pump, is the chemical itself. "We average one litre of Protak per week and current pricing is \$170/L," Naomi said.

Although Chalara was the main reason for Sellars to implement a post-harvest spray, they believe the benefits have been substantial when it comes to overall fruit quality. "The difference it makes to the appearance of the crowns at the market is huge, you can store the fruit for longer knowing that the crowns are going to hold up which gives them options as to when the fruit gets sold," Naomi said. "You may think this is a bad thing, but if the crowns are not holding up, that fruit needs to be sold ASAP, sometimes at a discount. I have been told that buyers of our fruit are very happy with the results. I wish we had implemented it (spray system) years

Sellars' market agent is also happy with the results and now sends Naomi photos of clean crowns since they have installed the post-harvest fungicide spray (Figures 7 & 8).



Figure 6 Protective shroud around booth minimises spray mist.



Figure 7 Sellars fruit showing clean crowns 11 days after post-harvest fungicide treatment.



Figure 8 Sellars fruit showing clean crowns 11 days after post-harvest fungicide treatment.

Thank you to Naomi Brownrigg and the team at Sellars Bananas who provided their time and gave permission to use this case study for the benefit of the wider industry.

If you would like more information on this case study or managing CER in bananas contact Ingrid Jenkins on 0497 801 980 or DAF's Banana Extension Team via email betterbananas@daf.qld.gov.au.

#### Crown end rot (CER) of bananas is a serious post-harvest quality loss for banana fruit.

As the name suggests, the rot begins at the cut surface of the crown and depending on the severity, can extend down the neck of the fruit and into the fingers. Several fungi can cause CER symptoms and the visual appearance of those symptoms may indicate what fungal organism is responsible. However, multiple fungi can simultaneously cause symptoms, so it can be difficult to distinguish the difference with the naked eye.

The length of time bananas spend in the supply chain can have a significant impact on the development of CER. The longer banana fruit is held in the supply chain before ripening, the greater the risk of developing more severe symptoms of CER.

#### The application of post-harvest fungicides is the most effective management strategy.

Research led by Kathy Grice from the Department of Agriculture and Fisheries (DAF) has shown that post-harvest fungicide application is the most effective management strategy. At the time of publication products containing thiabendazole (e.g. Tecto®) and prochloraz (e.g. Protak®) are registered for post-harvest use in bananas. Important screening work undertaken by DAF has shown that some of the organisms that cause CER are less sensitive to thiabendazole-based products, particularly in the coastal regions of Far North Queensland. These organisms remain more sensitive to products containing prochloraz.

More information on CER research is available on the Better Bananas website.

#### The application method is different depending on what product you use.

Products containing thiabendazole (e.g. Tecto®) are registered for use as a dip. Whereas products containing prochloraz (e.g. Protak®) are registered for use as a nonrecirculating spray system only.

#### Always check the APVMA website for the registration status of products before use and follow label directions.

Have a trough instead of a wheel? Many packing sheds have installed post-fungicide spray booths, spraying crowns after they leave the trough and before reaching packers.





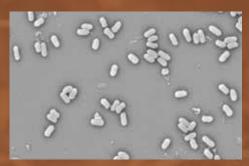




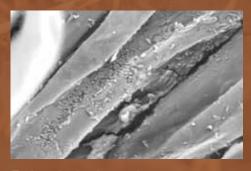
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# **AWARENESS GROWS FROM FACE-TO-FACE INTERACTION**

## On farm biosecurity prevention steps taken by North Queensland growers continue to show improvement

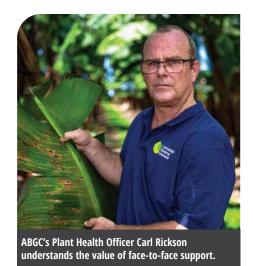
Farm visits by ABGC staff across North Queensland banana plantations, undertaken between July and December 2023, continue to show an improvement in the adoption of biosecurity pest prevention measures. The latest round of assessments conducted by Carl Rickson, ABGC Plant Health Officer, demonstrate that face-to-face discussion and support by ABGC assists in protection against the spread of serious banana pests including Panama disease Tropical Race 4.

"Growers face many challenges in running their business and sometimes a quick visit to discuss biosecurity is more effective than emails and other electronic industry alerts," Carl said.

"Aside from advice on on-farm biosecurity, we also get a chance discuss other issues like leaf-spot disease. Face to face discussion often saves growers time and I think we achieve a lot more."

"I think it's appropriate to provide advice to growers about on-farm preparedness in their growing area to allow businesses to understand what level of biosecurity risk they may face" he said.

Visits are conducted as part of the Hort Innovation Multi-pest surveillance and grower education to manage banana pests and diseases project.



#### **Grower extension events continue** to educate banana growers and residents on Bunchy Top risks

The Hort Innovation Multi-pest surveillance and grower education to manage banana pests and diseases project has also continued its work in reducing the risk that Banana Bunchy Top Virus (BBTV) infection poses within New South Wales. To educate banana growers and local residents in BBTV symptoms and risks, project staff Carena Rose and Wayne Shoobridge attended the Mullumbimby Farmers Market at The Mullum Showgrounds, Mullumbimby on 15 March.

"Irrespective of whether a banana grower is a commercial, non-commercial, or residential grower; containing and controlling BBTV within the current



Wayne Shoobridge and Carena Rose from the Bunchy Top Project at the Mullumbimby Markets.

control zone is critical. An understanding of BBTV symptoms and reporting is important," ABGC project manager Grant Telford said.

Carena Rose, NSW BBTV Project Officer, who organised the event, expressed her appreciation for the support also provided by NSW DPI. "Steven Norman, of NSW DPI, also joined us at our stand and was available to provide information and answer questions about initiatives NSW DPI is taking to support NSW growers as part of their project," she said.

"For Bunchy Top awareness we were able to show infected leaves displaying typical dot dash infection patterns. An 'eyes on' approach showing exactly what symptoms look like in infected leaves is the best education we can provide."

#### **PRODUCTION DISTRICT - ASSESSMENT AT 31 DECEMBER 2023**

Number of growers implementing / % of growers implementing / % total ha

BIOSECURITY MEASURE	INNISFAIL AND DISTRICTS	GREATER TULLY	FAR NORTH	TABLELANDS
Fence	41 / 24% / 30%	21 / 48% / 73%	8 / 67% / 99.6%	22 / 73% / 83%
Biosecurity signage	146 / 87% / 97%	37 / 84% / 97.2%	10 / 83% / 99.7%	29 / 97% / 99%
Carpark	65 / 39% / 70%	30 / 68% / 87.9%	7 / 58% / 98.3%	26 / 87% / 91%
Footbath / boot exchange	49 / 29% / 56.4%	30 / 68% / 82%	6 / 50% / 96.3%	24 / 80% / 89%
Vehicle decon	56 / 33% / 59%	30 / 68% / 88%	7 / 58.3% / 99.6%	27 / 90% / 95%
Total Farms & Total ha in district	168 / 5604 ha	44 / 2810 ha	12 / 725 ha	30/ 2095 ha

# **DECADES ON, STILL GROWING STRONG**

The ABGC's Banana Bunchy Top team is tasked of with the vital role of helping to contain and control the spread of Banana Bunchy Top Virus. In doing that work, they also meet and support some incredibly resilient growers, like 91-yearold Les Dawney.

#### **Project Officer Carena Rose shares his** story.

Les was one of 6 siblings – 2 girls and 4 boys born and raised on the Tweed coast of Northern New South Wales. He and his brothers - Don who passed away in 2002, Hec (90-years-old) and Ron (77-years-old) have been part of the NSW banana industry for decades. They have first-hand experience on just how devastatingly destructive BBTV can be.

James Michael Dawney (Les' Grandfather) purchased the land in 1905 and ran dairy cattle, which produced fine butter that was exported to England. In 1955, the Dawney family switched to producing bananas in the rich volcanic soil of the Piggabeen mountain area, adjoining Glenangarrie near the NSW and QLD border.

In 1991 Les was working on his farm with his brother Don and noticed some of his plants were showing signs of choking at the throat and light green to yellow leaf edges. He brushed the powder off the midrib and noticed dark dot and dash lines in the venations. Out of concern for the productivity and health of his whole farm he contacted the BBTV inspectors (NSW DPI at the time) who confirmed multiple BBTV infections in the Dawney family's main patch. Fortunately, the virus had not spread to all three of their plantations but the main

plantation was heavily infected. If not contained and controlled, Bunchy Top would cause their whole plantation to become completely economically unviable in a very short time.

To spot the Bunchy Top, when Les puts bunch covers on, he looks over the whole plantations' canopy and makes a note of any difference in leaves or a tall stool that looks bushy at the top.

"You can't see the last leaves easily from the ground, but when you are up the ladder and look across your patch you can pick up any differences guite

"If you have any idea what BBTV looks like and you have 3 or 4 leaves showing signs, well then anybody can pick it up if they know what they are looking

The Dawney family, with assistance from the Bunchy Top inspection team (NSW DPI at the time), had to destroy their whole main patch. This area of the farm was left to rest, with plans to replant after 12 months. Unfortunately, there was little to no government assistance at the time which would have been a struggle for any grower.

The decision was made in 1992 to replant with Williams Cavendish and some Lady Fingers. The tireless work of replanting on 45-degree slopes began. Harvest and maintenance of bananas in this area is not for the faint hearted. Les, Don, Hec and Ron harvested the bunches and used oaks to lug the 50kg bunches to a flying fox holding 8 bunches one chain's length (about 20 metres) apart. This sent them hurling down the mountain and across a creek where they stopped safely at the packing shed. All well and good, aside from one instance when Les recalled the flying fox cable snapped! This incident caused a pileup of bunches at the end of the line, damaging the valuable fruit.

Les still works on his farm with a hand from his son, Colin, a few days a week. His patch is the original 9-acre main area, however the production area is now 3 acres. Hec retired from farming bananas 12 years ago, while Ron still has his plantation producing a nice crop.

The Dawney family boast some of the sweetest fruit you will try (this Coffs Coast-born author will wholeheartedly attest to that!) Though their farms are no longer major commercial productions, they still supply to the local eco village, their golf club and have an honesty box fruit stall operating for the local community.



## **BUNCHY TOP BREAKDOWN**

Banana Bunchy Top Virus (BBTV) is the most significant viral disease affecting bananas globally and is a constant threat to Australian producers.

The presence of BBTV on a property can make a business unviable within 18 months if left uncontrolled. Furthermore, bunchy top symptoms alongside heavy infestations of Leaf Spot and Leaf Speckle can mask symptoms of the devastating Panama disease Tropical Race 4 as well as reducing the efficacy of surveillance, detection and containment.

Under the Hort Innovation Multi-pest surveillance project led by ABGC, BBTV remains controlled within Northern NSW and South East Queensland. Although a major focus of the project is directed towards grower education and engagement, ABGC staff visiting properties also continue to gain an appreciation about the impact of BBTV, its history, and successful management practices implemented by growers in the past.



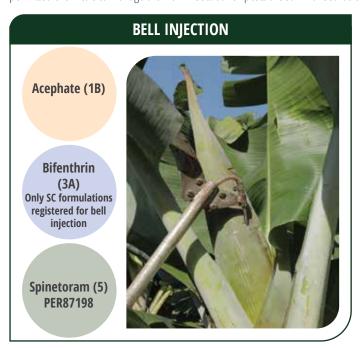
**A note from Carena:** One can't help but be completely in awe of the resilience of this tough family. Their keen knowledge, work ethic and awareness of biosecurity is something to behold and we are very proud of one of our oldest banana growing families in New South Wales. Our BBTV inspectors have a happy relationship with the Dawney brothers, who they enjoy catching up with each inspection.

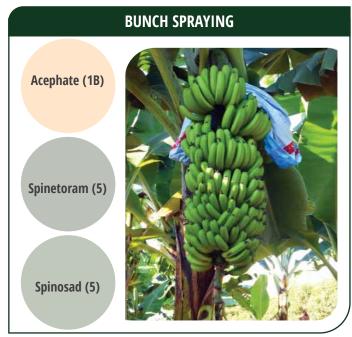
# PREPARING TO MANAGE BUNCH PESTS WITHOUT CHLORPYRIFOS

Tegan Cavallaro, Ingrid Jenkins & Sarah Williams

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has proposed that all uses of products containing chlorpyrifos in bananas be cancelled (except for impregnated bunch covers).

Growers should start planning for how they will manage bunch pests without applying chlorpyrifos (timelines on page 21). The **alternative** registered and permitted chemicals to manage the main insect bunch pests are summarised below:





Chemicals registered at the time of publication. Always check the registration status of products before use.

#### Things to consider

- The rate for bell injecting with spinetoram listed in the minor use permit (PER87189) is different to that on the label for bunch spraying.
- Good bunch spray coverage is important to get effective control.
- **Resistance management.** Rotate between chemical groups and avoid bell injecting, bunch spraying and ground spraying with the same chemical. \*The chemical groups are in brackets and colour coded in the above images.
- Consider **fruit fungal issues** when changing practices. Practices that increase air flow in bunch covers and the use of a registered fungicide may help minimise fungal diseases that affect fruit quality.
- Life stages of the pest consider using chemicals that focus on the soil-dwelling pupal stage of rust thrips as an additional option for control.

#### **On-farm trials**

The National Banana Development & Extension Team are now taking the current 'best bet' options from field trials onto farms. These trials will compare the grower's current practices (either bunch dusting or bunch spraying with chlorpyrifos) to:

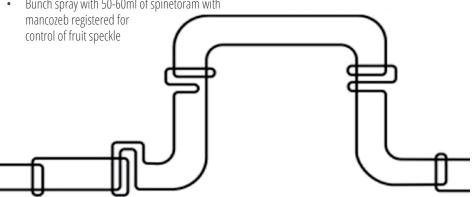
- Bell injection (60mL acephate)
- Early application of a liner (tied tight against bunch stalk)
- Either a plastic bunch cover tied tight against bunch stalk with a flue or paper bunch cover

Bunch spray with 50-60ml of spinetoram with mancozeb registered for

#### What's in the pipeline?

The Banana IPDM (Integrated Pest and Disease Management) project is focusing on biological approaches. Lab, pot and field trials are underway.

Hort Innovation has secured funding for trial work which is underway to assess the efficacy and generate residue data for a new active chemical to control bunch pests. These trials are not anticipated to be completed before 2026.



#### RESEARCH

### **Chlorpyrifos manufacturing and review timelines**

Announcement from the manufacturer that they are halting production of Strike-out WP

APVMA published its proposed regulatory decision on chlorpyrifos

March 2024

**APVMA** public consultation closed

July 2024

APVMA will publish final decision on chlorpyrifos. Details of potential phase-out period released.

Current dusting permit (PER14240) expires (subject to APVMA final decision)

Get in touch with our National **Banana Development & Extension** team who can visit and share their knowledge of bunch pest management.

There are other important considerations for bunch pest management including staff training, calibration, and chemical storage.

Tegan - 0459 846 053

Ingrid - 0497 801 980

Sarah - 0467 956 233

www.betterbananas.com.au

This information is current as at March 2024. Always check 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







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



## **NEW YELLOW SIGATOKA INFORMATION RESOURCES NOW AVAILABLE** better bananas

#### A BETTER BANANAS UPDATE

#### What is yellow Sigatoka and where does it occur?

Yellow Sigatoka is a fungal disease in bananas that causes leaf lesions and is commonly referred to as leaf spot. The fungal plant pathogen that causes the disease is Pseudocercospora musae.

Yellow Sigatoka occurs in all growing regions of Australia and is common in Far North Queensland, particularly during the wet season when conditions are warm and moist.

#### How is yellow Sigatoka managed?

Yellow Sigatoka can be difficult to control in wet, moist conditions and should be managed with a combination of cultural and chemical controls.

Deleafing is a major component of managing yellow Sigatoka that cannot be overlooked. Increased chemical application is unable to compensate for regular deleafing practices.

Three new videos, web pages and downloadable factsheets on yellow Sigatoka are now available. The resources provide a short overview of the disease, it's life cycle and management tips. These can be used as handy training resources for your staff.

Find out more about chemical and cultural practices by scanning the QR code, or had straight to www.betterbananas.com.au



Advanced symptoms of yellow Sigatoka disease. It is important to remove leaves with visible spot prior to fungicide application, to reduce disease load and to ensure the longevity of fungicides used for management. Source: Better Bananas

The banana industry guideline recommends that growers keep leaf spot levels on the banana plant below 5 % of the total leaf area in order to meet their general biosecurity obligations. High levels of leaf spot infection

in your plants will cause problems such as:

- Delays in filling bunches
- Reduced 'green life' in fruit causing mixed ripening
- Increased costs for de-leafing and spraying
- Difficulty in detecting exotic leaf diseases if they arrive in your
- **Restricted market access**

# IN THE BATTLE AGAINST TR4, IT'S IMPORTANT TO BUILD **DEFENCES NOT JUST FENCES**

Paul Dennis - University of Queensland, St Lucia, Queensland Tony Pattison - Department of Agriculture and Fisheries, South Johnstone, Queensland.

Panama Disease Tropical Race 4 (TR4) – now found in 23 countries – continues to wreak havoc on banana production worldwide. In Queensland, though, our banana industry has not witnessed the rapid spread and devastation observed in other countries. This is likely due to our heavy investment in on-farm biosecurity. However, while fences and footbaths help reduce the disease from spreading, its' movement via floods, feral animals, and other factors are difficult to avoid. Fortunately, fences are not the only defences in our arsenal against Panama Disease.

#### The soil microbial battleground

Soil biology plays a critically important role in determining whether the disease survives when given the opportunity to establish in new areas. Our research on the banana microbiome – the microbial community associated with banana plants – clearly demonstrates that soils with more microorganisms are less likely to be colonised by Panama Disease.

If we think about what is happening in the soil at a microbial level in terms of invading armies, this makes a lot of sense. It is more difficult for a small group of invaders to successfully take a large city than a small village. Likewise, it is difficult for Panama disease to become established when there is a large number of resident soil organisms.

One caveat to this, of course, is what if all the villagers were also highly trained soldiers?

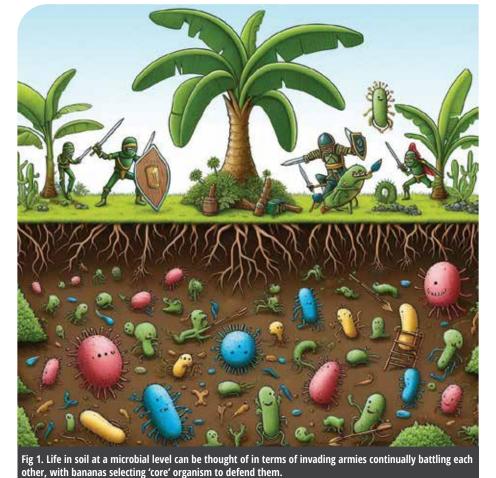
Would it then be as easy for the invaders to colonise?

Our results suggest not! The presence of different microbial species in soil, i.e., the community composition, also plays an important role in determining the likelihood of Panama Disease persisting in soil. This also makes sense as biologically rich soils contain a greater diversity of defences to resist newcomers. For example, soil organisms can suppress others through competition for resources, production of antimicrobial compounds, or by directly parasitising the invaders themselves.

Our work has also shown that in the Innisfail-Tully region, bananas form extremely stable partnerships with a subset of 'core' bacteria and fungi that help to defend the plant and keep it healthy. Incredibly, we see the same partnerships on banana farms in Asia and Africa, that have very low, or zero disease incidence.

#### How strong are our soil microbial defences?

Concerningly, when compared with soils supporting native banana, rainforest or pasture soils, those on commercial banana farms have roughly half the number of bacteria and fungi. This means less competition for invaders, and for bananas, it is strongly linked to how they are grown and how the land is managed. In banana systems that balance inputs with plant requirements, there is a more stable environment that builds soil microbial defences. By maintaining neutral soil pH, ground cover and diverse organic matter inputs, a more complex soil microbial community can exist; one that helps defend plants against soil borne diseases (Fig 2).



#### RESEARCH

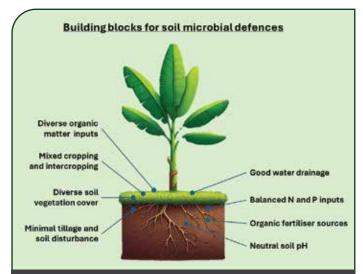


Fig 2. To build soil microbial communities that defend banana plants from disease requires a stable environment with diverse plant and organic matter

# Soil microbial defence destroyers Monoculture Waterlogging, drought heat and salinity Tillag Acid soil pH

Fig 3. Soil microbial communities are simplified where bananas are grown as a monoculture in bare acid soils, with poor drainage, lack of vegetation cover and high use of inputs resulting in more disease problems.

#### Soil microbial defence destroyers

Bananas grown in disturbed monocultures are more prone to constant changes making it difficult for soil organisms to build defences to protect plants. Soils that are regularly disturbed by farm management or environmental conditions, have less diversity and soil microbial biomass are more prone to disease. Farm practices that rely heavily on synthetic inputs, pesticides and nutrients, and have little vegetation cover tend to reduce the diversity and number of soil organisms that can defend banana plants. The reduced diversity and biomass makes the plants more prone to environmental stress and to soil diseases like Panama disease TR4 (Fig 3).

#### **Stopping the invaders**

Therefore, while fences and footbaths are important to stop Panama disease, the soil defences built from diverse soil communities are just as important. Through good farm practices that maintain a stable soil environment, with a diversity of carbon inputs from plants and organic matter, a diverse soil microbial community can be created. By having a diverse soil microbial community, banana plants encourage the best microbial defenders, with the best microbial 'weapons' that help reduce the likelihood of Panama disease invading.



Fig 4. Contrasting banana production systems comparing intensively produced bananas in a bare soil monoculture (Left) with bananas produced in a less input intensive systems with diverse vegetation cover to promote greater soil microbial defences (Right).





This work is supported by the Australian Centre for International Agricultural Research with support from the University of Queensland and the Queensland Government.

# OPTTIMO IQ: REVOLUTIONIZING DATA ANALYSIS FOR BANANA GROWERS

# In a strategic manoeuvre aimed at reshaping industry practices and bolstering grower engagement, the Benchmarking Project has undergone a significant evolution, emerging as Opttimo IQ.

This rebranding endeavour represents a departure from conventional benchmarking methodologies, focusing instead on delivering accessible data insights that drive continuous improvement and innovation within the banana industry.

The decision to rebrand was prompted by a desire to streamline communication and provide clarity regarding project objectives. Opttimo IQ places a premium on readability and comprehension, ensuring that growers can easily interpret and leverage the wealth of data provided. For a comprehensive understanding of the project, growers are encouraged to explore our dedicated website at www.OpttimoIQ.com.au.

## Engage with Opttimo IQ: Your Gateway to Progress

The launch of the Opttimo IQ project website marks a pivotal moment in our mission to facilitate grower participation and foster knowledge sharing. This dynamic platform serves as a centralized hub for tracking project progress, accessing resources, and exchanging insights. Growers are invited to actively contribute their stories and photos, enriching the collective knowledge base of the industry.

Participation in Opttimo IQ is paramount, as it is through the collective contributions of growers that meaningful data analytics can be achieved. With a target participation rate of 8000 hectares, our aim is to equip participants with a competitive edge, driving profitability and sustainability across the industry.

## Focus on Carbon Reporting: Navigating Regulatory Landscape

Against the backdrop of evolving regulatory frameworks, Greenhouse Gas Emission Reporting has emerged as a central focus area for industry stakeholders. The imminent implementation of mandatory reporting requirements underscores the importance of proactive engagement and preparedness.

While banana growers may not be directly impacted by legislative mandates, the ripple effects are undeniable.

Financial institutions and wholesale buyers will soon be seeking data to inform supply chain emission numbers, placing a responsibility on growers to assess and manage their carbon footprint.

Opttimo IQ integrates carbon reporting into its scope, leveraging the accredited Melbourne University Greenhouse Accounting Framework Calculator H-GAF. By providing the required data to the Opttimo IQ platform, growers gain more than business changing insights to their business, they will also be provided an accredited Greenhouse Gas

Emissions audit, empowering informed decisionmaking, environmental stewardship and proactively generating an emissions baseline before mandated reporting from buyers and financial institutions flow down the line.

See image at bottom of this page.

## Privacy and Integrity: Our Commitment to Growers

At the core of Opttimo IQ lies a steadfast commitment to probity and privacy. Growers can rest assured that their data is treated with the utmost confidentiality, with no obligation to release personal information to external entities. Aglytica remains dedicated to safeguarding grower interests and autonomy.

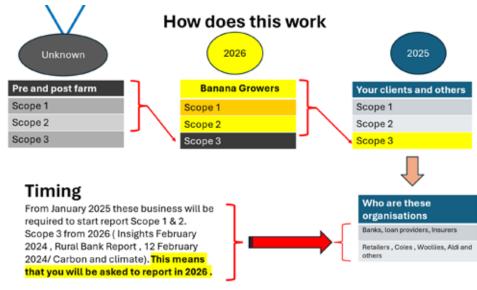
As we navigate the complexities of carbon reporting and industry transformation, Opttimo IQ stands as a beacon of innovation and collaboration. Join us in shaping the future of the banana industry, one data point at a time.

#### **Call to Action**

For the best possible outcome in Greenhouse Gas Emission reporting and as an industry, it's important to participate as soon as possible in the Opttimo IQ project.

#### To register your interest:

- View the project website and log an enquiry - www.OpttimoIQ.com.au
- Contact Eric Schluter, Aglytica, Project Manager – PH 0400 707 352, Eschluter@aglytica.com
- Contact Glenn Briggs, Aglytica, National Development Manager, PH 0438 976 910, gbriggs@aglytica.com
   OR SCAN THE QR CODE

















# **DE-HANDING ROBOT** PROTOTYPE IN THE WORKS

An industry-driven project that would automate one of the most physically demanding and repetitive processes in the packing shed has entered a new phase.

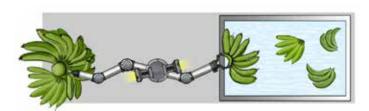
Scientists are now researching and developing new technology to build a prototype robot arm that will automate de-handing.

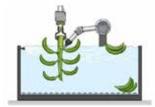
Delivered through Hort Innovation and led by QUT in collaboration with Future Food Systems, the Advanced Robotics for Manufacturing (ARM) Hub and BNL Industrial Solutions, the \$2 million program will use technology such as computer vision and machine learning to provide the banana industry with a solution for banana de-handing.

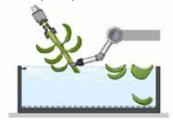
The project draws on years of collaboration between the Australian Banana Growers' Council (ABGC), growers, QUT, ARM Hub and BNL Industrial Solutions.

ABGC's R&D Manager Dr Rosie Godwin said she was excited to see where the project leads.

"This is a great example of researchers working effectively with growers and the private sector to deliver practical, useful tools for industry. We'll be watching this one very closely."







**ADVERTORIAL** 

## **REVOLUTIONISING QUEENSLAND'S BANANA INDUSTRY: DJI AGRAS T40 DRONES TAKE CENTER STAGE**

In the lush plantations of Queensland, where the banana industry plays a pivotal role in the agricultural landscape, a technological marvel is making waves - the DJI Agras T40 drone.

This innovative aerial solution is proving to be a game-changer for banana farmers, offering a range of applications that promise to elevate productivity, efficiency, and sustainability in the heart of Australia's banana belt.

The Queensland banana industry has long faced challenges, from labor-intensive cultivation practices to the threat of diseases that can decimate entire crops. The DJI Agras T40 drone comes as a welcome ally, addressing these challenges head-on and introducing a new era of precision farming.

Spraying has traditionally been a labor-intensive and time-consuming task in banana cultivation. The Agras T40, however, boasts an efficient and precise spraying system. Its ability to navigate the plantation autonomously while applying fertilizers or pesticides with pinpoint accuracy reduces both the time and resources required for traditional spraying methods. This not only boosts efficiency but also minimizes the environmental impact of chemical usage, aligning with the industry's growing focus on sustainability.

Moreover, the adoption of the Agras T40 aligns with global trends towards smart agriculture and the integration of cutting-edge technologies.

By embracing these innovations. Queensland's banana industry positions itself as a forwardthinking and technologically advanced sector, attracting interest and investment.

In conclusion, the DJI Agras T40 drone is proving to be a transformative force in the Queensland banana industry. Its applications in aerial monitoring, precision spraying, and mapping are enhancing productivity, reducing environmental impact, and

positioning banana farmers at the forefront of technological innovation. As Queensland's banana plantations embrace the era of smart agriculture, the Agras T40 stands as a symbol of progress, sustainability, and a promising future for the region's vital agricultural sector.

**Contact Wide Bay Drones for more** information: widebaydrones.com.au



# VARIETY TRIALS SEEKING RESISTANCE TO FUSARIUM WILT RACE 1 COMMENCE **ON ATHERTON TABLELANDS**

Jeff Daniells, Kathy Grice, Katie Robertson, Kaylene Bransgrove and Sharan Muthukumar, Queensland DAF

Eight new Lady Finger-like bananas - some from Brazil and some from Queensland DAF's mutagenesis efforts - have been field planted on cooperating growers properties at Mareeba. They will be assessed for resistance to Fusarium wilt Race 1 over two crop cycles.

#### **Background**

Fusarium wilt of banana, also known as Panama disease, has plagued production of Lady Finger (AAB, Pome) in the subtropics of northern NSW and southern Queensland since early in the 20th century. That widespread distribution of Fusarium wilt in southern production areas, combined with improved transportation and ease of mechanisation in the north, has contributed to major development of the Lady Finger industry on the Atherton Tablelands over the past 30 years or so. Currently about 280 ha are grown there – an industry worth about \$15 million/year (Figure 1). It wasn't too long though, before Fusarium wilt found its way onto a commercial Lady Finger farm on the Tablelands, with the first detection confirmed in 2008. Since then, several more farms have become affected, but damage on the Tablelands is typically not as severe as that in the south, because of the milder winters experienced.

Fusarium wilt is caused by the fungal pathogen Fusarium oxysporum f. sp. cubense. The relevant races described in Australia are Race 1, Race 2, Subtropical Race 4 (SR4) and Tropical Race 4 (TR4) which have to do with their banana variety host range. Lady Finger is susceptible to Race 1, SR4 and TR4. Within the races there is another division known as Vegetative Compatibility Groups (VCGs) which is particularly helpful for correct identification purposes. The VCG present on the trial farms is identified as VCG 0124/5 which is grouped in Race 1. This is the same as in previous trial sites in NSW and the north Queensland wet coast and is the most prevalent VCG recovered from diseased Lady Finger in Australia.

In previous banana plant protection projects, Fusarium wilt Race 1 screening has occurred at a field site in the subtropics of NSW. But due to budgetary constraints in the current Hort Innovation project - 'New varieties for Australian banana growers' (BA21002) - the feasibility of

conducting such trials on cooperating growers' properties is now being examined on the Atherton Tablelands. Two potential cooperating growers, that had sufficient Fusarium wilt disease present in their Lady Finger plantations, were identified at Mareeba in April last year. Tissue culture plants of the required varieties had been multiplied, were grown on in the glasshouse at South Johnstone and field planting occurred in October/November (see Figure 2).

#### **About the trial**

#### **Varieties**

- SCS451 'Catarina' reported to have tolerance to Race 1 in the Brazilian subtropics has been planted. It is certainly the one to watch. In our agronomic trial at South Johnstone it has performed well with bunches of SCS451 throwing well clear of the throat, not choking like what often occurs with Santa Catarina Prata, which we have had in Australia since the late 80s (see Figure 3).
- The four best tasting Goldfinger variants from the mutagenesis program have been included to confirm that they have retained resistance to Fusarium wilt Race 1.
- Three Lady Finger and Silk hybrids from the EMBRAPA program in Brazil are also being evaluated.
- As with other Fusarium wilt screening trials in the past we have included a few reference varieties with a range of known levels of disease reaction. They are the key to correct interpretation of results. It is not so much the absolute level of severity of disease present in the new varieties being tested, but rather how their level of disease severity compares with that of the reference varieties. Here we have included Dwarf Ducasse (very susceptible), Lady Finger (susceptible), High Noon (intermediate) and Goldfinger (resistant).



Figure 1. Lady Finger production near Walkamin and Mareeba has grown substantially since the 1990s.

#### RESEARCH



Figure 2. Field establishment of tissue cultured plants being completed last November. Fusarium wilt affected Lady Finger arrowed in neighbouring row in the background.

#### **Disease Inoculum**

- The trials were established in locations on the farms where Fusarium wilt was fairly widespread. Additionally, diseased pseudostem disks (about 5 cm thick) obtained from nearby blocks on the farm were placed in the bottom of each planting hole (Figure 4). This was to help enhance the uniformity of distribution of the pathogen and ensure that the roots of each plant in the trial were in close proximity.
- The previous crop of Lady Finger on the sites was 'knocked down' in early/mid 2023 to allow for plant breakdown and cultivation of the rows prior to planting.
- When any variety becomes diseased, the plan is to confirm by laboratory testing that the symptoms are due to VCG 0124/5.

#### To note

- Disease ratings will get underway as soon as disease symptoms become evident - expected in the next few months.
- Disease development will be assessed in a plant and ratoon crop.
- Hopefully, we will get good indications from the Tableland trials of the disease response of the varieties. Selected varieties could then be considered for inclusion later, in precommercialisation sites in NSW and elsewhere.

Further information is available at https://betterbananas.com.au/



Figure 3. The new import from Brazil, SCS451 (right) which is reported to be tolerant to Fusarium wilt Race 1, has bunches more pendulous than Santa Catarina Prata (left), - images from agronomic trial at South



Figure 4. A diseased pseudostem disk was placed in the bottom of each planting hole.



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

# WORKING TOGETHER ON TR4

The TR4 Control Program Team and staff from Biosecurity Queensland participated in a two-day workshop in March to collaborate on TR4 disease management strategies.

A visit to Blaise and Shayne Cini's farm in Wangan was a great example of proactive biosecurity practices. Their boot wash facilities, zoning and vehicle wash down facility were impressive to see.

The outlay for the biosecurity facilities and their ability to use Shayne's skills in welding and steel fabrication to build the vehicle washdown facility



Seeing the impact of the disease first-hand enabled further discussion to occur around the challenges and opportunities in future disease management.

A big thank you to growers who met with ABGC and BQ staff during their visit to FNQ. Seeing the commitment and biosecurity efforts in the field makes a lasting impact and impression. First-hand exposure provides a vital insight into grower's challenges and efforts in biosecurity measures and disease





ABGC and Biosecurity Queensland staff appreciated the farm visit to Shayne and Blaise's impressive property in Wangan. L-R: Leon Collins, Leanne Erakovic, Jess Portch, Michelle McKinlay, Shayne Cini, Blaise . Cini, Mike Reid, Geoff Wilson, James Planck, Gary Artlett, Suren Samuelian, Michael Kelly.

## CONSENT FORM FOR TR4 SURVEILLANCE

Growers in the Northern Banana Biosecurity Zone (NBBZ) should have all received a copy of the DAF/BQ consent forms to their mailing address.

If you haven't received a copy please get in touch with Geoff@abgc.org.au or call 0418 644 068.

#### **TR4 Destruction Zone Workshops**

Tully and Innisfail growers were invited to attend workshops in March to learn more about the latest research and developments into the size and treatments of TR4 destruction zones and discuss the ABGC Board's recommendations for future destruction zone management.

Tony Pattison and Wayne O'Neill from DAF presented 'Under the Plastic: Impacts of Urea disinfestation of Panama disease TR4' research findings and Paul Dennis from UQ presented on 'Research perspectives on the current destruction protocol.'

After the research findings were presented, TR4 Control Program Manager Geoff Wilson provided the ABGC Board's recommendations relating to TR4 destruction zone size for future management.

ABGC acknowledges that it has been nine years since the first TR4 detection, buying considerable time for the industry to adjust and prepare.

The ABGC Board supports:

- the destruction zone being reduced in size to include the infected plant plus others for distance of 5 metres along the row in both directions, for 10m total length;
- no destruction across the inter-row.

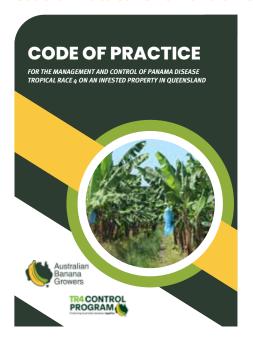
The reduction in destruction zone size has the potential to provide a more practical and workable solution to infested property owners in managing the disease, based on the current science.



A TR4 destruction zone in progress.

#### **TR4 PROGRAM**

#### **Code of Practice review and amendments**



Gary Artlett from BQ provided a presentation on BQ's policy position on change, highlighting that the current Code of Practice allows for innovation. The presentation demonstrated Biosecurity Queensland's support for a Code review, as well as ensuring that it reflects the latest scientific and technical advice, makes TR4 destruction zone management efficient and easy to implement and provides support to growers to manage their destruction zones.

The destruction zone workshops were the first consultation step in gauging the industry's appetite for changes to destruction zones in the Code of Practice.

If broader consultation is positive, DAF/BQ will facilitate changes to the Code and the revised Code would be tabled in Parliament and made publicly available.

#### **UPCOMING GROWER CONSULTATION FOR** CODE OF PRACTICE **AMENDMENTS**

There will be further consultation opportunities on the Code of Practice amendments during April and May this year. Please keep an eye out for E-Bulletins and SMS messages from ABGC with further details.

Growers are welcome to reach out to Program Manager Geoff Wilson directly with any questions or concerns in the meantime.

Contact: geoff@abgc.org.au or phone 0418 644 068

#### **ADVERTORIAL**

## TIPA®, PEALING BACK THE LAYERS OF COMPOSTABLE PACKAGING

Australia's banana industry is a vital part of the nation's agricultural landscape, contributing significantly to the economy and providing a staple food source for millions.

However, as with any industry, there's always room for improvement, particularly in the area of sustainability. This is where compostable packaging emerges as a game-changer, offering a path towards a more environmentally conscious future for banana brand owners.

Compostable packaging aligns perfectly with the circular economy concept, where materials are reused and repurposed rather than discarded. Banana waste, often abundant, along with the compostable packaging it is packed in, can be

transformed into nutrient-rich compost, creating a closed-loop system that reduces waste and generates value from what was once considered a by-product.

TIPA compostable packaging, a leading provider of compostable packaging solutions for the food and fashion industries, can play a crucial role in helping the banana industry meet the 2025 APCO packaging targets by providing a sustainable alternative to traditional plastic packaging, TIPA's compostable films and bags are designed to break down completely in industrial composting facilities, leaving no trace behind.

Tipa manufactures its products in Australia, and can provide growers with Banana bunch bags, banana bags and banana bands. "I wholeheartedly believe

that compostable packaging is not just a trend but an essential shift for the Australian banana industry. By embracing compostable solutions, banana brand owners can demonstrate their commitment to sustainability by reducing their environmental footprint and enhancing their brand reputation among eco-conscious consumers. This is not just about meeting market demands; it's about taking responsibility for the planet and ensuring a greener future for the banana industry", says Joe RoseMeyer, Sales Director at TIPA Compostable Packaging.

About TIPA® Compostable Packaging -For more information, please visit www.tipa-corp.com or email Joe at joe.r@tipa-corp.com



# NATIONAL BANANA FRECKLE RESPONSE



#### March 2024 update

# The Northern Territory (NT) continues to respond to an outbreak of *Phyllosticta cavendishii* (Banana Freckle).

This fungus is exotic to Australia and affects Cavendish and non-Cavendish banana cultivars. It is a category 3 plant pest disease under the Emergency Plant Pest Response Deed from Plant Health Australia and the Australian Government and a declared and notifiable pest under the Northern Territory's *Plant Health Act 2008*.

Banana Freckle is currently contained within existing delimitation zones and no further spread of the disease outside of these rural zones has been detected over the last four months. Containment lines have been implemented around Infected Properties (IPs) and surveillance continues in the surrounding areas.

The eradication of banana plants from IPs is underway with 87% of infected premises having had bananas plants removed. Where an infected banana plant is found, all banana plants from that property are removed.

The NT has had a favourable wet season for 2023-24 for the National Banana Freckle Response program. The delayed onset to the wet season meant that field crews were able to work right up to the end of 2023 with only some minor weather disruption in December 2023. The arrival of the monsoon in early January and again in February brought significant rain and flooding however, most of this rain fell south of the delimitation

zones. Banana Freckle is known to spread on wind driven rain and during the Wet Season, it can take as little 20 days to incubate and present symptoms. Surveillance on properties upwind of the containment lines to verify containment is now underway noting that, at the time of going to print, it was more than 60 days post first monsoonal rain and currently results for the containment of this plant pest disease seem positive.

For more information on the National Banana Freckle Response go to nt.gov.au/banana-freckle or scan the QR code.



### **Protect** the Northern Territory banana industry

Banana Freckle has been detected in the Territory

Report online at nt gov.au/barana-freckle or call the National Banana Freckle Emergency Response on 8999 213/

nt.gov.au/banana-freckle









#### **QBAN SCHEME FACILITIES**

# QUALITY APPROVED OBAN BANANA NURSERY®

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

# DIAZINON REVIEW OUTCOME ANNOUNCED

In March, the Australian Pesticides and Veterinary Medicines Authority (APVMA) published its proposed decision on the reconsideration of diazinon, an insecticide used widely in agriculture and horticulture to control insect pests.

The APVMA proposes to cancel all uses in the banana industry and many other horticultural industries.

Diazinon is currently registered for the control of

Banana beetle borer (butt spray) and banana rust thrip (bunch spray).

Public consultation on the proposed decision is open for 3 months and will close 11 June 2024.

Enquiries about the proposed decision or the public consultation can be directed to enquiries@apvma.gov.au or visit www.apvma.gov.au

**ADVERTORIAL** 

# EMBRACE THE FUTURE WITH SIDEWINDER

# Upgrade your banana plantation with the revolutionary arm-operated banana injection system.

Designed for maximum operator productivity and precision, this system features an ergonomic long handle that reduces fatigue and improves accuracy by utilizing upper arm muscles.

The lightweight aluminum spear with a stainless steel tip ensures ease of injection, and operator

comfort and reducing strain. The system's adjustable dosing provides precise and efficient delivery of pesticides. Compatible with various chemicals, it's the go-to choice for banana growers worldwide. Sidewinder's Arm-Operated Banana Injection System also offers desuckering and butt injection treatments, catering to diverse needs.

With its reliability and ease of use, it streamlines operations and saves time and resources.

Invest in Sidewinder's system for a cost-effective, efficient, and accurate solution. Choose the tool trusted by professionals and unlock the full potential of your tree care. Embrace the future of banana plantation management with Sidewinder.



# **TACKLING BANANA FOOD WASTE** WITH FIRST OF ITS KIND PLAN

Melissa Smith, Horticulture Lead, End Food Waste Australia

Banana growers, like all growers and other industry participants, do not intend or want to waste their valued and carefully grown produce.



Melissa Smith is the horticulture lead at End Food **Waste Australia** 

Unfortunately, fruits and vegetables are Australia's most wasted foods. Of Australia's 7.6 million tonnes of food waste, 50% of this is fresh produce (FIAL 2021) – enough to fill the Melbourne Cricket Ground to the brim five times over.

Each year, 100,000 tonnes of bananas go to waste. Bananas that currently don't leave the farm alone could provide food-insecure Australians with their year's supply. But we know it's not as simple as stating those two things together and calling it a solution.

And so, End Food Waste Australia with the Australian Banana Growers' Council and the horticulture industry has developed a new, and Australian-first, Banana Food Waste Action Plan. This plan sits as a chapter alongside a first-of-itskind, Australia-wide Horticulture Sector Action Plan. The most impactful interventions are crafted to suit the produce type and the banana industry (as well as the melon industry) has taken industry leadership as the first commodities with dedicated Food Waste Action Plans and targeted priority

#### But why reduce fresh produce waste?

Reducing food waste from fresh produce is critical to reaching Australia's goal of halving food waste by 2030 – in line with the United Nations Sustainable Development Goal (SDG) 12.3 – which will have positive impacts for industry profitability, for people and for the planet.

And, we know that reducing horticulture food waste would provide billions of dollars of economic benefits (Lapidge 2015), reduce the growing environmental impact of our food system.

#### What are the causes and hotspots?

We found the biggest hotspot for banana food waste was on-farm. Waste is between 10-30% of the crop, according to discussions with growers and the literature. In the paddock, growers have to assess "Is it worth picking?" and this decision is affected by the health of the bunch, the availability of the staff to pick and pack, and the expected dollar return. In the packing shed, growers ask "Is it worth sending?" which is affected by the condition of the fruit, the appearance, and the expected dollar return. In markets, distribution and retail, damage during transportation, produce specifications, ripeness and singles affect decisionmaking that impacts food waste.

#### What action is required?

Some strategies can be adopted on farm, during distribution or at retail level. Others required systemic change, collaboration and action from across the supply chain, government and consumers. Preventing waste from occurring in the first place is the top priority.

There are four priority actions to help prevent food waste occurring in the first place, they are:

- 1. Aligning banana production more closely with demand.
- 2. Supporting banana growers to continue best practice production.
- 3. Improve the transportation of bananas.
- 4. Facilitate a consistent supply of skilled labour.

These would result in less crop left in the paddock and being able to make the most of expensive inputs and environmental resources. Interventions would include reviewing produce specifications, trialling whole crop purchasing, continuing research on pest management, using real-time monitoring and implementing packaging techniques to delay ripening.

Two priority actions focus on growing alternative markets and repurposing surplus food from becoming waste, which are:

- 1. Increase the quantity of bananas being processed and incorporated into value-added products for human consumption.
- 2. Increase the quantity of bananas donated to food rescue organisations.

In action, these would look like conducting feasibility studies and supporting the expansion of innovative banana value-added and upcycled products. And addressing the barriers to food donation, identifying regional hubs and advocating for financial incentives like the proposed food donation tax incentive.

Three of the priority actions look at how we can enable food waste reduction across the supply chain, including:

- 1. Improving food waste data collection, reporting and analysis.
- 2. Education campaign and supply chain communication.
- 3. Calibrating policy and regulatory settings.

These would make it easier to reduce food waste and support food waste reduction through better data, better education and better policy.

#### Ready to get involved?

Australia's \$36.6 billion food waste challenge is too big to tackle alone. The implementation of the priority actions outlined in the plan requires everyone's involvement.

**Be proactive.** Start recording your food waste because we know that what gets measured, gets managed. Manage overproduction where possible, and grow to sell. And start looking for value-adding opportunities available to you.

#### Participate in industry activity. Be

part of communicating demand and supply. Include food waste reduction in staff training and KPIS. Be a part of initiatives like bench marketing trials and

#### Partner across the supply chain.

Work together to plan ahead for gluts. And build trusted relationships to share information.

Connect with End Food Waste Australia by joining our newsletter list, following us on LinkedIn, or connecting directly with me about Horticulture Food Waste Reduction activities.

# Why address banana food waste?

Australia grows high-quality produce the world wants. Yet, 29% of all bananas are wasted.1 Reducing food waste has significant impacts and opportunities for industry profitability, for people and the planet.

There is no time to waste when it comes to meeting **Australia's goal** of halving food waste by 2030.



For industry profitability



100,00 tonnes of bananas are wasted a year<sup>2</sup> – enough to fill 4000 semi-trailers.

Reducing food waste means selling more of what you produce, earning you more from what you invest. Food waste is Australia's \$36.6 billion challenge<sup>3</sup> and opportunity.



91% of consumers prefer to buy from organisations taking steps to reduce food waste.4

#### For people



**Australians** throw out the equivalent of 312 kg of food per person a year.5



Food security

Bananas that currently don't leave the farm could provide food insecure Australians with their year's supply.



1 in 6 adults & 1.2m children ao hunarv regularly<sup>e</sup>

For the planet

When we waste food, we waste the water, energy and land resources used to grow, make, move and sell that food7









- Lucas, D. et.al., 2022. Agrifutures: Pre-farm gate waste management: Baseline waste data for the agriculture, fisheries and forestry sector
- Based on Hort Innovation Statistics Handbook 2021-22, ref 1 above
- FIAL, 2021. National Food Waste Study Feasibility Study.
- Capgemini, 2022, Why Food Waste is Everybody's Problem. Final-Web-Version-Food-Waste.pdf (capgemini.com) FIAL, 2021. National Food Waste Study Feasibility Study.

- Foodbank, 2021 Hunger Report.
  FIAL, 2021. National Food Waste Study Feasibility Study



Learn more: www.endfoodwaste.com.au/horticulture

# **AUSTRALIAN BANANAS IMPRESS** ON THE INTERNATIONAL STAGE

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

#### Trial shipments highlight opportunities for Australian bananas in niche markets

Almost all Australian bananas are produced for the domestic market. On average, 62 tonnes per year, or less than 0.1% of production, has been exported since 2019 to markets such as Hong Kong, USA, Singapore, New Zealand and Japan<sup>1</sup>. Banana exports are often opportunistic and/or managed by market consolidators filling temporary demand. Fruit are typically exported as part of a mixed commodity airfreight consignment. Because the consignments often include other perishable fruit and vegetables with a lower storage temperature requirement, the bananas are at risk of being held below the recommended 13°C and developing under-peel chilling injury<sup>2</sup>. Fruit rejected due to poor arrival quality represents food waste plus economic and reputational loss for Australian bananas.

In November 2023, we tracked three Ecoganic® banana airfreight consignments to Hong Kong and Japan, documenting supply chain conditions, fruit arrival quality, shelf life and consumer preferences. The performance of bananas exported either as single or mixed commodity consignments was compared. Real-time data loggers were included in consignments to monitor handling temperatures.



Figure 1. Frank Sciacca with a real-time data logger and an export consignment

#### **HONG KONG**



Hong Kong is a non-protocol market where fresh produce is permitted entry without a phytosanitary certificate. Since 2019, 1 to 9 tonnes of Australian bananas have been exported each year to Hong Kong<sup>1</sup>. This represents small consignments of several boxes of organic or Ecoganic® Williams Cavendish airfreighted in mixed commodity loads. The fruit are typically pre-ripened with ethylene gas prior to airfreight to suit rapid sale by wholesalers and retailers. Dole and Del Monte dominate the Hong Kong banana market. Unripe green Cavendish fruit from the Philippines or Ecuador are sea-freighted to Hong Kong and then gas-ripened in controlled environment rooms. Conventional bananas currently sell for 2-8 AUD per kg at wholesale and retail. Small quantities of imported organic bananas are available for 10-14 AUD per kg at high-end retail.

#### Trial consignments 1 and 2

Premium grade Ecoganic® bananas from Innisfail in north Queensland were packed into 13 kg capacity boxes and delivered to a local transport depot on the same day at about 25°C. The fruit were road-freighted to Sydney under refrigeration arriving at 15-17°C. Fruit were gas-ripened for 3 days to peel colour stage 3 (50% yellow). Randomly selected boxes were exported from Sydney to Hong Kong as a single commodity load within an AKE airfreight container. Other boxes were transported by road to Melbourne and air-freighted to Hong Kong as a mixed commodity pallet on a PMC that included broccolini and melons. The temperature during airfreight of the AKE and PMC consignments was 14-16°C. The importer placed the AKE consignment into a 6°C storage room. A data logger triggered a low temperature alarm once the fruit dropped to 10°C, prompting transfer of some boxes to a warmer storage environment to reduce the risk of chilling injury. The PMC consignment boxes were distributed to the wholesale market almost immediately.

#### Fruit performance

Fruit from the AKE consignment that were removed swiftly from the 6°C storage room ripened to full colour in about 3 days at 20°C and did not develop chilling injury.



Figure 2. Fruit that avoided chilling temperatures

Other fruit that were stored by the importer at 6°C for up to 4 days before release to the market sustained moderate to severe chilling injury as they ripened and had limited commercial value.



Figure 3. Under-peel chilling on bananas held too

#### **RESEARCH**

Simulated export handling trials in our laboratory have established critical temperature and exposure time limits that result in chilling injury. This information has been used to develop a decision support tool which successfully predicted the chilling injury observed in this consignment.

#### Market acceptance

A survey of 104 Hong Kong shoppers at the Yau Ma Tei wholesale market revealed that 68% preferred the eating quality of Australian Ecoganic® bananas over the commonly available conventional Philippine fruit. On average, the Australian bananas had 21° brix compared to 19° for the Philippine fruit at an equivalent ripening stage. Samples of the Australian fruit were sold by wholesalers and a high-end supermarket for 8-13 AUD per kg. There was strong interest in the product and demand for follow-up consignments to fill a niche market segment.

#### JAPAN



Japan is a non-protocol market for bananas. However, bananas from Australia are only accepted if they arrive in an unripe green condition. On average, 37 tonnes of Australian bananas have been exported annually to Japan since 2019, either by air or seafreight<sup>1</sup>. Japan has modern ripening facilities and the expertise to manage green bananas on arrival. Dole, Del Monte and Sumifru currently supply conventional and organic Cavendish bananas to Japan. The fruit are sourced from the Philippines, Mexico, Ecuador and Vietnam and are available for 3 to 6 AUD per kg.

#### Trial consignment 3

Premium Ecoganic® fruit from a separate harvest near Innisfail were packed into 13 kg capacity boxes exported out of Cairns for the first time instead of being road-freighted to Brisbane, Sydney or Melbourne. The fruit were dispatched from the pack shed at 24-25°C, cooled to 14-16°C at a local transport depot and maintained at 16-17°C by the exporter. The fruit were packed into an AKE container and delivered to the Cairns airport where they encountered a 24-hour delay before flying direct to Tokyo Narita. The total time from harvest to arrival at the importer was 6 days. A decision support tool developed by DAF based on export simulation trial data predicted that the fruit should still arrive at peel colour stage 1 (100% green).

#### Fruit performance

Fruit arrived in Tokyo at colour stage 1, meeting the market access requirement and validating the decision support tool. Had the consignment travelled first to Sydney before airfreight to Japan, the decision support tool predicted a high risk of fruit developing some colour and being rejected. The fruit were gas-ripened with ethylene in a controlled temperature room as per standard procedures. Fruit attained uniform full yellow colour in about 5 days at 16-21°C.

#### Market acceptance

A professional taste panel, conducted by the Japan Food Inspection Corporation, involved 18 evaluators comparing Australian imported fruit to locally acquired fruit, which are potential competitors. The findings indicated a preference for the Australian fruit in terms of fragrance, texture, and flavour. Ripe fruit quality was excellent and attracted positive feedback from shoppers during an in-store promotion at the high-end Yaoko supermarket in Tokyo. The fruit were sold for 4 AUD per kg with additional orders placed. This activity was supported by the Queensland Minister for Agricultural Industry Development and Fisheries during a trade mission to Japan.



Figure 4. Consumer tasting of Australian and Philippine bananas in Hong Kong

#### Conclusions and recommendations

This study highlighted the importance of maintaining bananas at optimal temperatures during export. Trial consignments were dispatched from the farm too warm and sometimes stored at the importer too cold, increasing the risk of quality loss and market rejection. Direct exports from North Queensland reduced the time to market, maintained fruit freshness and ensured the product met market access requirements. Consumers in Hong Kong and Japan were satisfied with Australian

banana quality and were prepared to pay premium price. Retailers desired continuity of supply rather than irregular shipments. A decision support tool was used successfully to predict fruit quality based on different handling scenarios. The tool will be made available through the Better Bananas website.

Recommendations for delivering consistent premium quality bananas to export markets:

- · Access on-the-ground resources in export markets to connect and build trusted relationships with potential customers
- Increase knowledge among supply chain partners about optimal (13°C) banana handling temperatures
- Regularly monitor consignment temperatures to improve practices and fruit quality outcomes
- Airfreight small mixed commodity loads that match demand to reduce the risk of excess fruit being stored
- Seafreight fruit at optimal temperatures if there is demand for larger volumes
- Roll out a promotional campaign to capitalise on consumer interest, targeting high-end retailers

"Having access to a global market reduces our vulnerability to local markets and opens up opportunities. A monitoring program is crucial, especially in optimising supply of product quality, and freshness showcasing Australia's unique products."

Frank Sciacca, Managing Director Pacific Coast Eco Bananas

For further information, contact the DAF Supply Chain Innovation team c/o Andrew.Macnish@daf.gld.gov.au

This work has been supported by the End Food Waste Cooperative Research Centre, whose activities are funded by the Australian Government's Cooperative Research Centre Program, plus coinvestment from DAF and Pacific Coast Produce. We acknowledge Angelo and Michael Russo from Marlin Blue for supplying fruit for trial consignments. We thank Gary Kwan and Junko Akutsu from Trade Investment Queensland for coordination in Hong Kong and Japan, respectively. We also thank Daiji Takashima from DAF Agribusiness Policy and Industry Development. We appreciate the logistics support from Chaise Pensini and Tina Slattery at Perfection Fresh Australia. We reserve special thanks for Frank and Dianne Sciacca from Pacific Coast Eco Bananas for their commitment to banana exports.

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## SAVING SOIL WITH BETTER FARM PLANNING

A wise banana grower once said that he didn't purchase 100 acres of land but 20cm of premium topsoil. Keeping that soil on the paddocks is a benefit to both the farm productivity and the surrounding waterways.

The productive topsoil layer in the Wet Tropics, where most bananas are grown, can be shallow due to the high rainfall and rapid rates of decomposition.

Amelia Foster, the ABGC's Best Practice Coordinator, recently worked with Soil Conservationist Darryl Evans to design a new block on an existing banana

"The block had a variety of gradients and a contour layout will ensure that the risk of soil loss is reduced in the long term," Ms Foster said. The design has been digitized by Tahlee Engineering and can now be laid out by the earthworking contractor using the GPS on this tractor.

Modern farm planning considers the location of the farm within the landscape, the soil types, the natural flow of water through and from the farm and the lay of the land itself. There are a range of measures that growers can implement including diversion banks, grassed waterways, contoured paddocks on sloped land and sediment traps.

Floods in the Wet Tropics regularly deliver large levels of eroded soil from the river catchments to the Great Barrier Reef. Sediment is harmful to the Great Barrier Reef as it can smother coral polyps, block the sunlight necessary for photosynthesis, and disrupt the delicate balance of the reef ecosystem by reducing water clarity and promoting algae growth.

Proper farm and paddock planning can help to minimise the loss of soil, even in the high rainfall areas across the Tully and Johnstone catchments. Regulations introduced in 2020 brought in minimum practice agricultural standards for bananas that aim to minimise sediment loss by having appropriate erosion and sediment control measures in places where there is a high risk of soil loss from the farm.

The ABGC BMP Team works with growers to plan farm and paddock layouts in both new farms and as growers are replanting blocks.

ABGC also offers free Sediment Management Workshops where growers can work with other growers to better understand the topography and soils on their own farm.

If banana growers are interested in farm planning, they can email bmp@abgc.org.au

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



New soils form at a rate of about 1cm per century so there is no level of 'tolerable soil loss' given the time it takes to replace.



## **BMP BRINGS ELEANOR HOME TO FNQ**

The Australian Banana Growers' **Council recently welcomed** graduate extension officer Eleanor Sibree to its dynamic BMP team, based at South Johnstone.

Ms Sibree is currently completing her final two units remotely within a Bachelor of Rural Science from the University of New England.

"I was born and bred in Cairns and I'm delighted to be back home in beautiful FNQ to start my work with ABGC," Ms Sibree said. "I am a warm climate girl at heart and so am glad to have escaped another sub-zero winter in Armidale."

The BMP team seemed a perfect fit for the keen gardener with a passion for sustainability.

"I am also lucky to have former graduate extension officer, Molly Blake, showing me the ropes," she added.

"I look forward to meeting growers and hearing their stories. I hope that in time I will be able to share information with them so they can gain knowledge that is important for sustainable and profitable farming."

ABGC is proud to be participating in the 2024 Agricultural Extension Work Placement Program, which is funded through the Queensland Government's Queensland Reef Water Quality Program and delivered by the Queensland Farmers' Federation in partnership with the host organisations.



#### **BEST MANAGEMENT PRACTICE**



#### The Zecchinati family has been in the business of banana farming for over three decades. Now, Michael and Belinda Zecchinati are helping their daughter, Kayla, step up into the business.

After attending one of ABGC's past Nutrient Management workshops, the couple was eager for Kayla to learn more about fertilizer and crop nutrition. After speaking with Molly Blake from ABGC's Best Management Practice team, together they decided to sign up for the Cassowary Coast Reef Smart Farming Nutrient Management Planning project.

"I've been teaching Kayla what I can, but I thought the project could be a great start for Kayla to learn the basics about farming and banana nutrition," Michael said.

To kick things off, the three Zecchinati family members met Molly to chat about the farm and what they wanted to get out of the project. This information was used to tailor their program, and identify soil and leaf sampling locations, which were delivered for free.

"I really enjoyed learning how to take the soil and leaf samples with Molly. It's helped to demystify the process and understand the work agronomists do," Kayla said.

The results from these samples were analyzed by Anita Davina, from Total Growers Services, who produced a comprehensive nutrient management plan for their farm for the next year. Molly and Anita then met with Michael, Belinda and Kayla to go over the results and discuss some potential priorities.

"It was great to learn new bits of knowledge from the agronomist about how to balance our crop nutrition. It makes you think differently," Michael said. "Liming is going to be important for us going forward, to give the plants a good healthy soil foundation to be able to access the nutrients we apply."

Kayla also came along to one of ABGC's Nutrient Management workshops regularly held in South Johnstone. Led by an expert agronomist, these workshops are interactive and cater to small groups of growers.

"The highlight for me was the workshop, especially learning from other growers in the room. I learnt how to identify nutrient deficiencies I'd never seen before, but some other growers see often," Kayla explained.

"We've been busy getting the new farm up to scratch, so we were worried we may not have enough time. But it's definitely been worth it. It doesn't matter if you're a new or more experienced grower, there is something for everyone to learn through this project."

Growers interested in learning more about nutrient management planning can get in contact with Molly Blake on 0419 602 864 or molly@abgc.org.au.

The Cassowary Coast Reef Smart Farming project is funded through the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation, and is managed locally by CANEGROWERS Innisfail.



being part of the Cassowary Coast Reef Smart Farming project.

## **GROUND RULES KEEPING GROWERS A CUT ABOVE**

#### **Grassed interrows are important for keeping your soil where it should be – on your farm!**

Living groundcover reduces runoff by minimising the impact of rainfall and increasing the amount of water taken up by the soil. This reduces erosion and losses from your farm.

Ground cover can also contribute to improved soil biology and soil health. This means improved nutrient cycling and more nutrients available to feed your crop.

So, how do we grow great ground cover on banana farms?

Molly Blake, Extension Officer with the ABGC's Best Practice team, has been leading a project to answer that question.

"We all know ground cover is great. We also know that it is usually pretty easy to grow in the Wet Tropics. But when we start farming the land, ground cover can become a bit tricky to manage," Molly

"Growers want to maintain ground cover, but they don't want it to get in the way of getting the job done. For us to help growers grow great ground cover, we need to better understand how the way they farm impacts their ground cover."

To do this, Molly set out to survey 40 farms across the Cassowary Coast region.

"First, I asked growers about how they farmed. Questions like how wide are your interrows, how often do you use the slasher, and how effective is farm drainage," Molly explained.

Ground cover levels were then measured using a drone, which flew above the participating farms to capture high-resolution images of a few blocks. These images were processed and analysed to produce a ground cover percentage for each block. So, what did we find?

Banana growers are growing great ground cover. The majority of farm blocks surveyed had well above the 60% ground cover required by the Reef protection regulations.

"It's not surprising," Amelia Foster, ABGC's Best Practice Coordinator, said. "We've been seeing more and more ground cover on banana farms across the region over the past several years. Now we have the numbers to back that up."

Pairing the ground cover percentages with the farming practices survey, some of the key practices associated with ground cover included traffic reduction measures and contoured rows.

"This information will help us to identify with growers how to tweak their practices to grow

better ground cover and reduce sediment loss from farms," Amelia said. "It's also encouraging to see that effective farm planning, which includes reducing block gradients and promoting wider interrows, can actually help."

Growers interested in learning more about the project, or discussing how drones could benefit your farming operation, can contact Molly at 0419 602 864 or molly@abgc.org.au.

ABGC would like to extend a massive thank you to all the growers who participated in the project and industry experts who contributed to its success.



Extension Officer Molly Blake used a drone to measure ground cover levels as part of this project.

# Want to improve your crop nutrition & soil health?

FREE workshops available for North Qld Banana Growers

Increasing soil health & building carbon

Seasonal nutrient management

✓ How to read soil & leaf tests

Meeting the regs

Record keeping

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





# **MIXED SPECIES FALLOW CROP ON** SITE FOR UPCOMING NUTRIENT TRIAL

These photos show the mixed species fallow crop growing at the **South Johnstone Research Facility** scheduled to be planted with bananas later this year with a new nutrient management trial.

The 'Factors Other Than Rate' trial will examine timing, placement and form of nitrogen fertiliser as part of the second phase of the Banana Nutrient Rate Trials project. The site was mounded in October 2023, and had lysimeters installed one metre underground to measure nutrient leached from the site. The fallow species planted include Sunn hemp, sunflower, sorghum, Jap millet, tillage radish and mustard.

If you would like more information about the trials, please contact Alex Lindsay, Department of Agriculture and Fisheries, email: alex.lindsay@daf.qld.gov.au.







The Banana Nutrient Rate Trials project is funded through the Queensland Government's Queensland Reef Water Quality Program and delivered by the Department of Agriculture and Fisheries.





# NEW RESEARCH REVEALS A BUNCH OF THINGS HAVE CHANGED SINCE PARENTS WERE AT SCHOOL

#### Update provided by Hort Innovation

The primary objective of the Australian Bananas 'Back to School' campaign was to create a spike in media attention for bananas during the 'Back to School' period that highlighted bananas as nature's energy snack providing the fuel needed to help you do your thing.

The campaign kicked off in mid-January to educate Australians about the fact that, though many schooling habits have evolved, the humble banana has always been Australian's favourite snack to fuel for school.

New research by Australian Bananas found that Aussie parents feel the biggest changes in education across the decades are not just the integration of technology (76 per cent) or skyrocketing back-to-school costs (57 per cent), but the new age lunchbox (49 per cent) due to the increased food guidelines and 'must have' lunch box styles.

#### THE INSIGHTS

The research, funded by banana growers through the marketing levy, revealed school lunches are among the biggest differences parents have noticed from their own schooling experience, with four-infive (81 per cent) sharing they now need to adhere to food guidelines and almost half of Aussie parents say there are a lot more restrictions on school lunches, compared to when there were at school (67 per cent).

Nuts (82 per cent) and seafood (33 per cent) were the biggest no-no with the increase in allergy awareness, however, treats with sugar (29 per cent) and even plastic wrap (23 per cent) were included on the list

While most (70 per cent) Aussie parents find it increasingly difficult to stick to the evolving school lunch box guidance, nearly all parents (93 per cent) shared that they include a banana. Naturally convenient in their own peel 'packaging', it is easy to understand why.

The classic sandwiches, including peanut butter or ham, observed the highest decline in popularity, paving the way for new favourites, sushi and salad. Also in decline are the trusty plastic lunch boxes, with paper lunch bags virtually non-existent, making bento boxes (38 per cent) and cooler bags (24 per cent) the new 'it' items.

With the modern changes to school lunches, it is surprising that parents (94 per cent) are not stressing about what to put in the lunchbox. Instead, their biggest challenge is getting products

that their child will like (48 per cent) and being able to afford it all due to the cost of living (46 per cent). The majority (90 per cent) of parents even admitted to feeling an increasing financial strain this year.

#### THE APPROACH

One thing that has not changed is the humble Australian Banana, which continues to be the key snack in lunch boxes across the country, helping kids do their thing at school, past, present and future.

To showcase the integral part the feel good fruit has played in Australian lunchbox history, Australian Bananas partnered with media personality Tim Robards and his daughter Elle. Tim said, "Although a lot has changed since I was at school compared to Elle, one thing is the same - our favourite school snack, Australian Bananas."

According to banana grower Dianne Sciacca, "Bananas have been the go-to school snack for generations. Australian Bananas aren't just delicious, they are an extremely nutritious, long-lasting energy snack packed with natural carbohydrates, vitamin B6 and potassium." Australian bananas are the perfect snack for fuelling any hop, skip or jump.

#### **THE CAMPAIGN**

Key elements of the campaign included:

#### **Talent**

To bring the campaign to life, Australian Bananas partnered with reality star (The Bachelor, SAS Australia) and health and fitness professional, Tim Robards, and his daughter, Elle Robards. Together the pair stared in a hero video shared with media and across social media. The video demonstrated what has changed since Tim attended school versus Elle attending school, while highlighting how bananas were, and remain, their favourite school

snack, and sharing key banana campaign messages. Still images of the pair were also captured and shared with media for use across the campaign.

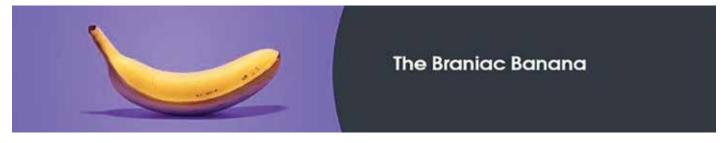
In addition to this, Tim promoted the campaign through:

- Conducting media interviews to highlight bananas as the ultimate back to school snack
- Providing a quote for Australian Bananas press release to be shared with media
- Sharing the campaign content on his own social (Instagram) account.





#### MARKETING



#### Social media

To further promote the back-to-school campaign, social media activity launched in January. This included sharing of content captured with talent partners Tim and Elle across the Australian Bananas' owned social media channels (Facebook, Instagram, Tiktok).

The campaign also featured other parents, including media personality and dad of two, Ben Milbourne, to share the key campaign messages and extend the reach of the campaign with their audiences, as well as sharing this influencer content across the Australian Bananas social media channels (Facebook, Instagram, TikTok).



#### Retail

Australian Bananas has an 'always on' approach with Coles and Woolworths online, where bananas are consistently promoted throughout the year to maximise time in market and consumer visibility of advertisements. Activities included:

 Banana advertisements targeting different online "aisles" including the snacking aisle, breakfast aisle, and fruit and vegetable aisles. For example, the "pick me up" banana creative, which features a banana in muesli bar wrapper, was advertised in the snacking aisle.



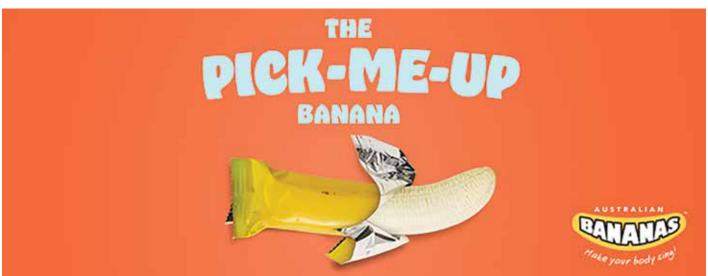
Targeting back-to-school shoppers with a "Brainiac Banana" creative advertised at key back-to-school timings.

In February and March, Australian Bananas trialled new activations with Coles and Woolworths, with the aim to be more "omnichannel". This means targeting shoppers in a range of ways, pre-store, instore and online -throughout their entire shopping journey.

- Inclusion in Coles' "Back to School Hub". This included featuring bananas in an online "back-toschool" aisle, as well as in-store radio ads which promoted bananas as the 'healthy fuel for school' during peak back-to-school timings.
- Product association in Coles with a complementary supplier partner. This included promoting bananas alongside vanilla yoghurt, encouraging consumers to purchase both products together for a breakfast/snacking idea.
- Landscape ticket (a pricing style ticket which featured the "pick me up" creative with a banana in muesli bar wrapper) displayed at shelf in all Woolworths stores.
- E-newsletter to Woolworths Rewards customers reminding and encouraging impulse add to basket.
- Out of Home front of store screens advertising in Woolworths Metro stores, encouraging impulse purchase for lunchtime snacking.

#### Media coverage

The public relations campaign secured **128 pieces of national coverage**, including on television; **The Today Show**, and with top tier media outlets; Daily Mail Australia, 9Honey and **Australian Food Guide**. A key highlight included an article titled 'Bananas: All the reasons to love this portable snack' featured across the News Corp network. The public relations campaign coverage created over 750,000 opportunities to see the banana key messages.



# 'BOZ' BRINGS BANANA **HISTORY TO NEW BOOK**

It's a time in Australian banana history that many growers remember all too well: the hardfought battle against banana imports to safeguard the local industry.

While it was a battle on multiple fronts, involving many growers and industry representatives, two of the people key to its success were former ABGC chair Len Collins and retired Queensland Senator Ron Boswell.

Mr Collins, a grower based in Tully, described Mr Boswell as a great friend of the banana industry. "His efforts to get government to release their biosecurity model meant our experts were then able to pull it apart. He was also able to use his influence to set up two senate inquiries, which helped us get the information and force biosecurity to stick to the rules."

Mr Collins said ABGC was always upfront with the Senator, even when there were hard truths to deliver, and ensured he was thoroughly prepared for any questions around the validity of the no imports argument.

"He really did help us through the whole thing." Mr Boswell, a National Party stalwart, has recently released a memoir Not pretty, but pretty effective detailing his upbringing, business background and of course his time in Australian politics.

"I think he [Len] originally saw just another politician and thought, 'he's not going to help.' But then I stuck with it...brought it up in press releases, asked questions in parliament, got to the senate

inquiries and he could see that we were really trying," Mr Boswell said. "We worked really well together."

Mr Boswell speaks of his admiration for the banana industry's tenacity. He still recalls the moment, with many growers listening in, that he had a breakthrough when questioning a government representative in a senate inquiry, which he details in his book.

The witness claimed a report recommending banana imports was unanimously adopted and answered questions as such. In fact, it was not. As a result, in Mr Boswell's words: "The report's credibility and import recommendation were in

The relationship he forged with Len endured for years, with Mr Collins recently attending the Queensland launch of the memoir.

"He understood business and farming is a business," Mr Collins said.

Mr Boswell's passion for politics, and his desire to see other people with real life experience in the halls of Parliament, is apparent throughout the

Mr Boswell left school at 14 but forged a successful career in business before entering politics. In fact, it was initially his wife who was more active politically and had a family background in agriculture.

"My wife [Leita] took me to a National Party meeting to see her father receive his lifetime membership," he explained. Leita's father was a bean and avocado grower, but had spent some time in bananas too.

This occasion would quickly lead to close working relationships with key political players, including Joh and Florence Bjelke-Petersen, initially in assisting and driving campaigns and then as a major political player in his own right.

"I don't regret anything for a minute, it was just the best thing I ever did," Mr Boswell said of his time in The Nationals. "I enjoyed every minute."

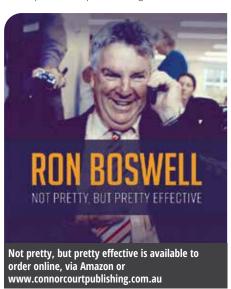
Mr Boswell has always had some impressive stories to tell, but the plan to officially put pen to paper was sparked by a near-death experience. Two, in

He'd gone into hospital for a knee replacement and fallen gravely ill, needing to be revived on two occasions and prompting a veritable who's who of Australian politics to visit him.

It turned out he still had much to give though, including the messages in this book.

"What if there were more people who understood politics, more people with practical business experience," he thought at the time. "I've come to the conclusion that you can't have a good country unless you've got a good parliament...with wellbalanced people in [all major political parties.] That's what I believe we used to have and I think that's disappearing rapidly now."

A Canberra launch of the memoir was due to take place on March 27 in the Nats Party Room, with guests including Dennis Shanahan (The Australian National Editor) and Barnaby Joyce (Federal Member for New England). A review of the book by former Prime Minister Tony Abbott had been published in The Australian in the lead up.





Len Collins and Ron Boswell as featured in Mr Boswell's memoir.

## FEAST OF THE SENSES MARKET DAY Sponsored by Australian Bananas

## Innisfail, Far North Queensland | 24 March, 2024

The Australian Bananas store is always a highlight at Feast of the Senses - quite literally, with it's bright yellow canopy and array of banana merchandise.

This year, Josephine Borsato and Dean Sinton from the Cassowary Coast BGA lead the charge, with support from both ABGC and Hort Innovation staff. A true team effort!

The hats, drink bottles, t-shirts and banana bags were a huge hit and the ABGC's TR4 Control Program team were also on hand to spread the word about Panama TR4. Of course, there were also plenty of bananas to give away, an ideal choice for all those braving the rain to enjoy all that the event had to offer.

A massive shout out to Jo Borsato for coordinating the efforts and to everyone who stopped by the stall – thank you!

















