# Australian

Issue: 64 | APRIL 2022

# **GET GROOVIN'**

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FOR NATIONAL BANANA DAY

CHEMICAL REVIEWS PAGE 9 UNPRECEDENTED TIMES PAGES 10-11 NATIONAL BANANA DAY PAGES 21-22



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Front page: Pictured (from L-R) - Isadora Nucifora, Brandon Borsato, and Gabriella and Teodoro Nucifora.





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#### AUSTRALIAN BANANAS

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## **CEO COLUMN**



Growers are fully aware of the tough situation in the industry currently, with low banana prices and ts causing

increasing input costs causing major financial stress.

#### **Input Costs**

All of Australia, including growers, are all feeling the impact of world issues through significant increases in fuel prices. Countries emerging from COVID and increasing their travel has increased the demand for fuels, but that has not been met by an increase in oil production. Another part of the issue is that Russia is one of the world's largest oil producers.

The farm sector is also facing increases in the prices of fertiliser and chemical as a result of the oil price increase. While individual growers have no influence on geopolitical dynamics on their own, there is a greater chance of addressing escalating input costs when farmers join forces. ABGC is a member of the NFF's Horticultural Council, where NFF has called for a domestic manufacturing strategy for highly-vulnerable critical inputs for the farm sector.

#### Jim Pekin, CEO

The NFF Horticulture Council has also been progressing access to farm staff. NFF has detailed to the Government how it should enhance Australia's programs for international farm workers, create pathways for more Australians to pursue a career in agriculture and to partner with industry to tackle farm worker exploitation. One of the outcomes is the commencement of the Ag Visa Program, starting with an agreement struck with Vietnam.

#### **Banana Supply and Prices**

We have a situation where current production levels are not being matched by consumer demand. Growers are reminded that it is best practice to check with your market agents before consigning fruit.

In addition, ABGC has recently launched a social media campaign #nana4afarmer. It highlights input cost issues and encourages consumers to continue to support Aussie banana growers by going out and buying a 'nana for a farmer' (Pronounced 'Nah-nah for a farma').

Also, members could check the Weekly Wholesale Price data that ABGC buys, available on our website: https://abgc.org.au/weekly-wholesale-pricesreport/

Bananas are in competition with other products, many of which don't experience the quality issues that bananas have had in recent weeks.

#### Panama TR4

Our thanks goes to all those growers who took the time to give their views on the 'Panama TR4 Program Transition' Discussion Paper. It can now be used as a plan on how ABGC will run the new TR4 containment Program from July 2023.

ABGC wrote to, and then recently met with, the Queensland Agriculture Minister Mark Furner on the future TR4 Program. We pointed out that ABGC is keen to continue to contain the spread of the disease by running a new TR4 biosecurity program when the Government funding of the current one comes to an end, on 30 June 2023. We noted that growers are prepared to fund the proposed new program, costing \$1.6m per year. However, we asked the Minister to support the industry, via a request to Government to share in the costs of diagnostics and the cost to ensure compliance with the proposed regulated parts of the Code of Practice.



Attending one of the Panama TR4 transition grower meetings in March (L-R) ABGC's Transition Leader Geoff Wilson, Mission Beach banana grower Naomi Brownrigg and 1IP Farm Manager Phil Neibling.



Data as at 16 March 2022

## **CHAIR COLUMN**



As ABGC Chair and a grower myself, I can certainly relate to the growing concerns of producers

#### nationally as we collectively navigate through some of the most challenging times we've ever faced.

Over the last 60 years of production there have been tough periods but it would seem that multiple external forces have combined to make the present conditions the toughest of all. Current global pressures combined with the lingering effects of the COVID pandemic have seen input costs soar and consumer buying patterns change. As you'll read on P10-11, fertiliser prices have tripled, chemical price rises are not far behind and the rising cost of fuel is flowing on to higher freight and packaging prices.

Workforce shortages also continue to take an exhausting toll on a large portion of growers, along with their support staff.

It is easy as an organisation to listen to grower concerns and to collate the many issues affecting their profitability and livelihood. It is however far from easy to offer any solutions to the current crisis

#### Stephen Lowe, ABGC Chair

we face. The two sides of the equation are supply and demand.

In terms of supply, I encourage all growers to work closely with their agents / merchants on volume and quality issues. Keep in regular contact and supply only the lines that are required.

In terms of demand, ABGC has ensured that Hort Innovation, who runs our Banana Marketing Program is aware of our unique set of challenges, so it can adjust its program efforts to focus on increasing demand. These wheels are already in motion, with the new marketing program launched in January focussing heavily on increasing the rate of consumption.

The ABGC is listening to growers' concerns, but with so many external factors influencing the current

threats to our viability, a solution to shore up our industry's sustainability, is no quick fix.

#### **NSW flooding**

I'd like to finish by acknowledging the impacts that recent flooding has had on our growers in northern New South Wales and the mid north coast.

Record rains affected some crops, however the more severe damage felt by growers was in the form of washed-out roads and causeways affecting their ability to access farms and get fruit to market. The good news is that Government emergency funding grants offered to these growers was swift, with most growers commending the quick response.

You can read more about the NSW flood impacts on Pages 12-13.

Years ending 30th June (in '000 tonnes):

341

371

371

393

414

388

372

382

403



ABGC Chair Stephen Lowe and CEO Jim Pekin joined the February meeting of the Cassowary Coast Banana Growers' Association to discuss TR4 transition to industry management.

### **ANNUAL BANANA VOLUMES**

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

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

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

**BANANA LEVY RATE** 

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

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

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

2013

2014

2015

2016

2017

2018

2019

2020

2021

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

Further information: Jim Pekin, CEO, ABGC: Email - jim.pekin@abgc.org.au Phone – 07 3278 4786. More info on the levy rate: https://www.agriculture.gov.au/ag-farm-food/levies/rates/bananas

## **MINI ROADSHOWS BACK IN 2022**

#### National Banana Development and Extension team

### The FNQ mini roadshows due to be held in June will shed light on integrated pest and disease management.

It is a hot topic with banana growers as the National Banana Development and Extension team are finding out from talking with growers in North Queensland.

"From our initial discussions with growers and researchers, this mini roadshow series is likely to focus on integrated management of bunch pests, yellow sigatoka, mites and nematodes," Project leader Tegan Kukulies said.

"We will aim to provide information around the fundamentals of these pests and diseases, current management strategies, practices to reduce the risk of chemical resistance and also the latest research." The mini roadshow events will also be a great opportunity for growers, researchers and industry stakeholders to share their knowledge and experiences on these issues in small group discussions.

Ms Kukulies said the team would be talking more with the NSW banana industry to determine what topics will be of most value for the NSW mini roadshows.

Keep an eye out in the e-bulletins, ABGC social media pages, the Better Bananas website and on your text messages for more information about these events.









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



### **MORE THAN JUST BANANAS FOR NEXTGEN GROUP**

#### By Shanara Veivers, DAF South Johnstone

#### Are you a grower striving to improve your business, looking to innovate and willing to share your experiences with like-minded growers?

If so, the NextGen banana growers' group could provide you with the opportunity to share "out of the box" thinking to help foster innovation and influence the future of the Australian banana industry. The NextGen banana growers' initiative forms part of the National Banana Development and Extension Program. The QLD and NSW NextGen groups are not limited by age; they consist of growers who are proactive and innovative.



NextGen farmers visit a Darwin fruit farm livit with TR4.

#### What does the NextGen group offer?

Many growers have benefited through being involved with the initiative, appreciating the opportunity to explore new experiences and learnings with their peers. 'There's always something that you take away. You're never going home thinking it was a waste of my time. There's always something you appreciate and the things you get to see and people you get to meet. You get to share your experiences with each other. We're not all the same age and haven't been here for the same period of time. Some people have been in the industry longer than others, and you can take information away from that no matter who you are.' - NextGen grower.

Guided by participating growers, the project facilitates 2-3 casual group meetings and a larger activity each calendar year to explore topics and areas of interest to them.

The NextGen group provide a space for growers to build and strengthen relationships with other growers. NextGen promotes peer-to-peer learning and NextGen growers who participate in larger activities play an important role in sharing their learnings and experiences with the rest of the industry.



Larger activities have ranged from day trips to other growers' properties, different agricultural enterprises, field walks, overnight trips, even multi-day interstate tours.

Shanara Veivers, leader of the NextGen initiative, has been getting in touch with current and new NextGen growers to determine what activities and areas of interest the group would like to explore in 2022.

If you, or a grower you know, are interested in being part of the QLD or NSW NextGen group, get in touch with Shanara on 0467 812 025 or shanara. veivers@daf.qld.gov.au



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



### BRISBANE MARKETS RECOVERS FROM DEVASTATING FLOODING

### The Brisbane Markets was a victim of southern Queensland's devastating flood emergency in late February and early March.

Inundated by flood waters which measured about one metre lower than the 2011 flood peak, the market community responded to the call of arms to clean up and make sure the facility reopened, with as little lost time as possible.

"The good news is that the impact to the Central Trading Area has been relatively minor," Brisbane Markets Limited (BML) Chair, Anthony Kelly said at the time.

"We learned a lot from 2011. We have flood mitigation strategies and planning in place to allow BML to get the site back up and running as soon as possible.

Brisbane Markets® is Queensland's largest wholesale marketing and distribution hub for fresh fruit and vegetables.

More than 700 million kilograms of fresh produce passes through its gates annually, valued at over \$2 billion.



Brisbane Markets was hit with a flood of 8m Australian Height Datum (AHD)

# **EYES IN THE SKIES**

#### CAIRNS TO HOST INTERNATIONAL SOILBORNE DISEASE CONFERENCE

Cairns will welcome research scientists from around Australasia when it hosts an international soilborne diseases conference in August.

The 11th Australasian Soilborne Disease Symposium will be held from 1-5 August.

The symposium will be themed, Soil health, Plant health and Global health, and is expected to attract renowned scientists and leading industry identities from overseas and within Australia.

Topics will include soilborne disease diagnostics, disease management, biocontrols, biosecurity, plant resistance, novel approaches to disease management, rhizosphere and soil microbial interactions and soil health.

Pre-symposium workshops and field trips will feature current topics of interest including pathogen-plan-microbe interactions, overcoming Fusarium wilts, on-farm biosecurity practices and soil health.

For more information, visit http:// asds2022.w.yrd.currinda.com/

Since December last year, the ABGC Best Practice team has been flying a small drone over 40 farms across the Johnstone and Tully catchments to capture high resolution images of banana paddocks.

These images are being used as part of a project funded by the Department of Agriculture and Fisheries (DAF) to help the ABGC team better understand and measure ground cover across the industry, which is important for reducing soil and nutrient losses on farm.

By coupling the drone images with a grower survey

about land characteristics and farming practices, the team is hoping to gain greater insight into how banana growers can grow and maintain their good ground cover. The team would like to thank all of the growers who have participated in the project so far.

The drone images are also a great way to view

farms from above, helping growers to spot interesting features that they may not be able to see from the ground. The team plans to continue utilising drone technology to support growers to maintain good cover and make farm plans. Interested growers are invited to get in contact with ABGC Graduate Extension Officer Molly Blake at molly@abgc.org.au to discuss.



ABGC Graduate Extension Officer Molly Blake with the drone used to capture images of ground cover on banana farms across the Johnstone and Tully catchments.



One of the drone images capturing ground cover.

#### NUFFIELD SCHOLARSHIP APPLICATIONS OPEN

### Applications are now open for 2023 Nuffield Scholarships.

Nuffield Scholarships are open to farmers, fishers and those in associated industries aged between 28-45. The bursary allows scholars to spend 14 weeks of travel over two years to study a topic important to the industry.

A Nuffield Scholarship is a unique opportunity to explore the world to discover new tools, practices and ideas, and forge connections that can improve long-term sustainability.

Each scholarship is valued at \$30,000 and Nuffield Australia will award up to 20 scholarships this year.

Nuffield Scholars also receive training in communication skills and personal and professional development.

For more information, visit www.nuffield.com.au

### MARIA JOINS THE BEST PRACTICE TEAM

The ABGC Best Practice Team has welcomed Maria Ribbeck to the team based in South Johnstone. Maria will be joining the Best Practice project until the end of June 2022 to support water quality monitoring and extension.

Maria has come to ABGC after working for the Wet Tropics Major Integrated Project as District Extension Officer, where her main role was to work with cane and banana growers in Tully by providing support in the implementation of farming practices aimed at improving water quality.

Maria will be putting her past experience to good use on an exciting new water quality testing project in the Utchee Creek Catchment which you can read about on page 31.

Additionally, Maria will be supporting growers to revisit their best practice self-assessment questionnaire focussing on those growers who haven't updated their answers in some time. Maria holds a Bachelor of Science in Agricultural Engineering degree, as well as a diploma in Agribusiness.



Maria Ribbeck has joined the ABGC Best Practice Team.

#### **'EVEN BETTER' BETTERBUNCH -RECORD KEEPING MADE EVEN EASIER**

#### By Kathryn Dryden, ABGC

#### Keeping track of the nutrients and chemicals applied on your farm is best practice. It's even better if growers do this regularly, rather than rushing as they prepare for an audit.

Not only is it best practice, but there are regulations that make record keeping compulsory depending on where your farm is located.

While growers in the Great Barrier Reef catchments have additional requirements relating to nutrient application, all growers are required to make records relating to chemicals to comply with state chemical usage regulations.

The Queensland Government does undertake audits against the Reef Regulations and the Chemical Usage Regulations and having easily accessible records will make this process much less stressful.

There are many ways that growers can keep records, including on paper (for eg. a diary), in spreadsheets or on specially designed software packages sold by a variety of providers. In addition to these options, and with banana production specifically in mind, the ABGC developed the BetterBunch app to make nutrient and chemical



record keeping simple and convenient .

The app was first rolled out to growers in 2016 and since then it has been used by many banana growers to reduce stress and save time and effort when it comes to managing their farm and preparing for audits. And the best news is – the app is free to banana growers and support is provided by the ABGC Best Practice Team whenever you need it.

The app is currently undergoing a revamp to make it even better – with a focus on making it easier to use, provide a farm mapping component and to align more closely with the requirements of the Freshcare audits.

In May and June 2022, ABGC will be hosting short workshops for growers to learn how to get the most out of the BetterBunch app.

If you'd like to move to a simple, free record keeping system that will improve your nutrient and chemical record keeping (and audit experience) please contact the BMP Team on bmp@abgc.org.au or phone Molly on 0419 602 864.

#### NEW LAKELAND DAM STUDY GATHERS MOMENTUM

Investigations into a new dam on the upper reaches of the Palmer River at Lakeland continue, with the draft business case due to the Queensland Government in May 2022.

Regional Development Australia Tropical North is coordinating the project which is preparing a detailed business case for the Palmer River option using a \$10 million Commonwealth Government grant.

The current option appears to be a 200,000 megalitre dam on the Palmer River, with a 12km gravity-fed tunnel to Lakeland delivering water to farm gate along two reticulation pipe systems.

The draft business case will include project costs, the environmental impact assessment and project investment prospectus.

Project director Tony Potter said the Lakeland Irrigation Area had the potential to expand its operations from 1400 hectares to more than 8,000 with a suitable long term water supply. The final report is due September 2022.

### UPDATE ON REGULATORY ACTION ON CROP PROTECTION CHEMICALS

By Rosie Godwin

Many growers and resellers have been expressing concern over the potential outcomes of the Chlorpyrifos (e.g Strike-Out, Lorsban) and Neonicotinoids including Imidacloprid (e.g. Confidor Guard) and Clothianidin (e.g Shield) reviews and their possible impacts on the banana industry.

These chemical actives are currently under review by the regulator, the APVMA (Australian Pesticides and Veterinary Medicines Authority). Reviews can be initiated to ensure older compounds meet current safety standards or when new scientific information emerges relating to the safety or effectiveness of a pesticide. In terms of safety, this is regarding human health, the environment, animal or crop safety or trade.

#### Where are the reviews up to?

The APVMA chemical reviews have several phases and those listed above are currently at the scientific assessment phase. For Chlorpyrifos, the APVMA is intending to publish its findings and its proposed regulatory decision in late 2022. The proposed regulatory decision for Imidacloprid is expected in early to mid-2023.

After the APVMA releases its proposed decision, there will be a three-month consultation phase when the industry and the public will have an opportunity to provide feedback through submissions.

The final regulatory decision will be published following the close of the public consultation period and consideration of all the submissions received.

If an adverse decision were to be reached, a 12-24 month phase out period could be expected. In the case of Chlorpyrifos, the registrant has indicated that supply would be maintained during the phase out period should this eventuate.

#### **Expected outcomes**

While we cannot pre-empt any outcomes of these chemical reviews, growers should re-evaluate their management strategies in the event the use of either of these chemicals were to be restricted.

Internationally, these products are under significant pressure. In Canada, the UK, the EU and the USA Chlorpyrifos is no longer authorised for use. For Imidacloprid and clothianidin, they have been deregistered for outdoor uses in EU while Canada has proposed restricting many foliar and soil uses. In the USA, an interim decision still allows access with additional label restrictions and PPE.

While Australian farming practices and environments differ the chemical regulatory outcomes can, on occasion, mirror what happens internationally, so the APVMA could, potentially propose similar outcomes. Further complicating the situation is the uncertainty over ongoing registrant support for chemicals and/or products based on review compounds.

Canada – proposed cancellation of most agricultural uses.

### What is being done to bridge potential gaps in crop protection.

The threats to these actives and the need to find solutions should regulatory actions result in potential pest management gaps was brought to the recent the Hort Innovation Strategic Investment Advisory Panel meeting to discuss possible future investment and collaboration to find alternatives. It is hoped these topics will be discussed in more detail at the road shows this year.

Several registrants have new actives currently under development and undergoing trials for registration in bananas for the management of pests currently being controlled by Chlorpyrifos or Imidacloprid.

A new 5-year Integrated Pest and Disease Management project is currently being contracted by Hort Innovation and aimed at improving crop protection for priority pests in the banana industry. This project is funded by grower levies with federal government co-investment.

For more information please refer to the:

• APVMA website for information on the chemical reviews

Chlorpyrifos https://apvma.gov.au/node/12451 Neonicotinoids https://apvma.gov.au/node/57031

 Hort Innovation AgChemical quarterly updates https://www.horticulture.com.au/growers/ help-your-business-grow/research-reportspublications-fact-sheets-and-more/mt20007/

Or contact the R&D Manager Dr Rosie Godwin Rosie@abgc.org.au 0407 746 469

#### RESEARCH PROJECT TO DEVELOP TR4 RESISTANT BANANA VARIETIES

A \$9.8 million research project has been launched to develop TR4 resistant varieties of Cavendish and Goldfinger bananas.

The project is being jointly delivered by Brisbane-based Queensland University of Technology and Hort Innovation and aims to develop resistant banana varieties using gene-editing techniques.

QUT project lead, Distinguished Professor James Dale of QUT's Centre for Agriculture and the Bioeconomy, said his team aims to develop Cavendish and Goldfinger varieties using gene-editing techniques through the five-year project.

The aim, he said, was to support food security in Australia and worldwide.

"The original Cavendish varieties is an excellent banana, but it is susceptible to some devastating diseases including Panama Disease TR4," Professor Dale said.

"There is also concern that the banana industry worldwide is too dependent on a single variety and that greater variety diversity is highly desirable."

Professor Dale said researchers aim to use recent advancements in gene editing to improve this variety to appeal to the Australian palate.

"We are now in a position to make very small changes in a banana genome that can have dramatic effects on the phenotype of the banana whether it is disease resistance, fruit quality or fruit taste and texture," he said.

This research is being delivered as part of the Hort Innovation Hort Frontiers Strategic Partnership Initiative, which is better equipping Australian horticulture for the future ahead.

# **UNPRECEDENTED TIMES**

There's not too much more that can be thrown at Australian banana producers at the moment.

Market prices below cost of production, high production rates, ongoing COVID consumer buying challenges, labour shortages, quality issues and now global economic pressures continuing to drive up the cost of inputs.

#### In this time of unchartered challenge. Does something have to give?

#### By Sonia Campbell

Resilience is a necessity in farming, but the past two years have thrown more challenges at industry than most growers can recall.

Already battling through long periods of poor returns, the arrival of COVID put an unprecedented level of pressure on almost every Australian banana business as labour was thrown into turmoil – and continues to impact operations – while severe weather events have also taken their toll.

Now, with the additional pressure of escalating farm input costs, including skyrocketing prices of fertiliser, chemicals, freight and fuel, many growers (at the time of publishing) were selling fruit well below the cost of production. With this vortex of pressure from a volatile global economy, combined with increased labour costs, high production levels, consumer buying challenges and farmgate pricing issues, many are questioning how much more some growers can take.

Speaking from his Innisfail banana farm in Queensland's far north, Tony Alcock and his farming family have had more than their fair share of knocks in the past 12 months. In March last year – during the height of COVID - they lost 50 per cent of their hanging fruit during Cyclone Niran. Last month (March), they were forced to cut down half of their crop due to an extreme heat wave, which affected fruit quality. And now, like most Australian producers, the cost of inputs on their farm has become exorbitant.

#### "My father has been farming bananas for the past 60 years, I've been doing it for 25 years, I've never seen it like this before, ever," Tony said.

"After Cyclone Niran, we were lucky that we had a plant crop (still standing) that pretty much got us through it. But since then, it hasn't got better. We've just suffered through two weeks of a heat wave. "This week we've cut down 50 per cent of our crop, because it was unsellable. Usually, a heat wave goes for about three days, but this one actually went for two weeks. And then, the week after that, we had a flood event. So, we've just copped a hiding."

But it's the rising cost of inputs, combined with consistent low returns, which has Tony most concerned for the future. And he believes a government subsidy scheme is needed for industry to survive.

"The cost of freight's gone up around 20 per cent, cartons have gone up as well. Fertiliser used to

be \$800 a tonne, it's now \$2300 a tonne. We go through about 40-60 tonne every six weeks, in a cycle.

"Chemicals for our weed spraying used to be \$180 for a 20-litre drum, now it's \$500. And we can't pass these costs on. We're stuck with that price. The solution is hopefully a subsidisation. If the government can help subsidise some freight, or the cost of a chemical, just to get back to reasonable rates."

"It's just not sustainable at all. If something doesn't change, I think half the industry will be missing by the end of the year."

• Fertiliser prices 🔺 TRIPLED
Chemical prices     DOUBLED
• Fuel, freight and packaging 📥
COVID workforce issues
• Severe weather events

- Production levels outstripping consumer demand
- Prices below cost of production



Innisfail grower Tony Alcock



More loss – an extreme heat wave last month (March) forced Tony Alcock to destroy half of his crop, due to heat stress.



Innisfail growers Charles Camuglia and Dean Sinton

Fellow Innisfail grower and Chair of the Cassowary Coast Banana Growers' Association Dean Sinton agrees that industry is experiencing unprecedented times.

"It's definitely unchartered waters for growers at the moment, and it's not just our growers, a lot of other industries are feeling it as well. But, it's certainly something we haven't experienced before," Dean said.

"Since the inflation of fuel and fertiliser and chemicals, just those three things have driven up our cost of production dramatically. And returns are continuing to go down. We're hearing from some growers reporting single figure sales on the market in some cases, so it's just not viable to send (fruit)."

"I mean (right now), you can buy a kilo of bananas for less than half the price of a take-away coffee."

Dean was also impacted by Cyclone Niran and said while severe weather events were part of life in the North, the pandemic and impacts from global financial issues had struck without warning.

"We're in the part of the world where we are vulnerable to weather events here and we're all aware of it, that's the risk we take growing here," he said.

"But COVID, it hasn't helped our situation over the last two years, and now with the inflation costs and cost of production, growers really are struggling.

"We've had minimal time to prepare and try and change our farming practices for the inflation of fertiliser and chemical prices, and also the fuel inflation. There was minimal time to prepare for that and it's really hit everyone's back pocket at the moment."

#### "Speaking to some people, it's possible they are not going to see the year out."

Boogan grower Charles Camuglia suffered 100 per cent crop loss in Cyclone Niran and said recovery had been "the toughest by far" due to the impacts of COVID and rising production costs.

"We've been growing bananas since the mid-90s, and started the packing shed in 2003, but the past year has been particularly hard because we are still pulling out of that previous cyclone (Niran), we've poured everything back in to get this crop and we've come into a market of low demand for the product and low prices.," Charles said.

"But increased inputs are the latest, hardest issue for sure. In the last month alone, our increases are basically \$1.50 (per carton), that's just in the last month, between fuel, chemicals and fertiliser.

"With COVID, cities are dormant, people aren't buying. Demand has definitely dropped and at the

current rate, it's not sustainable. We talk to growers, we talk to each other on a daily basis and everyone is in the same position."

#### Western Australia

Impacts of COVID, low prices and increased cost of production are being felt by banana growers Australia wide, including those in WA.

Chris Collins from Mundillya Farms, who is also chair of the Sweeter Banana Co-operative in Carnarvon, said Sweeter growers were also feeling the pinch, despite experiencing a bumper production season.

"It is going to be possibly one of the hardest years that we have faced as banana growers here in Carnarvon, barring major cyclones," he said.



WA grower and Chair of the Sweeter Banana Co-operative in Carnarvon Chris Collins

"Input costs have gone up. Wages have gone up, packaging, freight and fuel has gone up. And one of the biggest issues is the cost of fertilisers which has basically tripled.

"For a small operation like mine (18 hectares of bananas) it's like an extra \$100,000 a year for fert alone."

Chris said some smaller operators were battling through the challenging times, particularly COVID, by working their farms themselves and having less overheads.

"I know other growers are saying that fert is one of the major issues, other growers do a lot of work themselves so the labour issue they are a bit sheltered from. But most people on farm have struggled their way through COVID.

"I know personally we will probably be able to ride it out for a fair bit longer, but we are growing other crops as well. But obviously those growers under financial pressure already, it's going to be very hard for them to continue."

f /abgc

Staffing has been a significant issue at the Sweeter Banana packing shed since COVID, operating with skeleton staff through one of the best production years in six or seven years.

"With the current volumes, the packing shed would normally have had 40 staff, so it's running on a third of that."

Growers are now hoping for prices to turn around, a normal occurrence in winter when production drops off.

"We just ask that consumers support growers and the retailers that stock our product by buying a couple of extra bananas, just a few extra each week increases demand and helps all of us to sell more at the right price."

#### **New South Wales**

Jeff Eggins has experienced a lot in 36 years of growing bananas, currently farming Cavendish at Woolgoolga on the mid north coast of New South Wales since 2005 and prior to that operating in the Pillar Valley.

But he says nothing compares to the challenges growers are facing today.

#### "It's the worst we've ever seen it. Everyone is feeling the pinch, not only bananas.

"Everything has gone up. Fertilisers have doubled and chemicals have nearly doubled. Fuel costs have gone up which affects everything.

We send excess fruit to Sydney and we're slugged extra freight charges. But (market floor) prices have not gone up and that's the bit that hurts."

Mr Eggins said most growers in the area had been selling below the cost of production for the past five years, but he also considered himself one of the "lucky ones" as he sends the majority of his fruit direct to a local retailer.

"That's all that has kept us in bananas for the last 15 years. If we didn't have that direct market we'd be going backwards."

Mr Eggins said compounding inflation problems was a severe short supply of chemicals and fertilisers, with many supplies coming from overseas.

"Urea and potassium sulphate, just basic fertiliser, you just couldn't get it."

Growers in northern NSW and the mid north coast have also experienced their own severe weather events over recent years, including bushfires and more recently, flooding. But Mr Eggins said the uncertainty of the future, and the many complexities involved in both the pandemic and global economy, was causing growers the greatest concern.

"The problem is, we don't know when it's going to end."

# CROPS LARGELY SPARED BUT RECOVERY CONTINUES FROM NSW FLOODS

#### By Sonia Campbell

Growers in northern New South Wales and the mid-North coast continue to recover from extreme flooding which caused devastation across communities last month (March).

The catastrophic weather event left a path of destruction, with growers living in and around flood-ravaged areas reporting severe damage to homes, roadways and other infrastructure.

Remarkably though, banana crops were left largely unscathed. However, roadways that were completely washed out in the flash flooding, coupled with continued rainfall in some areas in the week's following, did impact on a number of growers' ability to harvest their fruit.

Peter Molenaar, who farms bananas with his son Dan near Mullumbimby – one of the hardest hit areas in the northern region of the state - described the severe weather event as "a disaster like no other, for the Far North Coast of NSW".

#### "People are hurting," he said in the days following. "They are left totally isolated and feel helpless. There is no phone, no power in some instances, no internet and no water at various stages."

"Mullumbimby has never in recorded history, had a flood enter shops in the CBD, not to mention the countless houses that were inundated. We've only ever had floods affect a few houses on the fringes of town. At the farm we had 1040mm in a 30hr period. This was on top of 500mm (over) the previous five days."

While the extreme rainfall left Peter and Dan unable to access the family farm for a number of days, the pair were thankful not to have suffered major crop losses.

On the farm - which was established by Peter's father in the early 1950s – large landslips took out a bridge and a culvert, which prevented vehicle access to the farm. While a large landslip also took out some bananas and avocados.

"You can see up in the forest, it's given way and brought these trees and palms down and they've taken out anything in its path. Big rocks have come down and filled up the dam, and kept on going down to the river flats, down to the main road," Peter said.

"The slip probably consumed about an acre and a half of bananas which were irretrievable. But outside the slip area, we probably lost only about 20 or 30 stools, because there was no wind, which was terrific, because we've still got our crop. We're just so lucky."

Dan agreed. Speaking on the farm in the week following the event, he said he also expected crop losses to be far worse.

"We'd heard through neighbours in the village that bridges were washed away and what not, and I came out here expecting that all our bananas would be on the ground as well," Dan recounted. "But I got here and was quietly surprised. Because we didn't have the wind, we got lucky in that respect. Overall, we could have been a lot worse off."

Repairing the causeway to allow vehicle access to the farm was expected to take some weeks. In the meantime, Dan has been humping bananas out by foot.

"We're harvesting into our old landcruiser, driving down to the creek crossing, which is no longer here, and walking the bunches across one by one. So, it's a pretty long process," Dan said.

While this process has been very labour intensive, he said, there was simply no other option.

"After you put all the hard work into getting the

#### **NSW FLOODING**

bunches where they are, you can't just watch them go ripe or chop them down on the ground. So, if there is a way out, we'll get them out, simple as that."

Australian Banana Growers' Council director Stephen Spear, who farms next to his brother Michael at Taylors Arm in the mid-north coast of NSW also escaped severe crop losses, however lack of access to their farms, left them both unable to harvest their fruit.

Speaking four weeks after the initial flooding event, Stephen said while causeway damage continued to

prevent access to his farm, continued rainfall had also left the area so waterlogged, it meant driving machinery or vehicles on the farm was not possible.

#### "At the moment I still can't get to my bananas, so I can't harvest them," Stephen said.

"It's just impossible with the causeway damage at the moment, and the road is a steep hill. Even with a tractor, we couldn't harvest our fruit. That country just hasn't had a chance to dry out."

Stephen said his brother Michael had experienced

similar frustration, forced to cut down hundreds of bunches in the weeks after the flooding event, because he had no way of getting them to his local ripener.

"I think every banana grower knows what it's like, when due to inclement weather or low prices you cannot harvest, after all the effort that goes into producing a bunch," Stephen said.

"Rain events such as we've had in the last month, and again this week, you would usually expect a lot of crop damage, but we've been very lucky because of the absence of strong winds."



Peter and Dan Molenaar standing in front of a washed out causeway that Dan has been humping banana bunches across by foot, to get them to the packing shed.



The large landslip that took out an acre and a half of Peter and Dan's bananas.



Damage to roads and other infrastructure were the biggest impacts to the Molenaar farm (pictured here), as well as some other growing regions, with recovery – in some cases - expected to take months.



ABGC Executive Officer Leanne Erakovic (while Acting CEO) visited the flood damaged property of Peter Molenaar (far left) and his son Dan last month (March).



#### AG VISA NEEDS TO BE RELEVANT TO REGIONAL AND RURAL AREAS

### The ABGC has provided feedback to the Australian Government to ensure the new Agriculture Visa is relevant to regional and rural areas.

A phased-in approach to establish the visa program is currently underway.

Announced by the Federal Agriculture Minister David Littleproud in August 2021, the visa is intended to address workforce shortages in the agriculture sector by building on existing government programs.

An Australian Government representative addressed the February ABGC board meeting on the visa.

The Board's feedback highlighted the need for the visa to meet the needs of growers to address worker shortages in agriculture regions and the need for incentives for these visa holders to work in regional and rural areas.

On 28 March 2022, Vietnam signed on as the first

country to participate in the Agriculture Visa.

The Department of Foreign Affairs and Trade (DFAT) is working with a select group of employers to bring in a small initial cohort of employees.

"This will allow us to test systems and processes before the program's expansion throughout 2022 when we expect a steady increase in employees arriving in Australia," DFAT said.

Employer application and eligibility requirements for the expanded phase are expected to be published on DFAT's Agriculture Visa program website when they are confirmed in April 2022.

The visa will be open to applicants from a range of countries negotiated through bilateral agreements.

#### GOVERNMENT WORKING TO ADDRESS ISSUE OF ABSCONDING WORKERS

The Australian Government is actively working to reduce the number of workers who disengage from the Pacific Australia Labour Mobility (PALM) scheme, a spokesperson said.

The Australian Banana Growers' Council has received reports from some growers about workers engaged under the PALM scheme absconding.

Australian agriculture employers who participate in the Pacific Australia Labour Mobility (PALM) scheme are able to access Pacific and Timor-Leste workers to address unskilled, low, and semi-skilled Australian workforce shortages across Australia.

The scheme helps address farmers' demand for workers, Australian families' need for produce and provides income for Pacific and Timorese workers. A key positive impact is the development of an inclusive and diverse workforce.

A Department of Foreign Affairs and Trade spokesperson said the Australian Government was actively working to reduce the number of workers who disengage from the PALM scheme through proactive communication, pre-departure training on workplace rights, addressing potential welfare issues and education on the consequences of non-compliance with visa conditions.

Workers also have access to mechanisms

to support wellbeing including those provided by employers, case managers, staff in regional locations, a worker welfare hotline, and liaison officers from their own countries.

Workers are also deployed with their agreement from placements where employers cannot provide enough work, or where the worker cannot return home (in the past due to COVID-19 border restrictions or limited flight options).

In the period August 2020 to 11 March 2022, some 5398 Pacific labour mobility workers arrived in Queensland.

Through the scheme, eligible Australian businesses can recruit workers for seasonal (unskilled) jobs for up to 9 months or for longer-term roles between one and 3 years in low-skilled and semi-skilled positions across Australia.

The PALM scheme benefits the agriculture sector by having access to reliable and productive workers and contributing to the positive impacts of having an inclusive and diverse workforce. If a smaller grower does not wish to apply to join the PALM scheme, they can access workers through a PALM scheme approved labour hire company. GOVERNMENT OFFERS HELP AVAILABLE TO SUPPORT HARVEST WORKERS MOVING



#### AgMove Poster

#### The Australian Government is offering financial support for workers to relocate for short term work to farms across Australia through the AgMove relocation assistance initiative.

AgMove is an initiative to help cover the cost of travel, accommodation and work-related expenses associated with moving.

Eligible Australians can claim up to \$6,000 in reimbursement of travel and accommodation costs associated with relocating to take up short term agricultural work, and temporary visa holders with general working rights, are able to claim up to \$2,000.

Harvest work is for all Australian citizens and permanent residents – whether you're a job seeker on income support, taking a gap year from studying, a person looking for a change or exploring the sights as a grey nomad.

People on temporary visas who have a general right to work in Australia (including working holiday makers and international students) can also do harvest work and access AgMove.

Harvest work is being promoted through AgMove as a great opportunity to travel, learn new skills, meet new people, stay physically fit and help to provide the nation with a fresh food supply.

More information is available at www.harvesttrail.gov.au

#### **ADVERTORIAL**

# PROTECT BANANAS WITH GROCHEM FUNGICIDES

#### Banana growers seeking first class protection for their crops against a variety of costly diseases should look no further than specialty horticultural supplier, Grochem Australia.

Whether it's Panama disease, Yellow or Black Sigatoka, or leaf spot diseases, there's a high quality Grochem product to assist growers from their local resellers.

Ben Coombe, General Manager of Grochem Australia, says good farm hygiene to control and minimise the spread of Panama disease begins with Sporekill, a broad-spectrum sanitation and water treatment solution.

"A clean start with Sporekill is essential to sanitise farm vehicles, machinery, packing sheds, boots and for general farm hygiene," Mr Coombe said.

The next step to protecting banana crops is choosing high quality Grochem fungicides such as Fortuna Globe 750 WG, a superior European formulation of mancozeb which is easy to use, has fine particles and minimal dust.

"Even better, Fortuna Globe has excellent weathering and sticking properties, giving crops better protection for longer against leaf diseases such as leaf spot, leaf speckle, Cordana leaf, fruit speckle and black pit in hot, humid conditions," Mr Coombe said. He explained that Fortuna Globe works by giving multi-site and protective action, forming a protective film on the plant surface that inhibits the germination of fungal spores.

"This is why we recommend growers apply Fortuna Globe before major weather events or overhead irrigation as part of a regular protectant program, particularly to avoid weathering and protect new growth."

The third major fungicide in Grochem's banana range is Kingfisher systemic fungicide to assist in the management of Yellow and Black Sigatoka.

The easy to use liquid formulation has extremely fine particles for better coverage and greater availability.

"Kingfisher is quickly absorbed into the plant, has good withholding periods and is suitable for ground or aerial application," Mr Coombe said.



Ben Coombe, Grochem Australia.

"This means Kingfisher offers quick knockdown and is rapidly absorbed into the plants, so it stops the early development of disease and protects crops before infection occurs."

Talk to your local reseller for advice about protecting bananas with Grochem products.



# **CONTINUING THE WAR AGAINST TR4**

TR4

The most significant shift in TR4 management since it was first discovered in Far North Queensland is nearing as funding from the Queensland Government approaches the June 2023 end. To prepare growers for this transition, the ABGC released a Discussion Paper that detailed key issues of self-governing disease management, with an open invitation for growers to be part of key decision making.

Three months into the consultation process, growers are clearing the path for a continuation of an effective ongoing control and containment Program, and a banana biosecurity Code of Practice that could be key to a unified response in protecting the industry from disease.

#### By Jael Napper

The transition of TR4 management to industry started in 2018 with an independent ACIL Allen report that attributed the success of disease management to shared responsibility between industry and government. The final recommendation stated, *'Industry must move towards an equal share of the costs of the Panama TR4 Program over the next 3-5 years at which point it should be reviewed.'* 



Louis Lardi, Naomi Abbott, Tiger Mereider and Doug Phillips at the South Johnstone TR4 transition meeting.

The subsequent agreement that the ABGC signed was to take 'leadership' of Panama TR4 management – a point that CEO Jim Pekin does not want to have lost in the discussion.

"Nobody is walking away from this," Jim noted when asked about concern from growers that government funding is coming to an end.

"We're taking over delivery of the Program, but the concept of shared responsibility remains a critical success factor into the future."

No other banana growing region around the world has been able to achieve what Queensland has in controlling TR4. The United Nation's Food and Agriculture Organization has gone so far as to say, *TR4 is recognized as one of the most aggressive and destructive fungi in the history of agriculture and the world's greatest threat to banana production.'* Yet, as overseas farms continue falling to the disease at a fast rate, Queensland has proven that life with TR4 can go on. The four infested properties that continue to commercially operate with the disease to date are testament to this, challenging any prior notion that to get the disease is the end.

Warwick Flegler has been digging trenches at the frontline of this war since 2018. He explains how staring down the barrel at TR4 has been integral to ensuring his property can continue to operate.

#### "There's no running from this, you have to learn how to make TR4 just another routine part of your business," Warwick said.

Like Warwick, the Tully growers who've experienced TR4 first-hand have learned that the best way to contain the fungus is through a swift control response. And most Far North Queensland growers have acknowledged the best way to draw their lines of defence is through on-farm biosecurity.

### Achieving the same outcome at half the expense

Dean Sinton is a second-generation banana grower and long-running President of the Cassowary Coast Banana Growers' Association. As one of many growers who've stepped forward to take part in the discussion about the future management of TR4, he has more than just two cents' worth to share with the ABGC's transition leader, Geoff Wilson.

"The Program has been successful," Dean comments while looking at an infographic that shows the relatively slow rate of disease spread in Far North Queensland.

"Only five properties in seven years – that's a story on its own."

Dean pours over the Discussion Paper from the tray of his ute in the front yard of his Mourilyan farm, before Geoff leads him to the business at hand.

"Yes, the Program has been successful, but we'll have to keep it up with only forty per cent of the money in our budget," said Geoff, flicking to pages that describe the Program's current operational costs.



Geoff Wilson with Dean Sinton discuss the transition at his Mourilyan farm.

The Paper explains that the ABGC will not be increasing the PHA levy for growers to supplement the Program's delivery, so efficiencies must be found to maintain the TR4 Program's efficacy on less than half the amount of money.

"It's expected that the Program will reduce in size from thirty-five full time equivalent staff in its current government led form, to less than half of that," Geoff explains.

"We can instantly strip away some expenses by taking away the bureaucratic restraints of government that the Program is currently operating under.

"Further savings might be made through multiskilling people across several functions, and utilising skills and personnel already present in

#### TR4

the ABGC such as in administration, finance and communications."

With surveillance the most expensive function of the Program, Geoff explains how growers can help find efficiencies with the on-farm component.

"Growers can think about how they can help efficiency through actions like minimising the wasted time that surveillance teams might otherwise spend on-farm by providing transport from farm gate to banana blocks," Geoff said.

#### **Changes to surveillance**

The Discussion Paper asks growers for feedback on optional surveillance measures such as reducing the frequency that farms would be surveyed, or the number of rows surveyed on each property. It also explores if surveillance on properties infested with the disease could be supplemented by the grower.

With the current Program's focus heavily on containment, infested properties are on a high rotation of surveillance every eight weeks. Tully properties considered 'high risk' are surveyed every three months, and all others in Far North Queensland once in twelve months.

"If we already know TR4 is on a particular property, could it then be the responsibility of that grower to do regular surveillance on their farm allowing for less frequent surveillance by the ABGC staff?" Geoff asks a room of growers in Mission Beach.

Mark Smith is at the Mission Beach meeting. His farm is one of the Mackay's, offering the group a valuable insight of farming with TR4.

"Our guys are out there every day – they're our eyes and ears," Mark said about his farm workers. Under the circumstance, Mark thinks the frequency of surveillance could be stretched out if the grower with TR4 embeds surveillance into everyday practice.

"We've trained our workers to know what to look for, and to report suspect plants so we're already doing a lot of our own surveillance."



Phil Weibling, Amanda Baston, Geoff Wilson, Naomi Brownrigg, Savinder Singh and Mark Smith at the transition meeting in Mission Beach.

With surveillance in the spotlight, Geoff moves to the current team structure with one purely dedicated to infested properties – a measure that traces back to original concerns around disease spread.

"With the right scheduling and strict decontamination protocols in place, is there a need

for a separate surveillance team to work on infested properties only?" Geoff asks.

"This is only a small proportion of the total banana production land needing surveillance."

### Diagnostics will need Government support

Geoff explains that the cost of diagnostics testing is likely to increase in time as it's expected that the number of samples will increase as the disease spreads.

"If we're talking about managing costs, diagnostics is one area where we need to be mindful about being able to manage costs into the future," Geoff warns.

"If the disease has escalated, could it be an option to limit the amount of testing that is done on a known infested block?"

"This might be a way to ensure we have funds available to test and detect TR4 in new areas."

Some ongoing government support for services has been pledged by Queensland's Chief Biosecurity Officer, Malcolm Letts, who Chairs the TR4 Program Management Board. In his response to the 2021 Panama TR4 Epidemiological Review, Malcolm said this could be offered on a fee-for-service basis, but the ABGC is hoping the government will extend the friendship a little bit further in demonstrating its role of shared responsibility.



Officer and Chair of the Panama TR4 Program Management Board, Malcolm Letts has suggested diagnostics support could be available to growers on a fee-for-service basis.

"We've recently met with Minister Furner to ask if Queensland Treasury can support us in a package which will include shared costing for diagnostics," Geoff said.

Discussions are ongoing.

### A Code of Practice for managing TR4

Diagnostics is one side of the unpredictable coin in future Program costs. Compliance is the other. In an environment of disease escalation, the ABGC is seeking ways to support growers to contain the disease as it manifests.

Compliance is currently facilitated by a 'Notice of presence of Panama disease tropical race 4', a legal document that prescribes the conditions that each property must comply with to prevent the spread of TR4. The Notice will not continue post-transition, to be potentially replaced with a 'Banana Biosecurity Code of Practice'.

Geoff explains how the ABGC is already consulting with government on the Code's creation with the intention that they'll adopt mandatory measures for containment on infested properties incorporating many of the elements currently in the Notice.

"If the mandatory measures are adopted in legislation, then the government will be given powers of enforcement," Geoff said.

"And most growers have made it clear to me that they believe the Code has to have teeth to be effective."

While the ABGC continues to work with government to understand what the future of compliance could look like, the organisation remains focused on providing a "grower-first" approach to disease management through education and supporting them to meet the Code.

Naomi Abbott joined the discussion at South Johnstone, sharing how she particularly wants to see a supportive approach for growers whose properties are detected with the disease into the future.

"I think we need to make sure there's support to get growers back on their feet after their first positive detection," Naomi said.

"Where possible, parcel all the requirements and provide help them to get everything in place so they can get back up and running as soon as possible."



Donna Campagnolo, Tony Pattison, Shanara Veivers, Ingrid Jenkins, Louis Lardi, Doug Phillips, Naomi Abbott, Tiger Mereider, Robert Mayers and Geoff Wilson discuss the TR4 transition in South Johnstone.

Back to Warwick Flegler who's keen to be part of a peer-support program for infested property growers into the future.

"I'm putting my hand up to help others get back up and running," Warwick said.

If feedback from growers across the discussions is any indication, Warwick wouldn't be alone in wanting to offer a helping hand. This might be the critical success factor in the new TR4 Program.

"In order for the new program to be effective, growers need to get behind it," Geoff said.

"It's important for the industry's longevity and profitability that we're united on the frontline of defence against this disease with a whole-ofindustry approach."

#### TR4

# TRENDS IN FEEDBACK TO THE DISCUSSION PAPER FROM GROWERS:

- Surveillance is broadly agreed to be the most important part of the new Program.
- Support for all FNQ farms continuing to be surveyed once in 12 months, and 'high risk' farms every 3 months.
- On-farm vehicles such as side-by-sides could be made available to surveillance teams where the farm landscape makes it safe to do so.
- Growers feel generally capable of selfsurveillance and understand how selfreporting can save their farm from disease spread.
- Effective, ongoing support needs to be provided to new infested property owners to ensure they're able to return to trading as quickly as possible.

- Growers are open to destruction protocol changes however more investigation is needed.
- A Code of Practice for compliance needs government support for enforcement to provide protection for the industry.
- Acknowledgement that significant budgetary savings can be established across nonoperations business areas of the current Program, including communications, policy and planning, program management and business support.
- All believe that government should help fund diagnostics into the future.



Sandeep Singh Boura, Baluir Singh Sidhu, Kathryn Dryden, Pav Grewal, Jim Pekin, Geoff Wilson, Iqbal Singh, Diljit Singh Bhullar, Sukhpal Singh Chahel at a TR4 transition meeting in Innisfail.

# WHAT'S NEXT?

A consultant has been engaged to start drafting a Code of Practice for the ABGC in consultation with government and a focus group of growers. The draft Code will be released for feedback in August this year which, once endorsed by the industry, will progress for adoption by government. It's intended that the Code will be in place by 1 July 2023.

The ABGC would like to thank all growers who participated in the TR4 transition discussions and acknowledge the TR4 infested property owners who have carried much of the burden of protecting the industry.

### SHARING RESPONSIBILITY WITH GOVERNMENT INTO THE FUTURE



Panama TR4 Program Management Board members Lynne Turner, Jim Pekin, Malcolm Letts and Stephen Lowe.

#### In his response to the 2021 Epidemiological Review, TR4 Program Management Board Chair Malcolm Letts assured growers that the Government will continue to be involved with TR4.

"The Department of Agriculture and Fisheries (DAF) will continue to support industry beyond 1 July 2023 through ongoing extension activities, research into soil health and research into Panama TR4 resistant varieties," Mr Letts said.

"Research currently being conducted by DAF on soil health properties will continue over the next two years, aiming to enhance industry's ability to manage disease spread into the future."

Efficiency measures are already being explored by the TR4 Program Management Board which approved a short-cut of diagnostics to eliminate the VCG test for samples from infested properties. That change will take effect in July 2022.

The TR4 Board has also deployed \$150,000 in savings accrued by the Program due to the slower-than-expected detection of new infested properties. This has been pledged to research in electronic nose technology that aims to understand if the odour emitted by TR4 can be detected by machine.

Extensive reviews into the process of destroying infected plants and destruction zones are also taking place.

TR4

# NO TIME FOR CHANCE

#### By Sonia Campbell

It's been a little over four years since TR4 was first detected on Warwick Flegler's Tully Valley farm and he has one grave concern when it comes to industry's ability to continue to contain the disease, long-term.

"There will be a tipping point if someone gets a tree that is infected (with TR4), and it's not disposed of correctly. That will be a tipping point for industry," he believes.

"Because that one tree contains millions of spores, literally millions of spores. And if you don't destroy that plant quickly and in the correct way - before you know it, spores from that one tree will be everywhere."

Warwick knows just how difficult it is to keep the disease at bay. Since his first detection in 2018, TR4 has surfaced on 15 of the 30 blocks on his farm.

One thing that has surprised him is how indiscriminate the disease is, often presenting in some of his best paddocks.

"That's an eye opener. When you get a really good producing block, and you see that one tree, it has a great bunch on it, and then it's starting to die because it's got Panama, and you know there's nothing that I could have done better."

"But maybe it just takes a week of stress, like the 40 degree heat that we've just had for it (the disease) to be sitting on the edge of a root, and for that to get into the root. Maybe that's all it takes to get in there. But it is disheartening when you've got a fantastic block and there is one tree that is dying."

About 12 months ago, Warwick had to make the difficult decision to take out 60 acres of his best production area, due to frequent new detections. However, he says he knew it was the only way of limiting further spread.

"They were the best producing 60 acres on my farm. It's probably a fifth of my production," he said.

"But before we knocked out that 60 acres, every 6 to 8 weeks, we were getting two, three or 10 new detections. Now, we're getting one tree detected every three months."

But big knock outs like this, are not always the

solution according to Warwick, who believes flexibility for growers with TR4 should be considered when determining destruction zones in a new TR4 Program that will be run by industry under the ABGC.

"Currently if you get an infected tree, you've got to destroy a 10m radius around it, so it's a 20x20 square, just so it fits in the rows. And, when you first get TR4, you don't mind knocking out a whole 10ha block, because you want to make sure everything's in there. But once you've had a few detections on your farm, I think it should be up to the grower to determine each destruction zone.

"We've got the opportunity to change some rules, so it's not so taxing on our businesses -without relaxing the rules to a point where they are not effective. We were going to knock out the whole block, a whole 10ha block, but over the last five years, I think there has been only 4 or 5 new trees detected in there since."

#### **Biosecurity still the big key**

Warwick said he could not stress enough that having good biosecurity systems in place was still the best way of keeping TR4 off your farm. It is also crucial to getting back into operation, once you get an initial detection.

"Having systems in place helps keep Panama off your farm. But once you've got it, having systems in place beforehand will mean you will be up and running before you know it.

"Putting some sort of fence up, some sort of physical barrier. Even just digging a drain around a place to keep people out and so a vehicle can't cross and take kilos of dirt onto your farm.

"Keeping boots out, by separating your boots with a boot exchange area, that's a big thing."

"Once you've got TR4, you can't just get the laser level in and make a nice pad for a fence. You have



Warwick Flegler

to do it with a backhoe or something and they have to stay on the clean side."

"I'm so glad we had systems in place before we got it."

### TAKING NO CHANCES

Warwick recently purchased a new farm in Mareeba, where he has planted 100 acres of bananas, and said on-farm biosecurity has been his absolute number one priority.

So much so, he destroyed an entire block of plant bananas last year, because he didn't have adequate biosecurity measures in place to allow safe entry (biosecurity wise) of trucks and other vehicles.

"We chopped down 40 acres of plant bananas last year, so you can say 30,000 cartons of bananas, we chopped down, because we didn't want to have trucks coming onto the property," he said.

"I didn't have (biosecurity) processes in place to have trucks come onto the farm every day. But for me, sacrificing every bunch that I had, I didn't even think about it."

"The prices were not the best as well, so the risk over reward was certainly not there."

# THE KARAOKE banana

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National Banana Day is a day to celebrate and champion the mighty yellow fruit.

And because there's a banana to make your body sing, whatever your thing, it feels only right that we introduce a rather celebratory banana this National Banana Day. A banana that can quite literally make your body sing - The Karaoke Banana.

Complete with a Spotify playlist that features an array of beats that nod to the banana, from the band Bananarama and Harry Belafonte's iconic 'Banana Boat Song', to Gwen Stefani's "B-A-N-A-N-A-S" anthem 'Hollaback Girl' - The Karaoke Banana is set to get Aussies bursting into song.

So get involved by listening to the playlist, recording your favourite banana related song ('Yellow' by Coldplay anyone?) and tag us at @AustralianBananas.

We'll have posters available to display in store, a high profile Aussie entertainer supporting our public relations media outreach and social media spruiking the launch.

Get an exclusive look at the playlist here



Find out more by contacting belinda.vanschaik@horticulture.com.au



# **1IP CONTINUES TO PROTECT THE INDUSTRY**

#### By Lea Coghlan

#### When Panama TR4 was detected on a Tully banana farm, ABGC purchased the farm to protect the industry from the devastating soil-borne fungus.

Since the 24 October, 2016 purchase, a comprehensive management program has been implemented at the farm, known as 1IP - the first property in Queensland detected with Panama TR4 - to minimise the risk of disease spread.

Then retired El Arish banana grower Phil Neibling accepted an approach from the Australian Banana Growers' Council to caretake the 242 hectareproperty where former owner Bevan Robson had reported a suspect banana plant a year earlier.

Mr Neibling grew bananas for 40 years, so had an acute understanding of the industry's value and importance to the regional economy.

"The purchase of the farm was definitely the right move," Mr Neibling said. "It was the best thing the industry could have done."

Mr Neibling's role is to ensure the farm meets its requirements as an Infested Property under the Notice of presence of Panama disease tropical race 4.

His weekly caretaking activities begin on a Monday morning when he sets off to inspect the perimeter of the 14km pig proof fence and undertake repairs, where necessary.

He maintains the fence line with herbicides, along with the 20m fire break. Infestations of Siam Weed and Giant Sensitive Plant are also controlled.

Soon after the farm was purchased, significant earthworks were carried out to limit water run-off from the farm onto neighbouring properties. It took three months to build two major drains, and put a levy bank in.

The farm is under 24-hour surveillance, with sophisticated security cameras positioned at strategic locations on the perimeter fence.

Run by electricity and solar panels, the cameras – alarmed to detect human and vehicle movements communicate with the base station and ABGC staff.

With the Come Clean Go Clean biosecurity message front of mind, the farm has implemented a raft of measures including signage, a 1km shot rock driveway, footbaths, a boot exchange and a decontamination set-up.

Despite no longer in commercial banana

production, the farm continues to be subjected to a raft of Biosecurity Queensland (BQ) requirements and twice-yearly audits.

BQ flies a drone over the farm, paying particular attention to the 25-acre block where the first infestation was detected, searching for feral banana plants, along with flying the fence lines.

Biosecurity Oueensland Panama TR4 Program acting program leader Donna Campagnolo said as the only infested property not commercially producing bananas, 1IP stands alone in the way it protects the banana industry from Panama TR4.

"The ABGC have their own processes and procedures in place to limit the biosecurity risk posed by Panama TR4, including keeping the property free of banana plants," Ms Campagnolo said.

"The movement of people and machinery is also limited to necessity, and no soil or plant material leaves the property as required by the notice of presence of Panama disease tropical race 4.

"Biosecurity Queensland conducts regular audits on the property to confirm that the regulatory requirements of the notice are met.

"Audits continue even when the infested property is self-managing the biosecurity risk.

"Self-managing the disease is a positive step

forward for both regulator and property owner, and ABGC has been self-managing the disease since 2019."

Mr Neibling said with 32 live electricity poles still on the property, Ergon Energy crews required access to inspect and carry out maintenance on power infrastructure every two years.

Last year, the first ever Ergon Energy bucket trucks were granted access to the farm. Maintenance to the electricity poles prior to this was done with ladders.

The trucks came in from non-growing areas of Hughenden and Townsville to the Ergon Energy depot in Tully where they received a washdown and BQ inspection.

Once the work was completed, the trucks moved through the washdown area on the farm and after leaving the farm, were inspected again by BQ, with details of the vehicle registration, engine numbers and tags recorded. The staff are made to change clothing before they leave.

Mr Neibling said prior to the COVID-19 health pandemic, the farm was of great interest to international research scientists, but access was restricted.

"It's certainly been a challenge. The public are curious and people tend to not know what goes on."





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# **PHOSPHORUS MATTERS**

By Alex Lindsay, Rebecca Murray, Curtis Lanham, Mahmud Kare<sup>#</sup> and Stuart Irvine-Brown, Department of Agriculture and Fisheries (#formerly DAF, now NSW Dept of Primary Industries)

Phosphorus (P) is one of the most heavily applied nutrients on banana farms, after potassium and nitrogen. As part of the Banana Nutrient Rates Project, a trial was established at the South Johnstone Research Facility to investigate the effect of phosphorus fertiliser on plant growth and yield.

Tissue-cultured plants were planted in January 2019, at a spacing of 1825 plants per hectare, double-row. The alluvial soil on the site had been fallow for at least 15 years and had low levels of available phosphorus in the topsoil (20 to 30 mg/kg Colwell P).

The trial design was very simple, comparing plots receiving phosphorus with adjacent areas receiving no phosphorus. Each treatment was replicated five times along a single row. Superphosphate was incorporated into the soil prior to planting, supplemented by periodic topdressing to make a total of 50 kg/ha of elemental P applied in the first year, and 20 kg/ha/yr thereafter.

All plants received the same amount of potassium (850 kg/ha/yr) and nitrogen (100 kg/ha/yr for the Plant crop, increasing to 200 kg/ha/yr in first ratoon, and then 400 kg/ha/yr) by fortnightly fertigation.

#### **Results**

For the Plant crop, the average crop cycle time for the plants that had received phosphorus fertiliser was 3.5 weeks faster than the plants that received no phosphorus fertiliser. By the 48th week after planting, 80 per cent of the fertilised plants had been harvested, compared to 33 per cent of the non-fertilised plants. By the 54th week all plants that had received phosphorus had been harvested, while 15 per cent of the non-fertilised plants had not.

There were no differences in bunch weight between treatments up to week 54. Some of the plants which had not received P fertiliser took much longer to produce fruit (Figure 1), but when they were harvested, they had significantly heavier bunches and were also larger plants. The heaviest bunches of the plant crop were harvested 14 to 15 months after planting (March-April 2020).

In the first ratoon crop the average cycle length of the plants which received phosphorus was around two weeks faster than the non-fertilised plants (Figure 2). There were no other differences observed in bunch harvest or growth characteristics in the ratoon crop.

Foliar samples collected at mid-growth showed that all plants had substantially higher phosphorus levels in the Plant and first ratoon crop than the industry-accepted normal range (0.18 - 0.22 percent). This was surprising given the low levels of available phosphorus in the soil, which is considered to be a better guide. Leaf deficiency symptoms of phosphorus were not observed.

#### Comparison with other studies

A research trial at the South Johnstone Research Facility in 2006-07 showed no significant difference between four rates of phosphorus fertiliser, suggesting that the demand for phosphorus is quite low. Crop removal through harvest was 6 kg/ha of P in the Plant crop (Armour et al, 2007). An earlier study (Armour & Daniells, 2001) measured 17 kg/ha of P removed in fruit in the first ratoon crop.

A review of phosphorus use in the banana industry found that there was a wide range in the rate of phosphorus fertiliser used in the Wet Tropics, and that phosphorus deficiency was only very rarely encountered, due to an accumulation of phosphorus fertiliser over time (Armour and Lait, 2017).

Since 2017 there has been an expansion of bananas onto new land, where phosphorus reserves may be lower. Growers should use soil tests to guide their phosphorus fertiliser requirements. In particular, growers and agronomists should take notice of the Colwell P level, and the phosphorus buffer index (PBI) of the soil, which influences the ability of the plant roots to absorb phosphorus. Phosphorus uptake is also affected soil micro-organisms, pH, moisture content and the availability of other nutrients. For further information visit the Banana BMP on the ABGC website.

The trial will continue to be monitored through time, when differences in soil phosphorus levels between the two treatments are expected to become more pronounced.





Figure 2: The plants that had received phosphorus fertiliser had a faster crop cycle time than those that had not been fertilised, but the difference was less than in the Plant crop.

The banana nutrient rate trials are funded through the Queensland Government's Queensland Reef Water Quality Program and is delivered by the Department of Agriculture and Fisheries (DAF). References:

Armour, J and Daniells, JW. (2002). Banana nutrition in north Queensland. Project FR95013, unpublished Final Report to Horticulture Australia Ltd Armour JD, Lindsay, S and Daniells, JW. (2007). Improved phosphorus fertiliser management of bananas. Unpublished report for Project CCI-10.3, Tully Water Quality Improvement Plan Armour, J & Lait, R (2017) Optimum Soil Phosphorus for Banana Growing. Unpublished report for Project RP158B, Department of Environment and Heritage Protection



#### PANAMA TR4

# **SNIFFING OUT TR4**

By Wayne O'Neill, Lindy Coates, Ken Pegg and Tim Shuey, Department of Agriculture and Fisheries (DAF), EcoScience Precinct QLD; And, Andrew Hayes, University of the Sunshine Coast, EcoScience Precinct QLD

A new project looking at the detection of Panama tropical race 4 (TR4) via volatile compounds is underway. Early detection of the disease is critical for containment, and current strategies rely on the identification of external symptoms like leaf yellowing.

A method to identify infected plants before they show these signs would be extremely useful for the Australian banana industry. Volatiles have been successfully used for early detection of other plant diseases such as citrus greening and laurel wilt of avocado.

It has been known for many years that race 4 isolates of the Panama disease fungus produce a strong, characteristic odour when cultured in the laboratory. The compound responsible for this smell was identified as benzocyclobutene (BCB) by Australian scientists in the 1990s.



#### Benzocyclobutene structure

More recently, a team from Queensland DAF and the University of the Sunshine Coast detected BCB in infected banana plants (but not uninoculated control plants) from glasshouse experiments, raising the possibility of use as a diagnostic or surveillance technique.

Next, in collaboration with Northern Territory scientists, samples were collected from a heavily infested field site and a disease-free site for comparison. The target compound was detected in almost all samples from the infested site, but not in samples from the disease-free location. Some of the plants that gave a positive result had internal symptoms of the disease but were yet to show any external symptoms. Others had no obvious internal symptoms in the core sample, demonstrating potential use of the technique for early detection of TR4.

The new project, supported by the Australian Banana Growers' Council (ABGC) and DAF, will further investigate the usefulness of this approach for early TR4 detection. It will see whether portable electronic sensors, such as "e-nose" devices, can be 'trained' to recognise BCB, as current testing relies on bulky laboratory equipment.

E-nose devices can also be tuned to recognise a combination of odours associated with diseased plants, so the research will also see if such a 'signature smell' for TR4 infected plants can be detected by an e-nose.

It is hoped that one of these approaches will enable volatile detection to be a useful addition to management efforts against the disease.



Flasks of banana samples with fibres inserted to collect volatiles.



Core sample taken from a banana corm in the Northern Territory.

#### RESEARCH

# FEASIBILITY OF ROTATION CROPS FOR BANANAS

#### By Tony Pattison, DAF, South Johnstone, Wayne O'Neill and Jennifer Cobon, DAF

Are crop rotations a practical way to reduce soil borne diseases of bananas? The answer to this question depends on what disease you are targeting and what you grow. What works to control one disease may not work for another.

Crop rotation is the practice of growing a sequence of plant species on the same land. The benefits are increased fertility, soil organic matter and microorganism populations, improved soil structure, reduced soil erosion and pest and disease reduction. But this comes at a cost, due to loss of income during the rotation period and crop re-establishment costs.

Crop rotations can be grown as green manures, where the focus is on improving soil properties while reducing disease, or they can be grown with a commercial focus, where there is a return from harvesting the crop, while also reducing banana disease. Commercial crops can be grown extensively, like sugarcane, cassava, and pineapples or intensively like vegetable crops, such as turmeric and galangal, which are found around north Queensland.

#### Nematodes

Burrowing nematode has been successfully managed using crop rotations, reducing the need for chemical nematicides. Recent testing of different plant species has increased the range of nematode resistant options available to banana growers (Australian Bananas, Issue 16, page 19).

Brassicas work well to reduce burrowing nematodes when grown over winter, and Rhodes grass, sunn

hemp and some sorghum cultivars work well during the summer. The success of well-managed crop rotations is changing the nematode profiles found in banana soils, reducing the occurrence of burrowing nematodes.

For root-knot nematode, which can be a problem in sandier soil, Brassicas are not a good option. Rootknot nematodes can survive and reproduce well on Brassica roots. Additionally, the chemicals produced by the Brassica roots reduce microbial competition in the soil, allowing root-knot nematode to quickly increase when bananas are re-planted. This can also be a problem for Panama disease management.

#### Panama disease

Using rotation crops to manage Panama disease can be more difficult. Our research has found that the Fusarium species that causes Panama disease can live around the roots of most plants and grows on decaying organic matter.

However, most rotation crops lowered disease in banana compared to bare fallows during glasshouse experiments. In the glasshouse there was a trend for grasses to reduce Panama disease better than the legumes, but some legumes have also showed promise in the field.

There are reports that some commercial crops

like pineapples and chillies can reduce the rate of infection when bananas are re-planted. Our work in Australia has identified some potentially useful crops for north Queensland, but these need further evaluation, especially in field trials.

#### **Mixed species**

There is a trend to use mixed species cover crops in banana fallows. By having mixed species during the fallow period, it is possible to increase the diversity of microorganism in the soil. However, selection of the species needs to be done carefully as they can contain plant species that host disease organism, like nematodes and Fusarium. This will undo the disease suppression that is being done by the resistant species, carrying the disease over to infect the next banana crop.

#### Conclusion

Giving bananas a break and growing a rotation crop has a lot of advantages to reduce disease and restore soil health. Careful choices of the species being grown during the banana break can have long lasting effects, more than repaying for the time out of production.

#### **More information**

https://keys.lucidcentral.org/keys/v3/ crop\_rotation\_plant\_parasitic\_nematodes/crop\_ rotation\_plant\_nematodes.html



Brassica grown in rotation with banana over winter to reduce burrowing nematodes.

nnovation

Hort



Mixed species cover crop being used in rotation with bananas.



Testing rotation crops for disease suppression in the glasshouse.



Sorghum and Sunn hemp grown over summer in rotation with bananas to reduce disease.

This publication has been funded by Hort Innovation, using the banana research and development levy, the Australian Centre for International Agricultural Research, the Queensland Government, and contributions from the Australian Government. Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australian horticulture. The views expressed in this publication are the author's alone and are not necessarily the views of the Australian Government.

BANANA FUND

#### RESEARCH

### LESSONS ON PANAMA DISEASE: VULNERABILITY OF THE SMALL FAMILY FARM

By Tony Pattison, DAF, South Johnstone

#### In Australia, and around the world, many small family farms play a crucial role in the supply of bananas to markets and consumers.

We have been investigating the best ways to help banana growers overcome Panama disease, as part of an Australian Centre for International Agricultural Research (ACIAR) research project.

We want to go beyond the on-farm biosecurity to focus on the growers and agronomic practices to help banana growers improve their disease management.

The work is designed to look at what banana growers in our region are doing, to find what works, what doesn't work and how research can improve the management of Panama disease.

Commencing in the Philippines, the second biggest exporter of bananas in the world, we learned some important lessons about Panama disease tropical race 4 (TR4) for Australia banana growers.

In the Philippines, 80 per cent of growers supplying the export market are smallholders, with less than 2.5 hectares of bananas.

TR4 was first reported in the Philippines in 2009 and has infected around one-third of Cavendish plantations on the island of Mindanao. The biggest banana productions province is Davao del Norte, where more the 35,000 ha of Cavendish are grown by around 4,000 growers.

TR4 was reported to be on 93% of farms in a recent survey of banana growers in Davao del Norte. Growers indicated that Panama disease was reducing production on 79% of farms, with 28% of the infected land abandoned due to the disease.

The smallholder growers in Davao del Norte are being blamed for not managing the disease and contributing to its spread. Part of the problem was the lack of knowledge about Panama disease, limiting the preparedness of smallholder growers. Other than the destruction of infected plants, the lack of resources further limits smallholder growers' actions in disease management.

In North Queensland, it is estimated that nearly two-thirds of banana growers could be regarded as small to medium, with less than 40 ha. Their farms make up just over 20% of the total banana production area.

Currently, TR4 in north Queensland has occurred on larger farms. The spread of the disease has been contained by well informed and resourced banana growers.

For the small growers of North Queensland to avoid the same scenario as their counterparts in Davao del Norte, they need to be well informed and well prepared.

This involves on-farm biosecurity but can go beyond that by developing agronomic practices that that are microbially competitive in soil.

Agronomic practices that increase soil microbial diversity such as managing soil pH, establishing ground cover vegetation and practice to reduce plant stress, can all lead to suppression of Panama disease.

The smallholders who make up a large number of the banana growers in our region are particularly vulnerable to Panama disease. However, smallholder growers can also be the ones who are most adaptable and responsive with practice changes.

The lessons we are learning from the Philippines indicate that knowledge is crucial to Panama disease prevention. Keeping plantations productive and soils healthy with good agronomic management practices is the key for keeping small growers in banana production.



Comparison of smallholder banana growers in Davao del Norte, Philippines and North Queensland Australia.



Smallholder grower losing productive plants in the Philippines to Panama Disease TR4.



Smallholder banana growers make up 64% of all growers in North Queensland, Australia.

#### Acknowledgements

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#### **REEF REGULATIONS**

## COMPLIANCE VISITS FOR REEF REGULATIONS EXPLAINED

#### By Michelle McKinlay

# It's been a little over two years (1 December 2019) since the Queensland Government introduced new Reef protection regulations (Reef regulations), which impact the North Queensland banana industry.

Compliance with the Reef regs is enforced by 'Agricultural Officers' from the Department of Environment and Science (DES). So far, a small number of compliance visits have been conducted on NQ banana farms. The Department's approach is to work with growers to provide information about the Regulations' requirements, ways to achieve compliance and identify whether the requirements are being met by each farm.

Agricultural Officers plan to visit farms across all banana production areas with a key focus on properties in the Johnstone and Tully River basins. When planning and scheduling compliance visits, the Department will consider events such as natural disasters and biosecurity incidents (such as Panama disease) and try to avoid areas that have been impacted by these or other serious events.

#### How will the compliance visit work? What can you expect?

The usual steps for a compliance visit are:

- A grower will receive a letter from the Department to arrange a suitable time for the visit. At the time of receiving the letter it is a good idea to refresh your memory on the minimum practice standards for banana farming and make sure your records are up to date.
- Agricultural Officers will follow your farm hygiene and/or biosecurity protocols (you need to make them aware of your requirements before the visit).
- Growers can send their records electronically via email for review before the visit to save time. This information will be included in your letter.
- During the meeting, Agricultural Officers may ask to inspect areas of the farm regarding erosion and sediment control measures implemented and may take photos of the measures and records.
- Agricultural Officers will review the farm operations against the minimum practice standards including record-keeping, fertiliser application, and on-site erosion and sediment controls.
- Following the visit, a letter will be sent to the grower that outlines the outcome and identifies any areas that do not meet the regulations. It may take a couple of weeks to complete this process.
- If any areas are identified as not meeting the regulations, you will be given some time to make changes to improve your practice or record keeping to meet the regulations. A follow up visit will be arranged at an appropriate time, to assess if the necessary practice changes have been made.

Of the small number of compliance visits to banana farmers that have been conducted, most growers have been found to be deficient in their record

keeping – which is a relatively easy fix. The ABGC administers an electronic record keeping app called BetterBunch and this can help keep your records up-to-date.

If you would like any advice or information to help prepare for your compliance visit, including a demonstration of the ButterBunch app, please give the ABGC BMP team a call on 0437241687. The ABGC team would also be keen to hear from those growers who have had a compliance visit, to get feedback on compliance processes.

If you need a reminder on what the regulations require of banana growers, you can refer to the Fact Sheet on the Queensland Government website at: https://www.qld.gov. au/\_data/assets/pdf\_file/0019/113482/factsheet-bananas.pdf.

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#### **BEST PRACTICE**

# A STRAIGHT AIM TO THE TARGET

Growers who farm near the Great Barrier Reef are all too aware of the importance of water quality, and have proven so, through improved land management practices over the past 20 years.

# Here, the ABGC's Industry Strategy Manager *Michelle McKinlay* explains more about the government push in Queensland to maintain targets for improved reef heath and how the ABGC continues to be the voice of industry, to ensure targets are achievable for growers, while attaining the desired environmental outcome.

The land and sea environments of north Queensland make it a very special part of the world and a major tourist destination. For banana growers, this unique environment is where they call home, where they farm and where they fish! And just like any farm, the environment needs a bit of targeted love and attention to make it look and function at its best.

Over the past two decades, the Queensland and Australian governments have become increasingly concerned about the long-term health of the reef based on monitoring the changes to water quality in the Great Barrier Reef lagoon. As a way to focus effort to improve water quality, the government established targets for all industries that are in proximity to the reef.

For farmers and graziers, the current land management target is that 90% of the production land is to be managed using best practice. This target focuses on reducing sediment and nutrient loads and ensuring aquatic ecosystems are protected from pesticides. The banana industry has been working steadily towards this target and has made significant progress in the last five years. Progress towards the targets has been measured and released in annual report cards.

When I drive around the districts, I can see evidence of the improvements that growers have made to their inter-rows. There is so much more grass in the paddocks these days. And grass in the paddock means there will be less soil in the creek.

In recent years many organisations have been critical of the land management target because it does not consider industry or catchment differences. In late 2021, it was decided to review the target and an independent consultancy group, Alluvium, has since been appointed to work with stakeholders, including growers, to devise more specific targets that will be more meaningful and achievable.

The ABGC is representing the banana industry in this process at both a technical and strategic level. The ABGC also organised for growers to share with Alluvium, their experiences and insights into farming practices that make a difference when trying to limit nutrients and sediments leaving farms.

It really is important that Alluvium and the government understand what actually happens on a banana farm. Too much guess work has happened in the past and this has resulted in government having unrealistic expectations of what can be achieved and the timeframe to achieve it. Farmers love where they live and they want to make improvements to the environment, but they must also remain profitable.

While new targets are expected later this year, the ABGC will continue to

influence and inform the government's policy development to ensure that the targets are achievable, but also aspirational in the long term. Through ABGC's input, government is aware of the excellent work already being done by banana growers. They also know that the industry is committed to a healthy reef and that growers continue to make improvements to their farms. I am very aware that banana growers love fishing and swimming on the reef and all that I have spoken to want to be part of the joint effort to deliver better water quality outcomes.

If you would like to know more about the target setting process, please don't hesitate to give me a call on 0427987499.

# #BananaBestPracticePaysOff WORKING TOWARDS INDUSTRY BEST PRACTICE



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#### BIOSECURITY

# **REINVENTING THE POD: SPRAY DOWN WITH THE RANDHAWA BROTHERS**

One thousand litre pods can have many uses.

After Panama disease tropical race 4 (TR4) was found in Tully, brothers Paramadeep and Harpreet Randhawa, like many banana growers, recycled a pod to use as a disinfectant spray down unit at the entrance to their farm.

Paramadeep and Harpreet Randhawa started growing bananas in 2015, the same year that Panama disease TR4 was found in Tully.

To help protect their farm, they purchased a pod from a local fertiliser distributor and engaged a local electrical contractor to install a 12-volt pump, hose and spray wand. They used a spare tractor battery to power the pump and installed a solar trickle charger to keep it charged. The whole setup cost around \$500 at the time.

"We placed the pod right at the start of the driveway to our shed," Harpreet Randhawa said.

"The position of the pod is good as I can see it from the packing shed, so I can make sure everyone coming onto the farm sprays their vehicle down. In busy times the pod lasts about a month, so Harpreet tops up the pod with fresh disinfectant mixture as required."



Paramadeep and Harpreet use a quaternary ammonium based disinfectant product, shown to be effective in killing the fungal spores that cause Panama disease. They have also installed a water supply to make refilling the pod easier.

The only hitch the brothers have come across is the solar panel doesn't keep the battery charged when there are long periods of overcast wet weather. On these occasions they just take the battery back to the shed to charge it.

"Make sure that the hose is long enough to be able to spray all around the longest truck that comes onto your farm," Paramadeep Randhawa said.

"We have found that most people that come to our farm follow our instructions to spray down to help us to protect our business."

Thank you Paramadeep and Harpreet Randhawa and all the growers who gave permission for their practices to be showcased for the benefit of the wider industry.

If you have a biosecurity practice, that you are willing to share for your industry's benefit, please contact the National Banana Development & Extension team on ph 4220 4152.



#### INSPIRATION TO IMPROVE YOUR ON-FARM BIOSECURITY

*By the National Banana Development & Extension Team* 

#### They say a picture tells a thousand words and do we have some on-farm biosecurity pictures for you.

The new image galleries on the Better Bananas website at www.betterbananas.com. au is a great way to find ideas that might suit your farm.

There are images of zoning, footwear exchanges, signage and disinfecting facilities that your fellow banana growers have implemented.

Also, on the Better Bananas website are case studies of some of the cost-effective options growers have implemented to protect their farms. On page 28, we look at one of these case studies.

Remember to check the website as we will be adding more photos and case studies of different on-farm biosecurity solutions growers have come up with.



Better Bananas: The Better Bananas website has a variety of on-farm biosecurity images.



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





#### WATER QUALITY

# **GROWERS COLLABORATE ON WATER QUALITY**

#### By Kathryn Dryden, ABGC Best Practice Team

Thirteen banana growers are participating in a water quality project coordinated by the Australian Banana Growers' Council (ABGC), to better understand the behaviour of nitrogen, phosphorus, sediment and pesticides in local waterways.

The project is underway in a banana-dominated sub catchment of the Johnstone River in Far North Queensland and is the first of its kind for the industry.

"The movement of nitrogen, phosphorus, sediment and pesticides in waterways is of significant interest to the banana industry," said Michelle McKinlay, ABGC's Industry Strategy Manager.

"Water quality data can help growers improve farm management efficiencies, reduce fertiliser inputs and costs, and support environmental stewardship."

Maria Ribbeck is ABGC's Water Quality Extension Officer whose expertise has developed over recent years in the region with similar work in the cane and banana industries as part of her role working for the Wet Tropics Major Integrated Project.

"By comparing samples taken at the top of the sub catchment (influenced only by rainforest) with samples taken at the bottom (influenced by bananas, cattle, and a small area of cane), over time we expect to gain an understanding of how land use influences water quality across a sample of the banana industry," Ms Ribbeck said.

Monthly monitoring will take place at the top and bottom of the sub catchment until October 2024 with more frequent monitoring to occur during rain events.

Banana growers involved in the project have already done their Best Management Practice selfassessment and are taking steps to better manage their nutrient and pesticide inputs along with sediment retention.

Kathryn Dryden, ABGC's Best Practice Extension Officer said there was a good cross section of growers in the sub catchment area with some being new and others having been around for a long time.

"Many of these growers have worked with us in the past and we aim to continue building constructive working relationships to make the project useful to them," Ms Dryden said.

"There will continue to be lots of opportunities for input and learning, as grower support and engagement is an essential part of the project.

ABGC's Best Practice team is collaborating with water quality scientists and technicians from Terrain NRM who are sharing their expertise to ensure meaningful and accurate data is collected.

Ms McKinlay welcomed government investment in monitoring the sub catchment rather than relying exclusively on modelling.

"Modelling results can be impacted by the wrong assumptions and then the data is worthless," Ms McKinlay said.

This is one of several water quality monitoring projects rolling out across a range of industries in the Johnstone and Tully Catchment areas by Terrain NRM, James Cook University and CSIRO, all of which seek to improve the science informing Great Barrier Reef water quality policy and bridge the gap between growers, scientists, and policy makers.

This project is funded by the Queensland Government's Office of the Great Barrier Reef.

For information, contact bmp@abgc.org.au



ABGC's Water Quality Extension Officer Maria Ribbeck taking a water quality sample on a banana farm as part of the project.

FERAL PIGS

# FUNDING LIFELINE FOR FERAL PIG CONTROL

Feral pigs are still a big threat to TR4 spread and the Cassowary Coast's environment

There are seven thousand fewer feral pigs on the Cassowary Coast thanks to a coordinated effort by banana growers and the Australian Banana Growers' Council through ground control and aerial shooting. But there's plenty more where they came from. As funding needed to continue the boar war is running dry, growers have been thrown a lifeline – for now.

#### **By Jael Napper**

Leon Collins isn't one to beat around the bush. Alongside professional shooter Trevor Williamson, the pair have co-ordinated a feral pig management program that has single-handedly wiped out 3,050 of the 6,930 feral pigs culled in the Cassowary Coast since 2017. But the boar war is far from won and Leon knows there's plenty more where they came from.

"Just last week the chopper cleaned out 31 pigs in one morning," Leon said at the last meeting of the Cassowary Coast Feral Pig Executive Oversight Group.

The Group, led by Cassowary Coast Regional Council, met in February to wrap up the three-year program to manage feral pigs in a coordinated partnership with government and industry stakeholders. The state government-funded regional program is now complete, however the Group has decided that momentum shouldn't be lost in the fight to protect its agricultural and natural assets, so it resolved to continue meeting.

#### Hunting for funds

At the February Group meeting, Leon shoots straight to the point.

"How the heck are we going to get more funding?" Leon asked.

"Beyond spreading TR4, pigs are doing a lot of damage to our environment."

The Group was initially established in response to TR4. However, downstream environmental benefits of feral pig control have included a decline in the degradation of wildlife habitat. Anecdotal evidence has also suggested the program has helped water quality in the Tully and Murray catchments that feed into the Great Barrier Reef.

The Group agreed there may be an opportunity to tap into government reef funding due to the damage that pigs cause to local waterways. And the Queensland Government has recently invited Far North councils to apply for \$400,000 collaboration grants for invasive pest control planning that Pictured (L-R) at the start of the eradication program in 2017, professional shooter Trevor Williamson, pilot Peter Liddle and ABGC Deputy Chair Leon Collins.

ABGC is hopeful will apply to the Cassowary Coast considering the Group's continued effort. Applications for this grant will close May 5.

In the meantime, Cassowary Coast growers have been thrown a lifeline thanks to the reallocation of unspent program management funds. This will help continue the aerial management program in a 50:50 arrangement with growers, extending the efforts seen so far.

"It's been great to have this show of support at a grass roots level," Leon said.

### Aerial shooting faces new CASA rules

Beyond funding for feral pig control, aerial shooting is facing its own challenge thanks to new Civil Aviation Safety Authority (CASA) rules that came into effect in December 2021, limiting aerial shooting to certain areas. The rules apply to operators conducting aerial work such as the ABGC who engages a task specialist in marksman Trevor

S MARIE

Williamson to conduct aerial shooting work under Division 3 Firearms and aerial work operations.

ABGC's Executive Officer Leanne Erakovic explains how the organisation was successful in seeking an exemption from CASA.

"We explained how over the past three years we have found aerial culling to be the most effective management method for rapid [feral pig] population knockdown in remote areas, as well as on, or near, TR4 infested properties.

"The use of thermal imaging from the helicopter rapidly reduced impacts while also meeting adequate safety, target specificity and humaneness standards.

"Our exemption from CASA will enable aerial work operations to continue in the upper Tully Valley, and Upper and Central Murray Valley under an approved aerial safety management plan.

In its reply to the ABGC, CASA said it will be amending Chapter 17 of the Part 138 Manual of Standards to insert a provision allowing operations within 3nm of specified areas, contingent on the safety management plan.

## Protecting farms and the environment

The total number of feral pigs removed by the banana industry from the high risk TR4 zone since July 2017 is 6,930. Of these, almost half (3,050) pigs were removed with aerial shooting, and 3,880 from ground control measures.

Positive environmental impacts of feral pig management:

- Increased sightings of cassowaries and their young.
- Reduction in predation of turtle eggs.
- Increased nesting of magpie geese.
- A decrease in predation of ground nesting birds, eggs and young.
- Fewer reports by cane farmers of cane damage.
- Less erosion of waterholes and riverbanks.
- A decrease in riparian vegetation damage.
- Improved water quality due to less sedimentary runoff.

### CHANGES TO LEGISLATION FOR 1080 BAITING

### New Queensland Department of Health regulations for the use of restricted Schedule 7 poisons including 1080 are now in place.

A new *Medicines and Poisons Act 2019* has integrated the Health Regulation (Drugs and Poisons), with the Pest Management Act into a single regulatory system as they both apply to the use of chemicals.

It's a legislative requirement that all Landholders participating in local government coordinated baiting programs must abide by the Departmental Standard in dealing with restricted S7 poisons for invasive animal control.

The Queensland Health Departmental Standard – Dealing with restricted S7 poisons for invasive animal control (version 1) was released 27 September 2021.

Copies are available from Cassowary Coast Regional Council by calling 1300 763 903 or email shared.feralpigs@ccrc.qld.gov.au.



At the start of the eradication program five years ago, feral pigs were rife in banana plantations as seen in this pic taken in 2017.

#### Feral pig trap advice

- Council loans pig traps to landowners (excluding the TR4 area in Tully) for a \$200 deposit, and the landowner/s must be able to transport the trap safely and dispose of feral pigs caught in the trap.
- For non-banana growers, pre-feed bananas to set in trapes are available to landholders by liaising with Council staff at least the day prior.
- 1080 Bait is available for collection from the Tully Depot and Innisfail Nursery, with Council investigating additional suitable locations that may meet legislative requirements.
- Register your interest the week prior to baiting through Council's email shared. feralpigs@ccrc.qld.gov.au.



Areas once littered with pig wallows and diggings are now rejuvenated thanks to the eradication program

List of member organisations represented on the Cassowary Coast Feral Pig Executive Oversight Group

- Cassowary Coast Regional Council
- Australian Banana Growers' Council
- Tully Canegrowers
- Tully Sugar
- Tully Productivity Service
- Canegrowers Innisfail
- MSF Sugar
- Innisfail/Babinda Cane Productivity Services
- Terrain Natural Resource Management (NRM) Group
- Commonwealth Department of Defence
- Department of Environment and Science (QPWS)
- Department of Resources
- Department of Agriculture and Fisheries, (Biosecurity Queensland)
- AgForce

/abgc

National Feral Pig Management Coordinator

A DOLLARS STORE ALL

# ALL-IN-ONE SOFTWARE PROGRAM TO REDUCE BURDEN FOR GROWERS

#### By Lea Coghlan

### Innisfail local Jennifer McKee has developed and launched new management software that aims to ease the burden of record-keeping for farmers.

With a career in natural resource management in compliance and permits under her belt, Mrs McKee was well aware of the record-keeping requirements on landholders.

But while on maternity leave with her third child and working in the banana industry, she quickly learnt the enormity of the issue for horticultural growers.

"The feedback from farmers was generally the same," Mrs McKee said.

"Growers are spending hours every week to keep up with record keeping, not to mention days leading up to farm audits.

"The more I looked into it the more I appreciated the mountain of paperwork associated with record keeping.

"I had a look around for what is available and there are software platforms that offer spray diaries and other features but there was little available that provided a comprehensive, all-in-one system for all compliance activities, from HARPS to Freshcare, workplace health and safety and labour."

Grower Support is an all-in-one compliance management software platform and mobile app for Australian farms.

Mrs McKee engaged a software developer and together they built Grower Support.

"Along the journey there's been more and more ideas about features, functionality and inventory, so I've tried as best as possible to release a version that will meet the needs of growers," she said.

"While Grower Support is still in its first version, it needs to do what it promises to do."

Grower Support will digitise regulatory and certification records, audit preparation and farm management needs so growers can focus on their number one priority - farming.

"My vision is to provide what growers need to save them time, so they can stay on top of their records, digitally, and have immediate access at audit time."

The software works on a subscription basis - \$95 per month or \$1100 per year. Once subscribed, farmers set up their profile with the relevant forms and

checklists that apply to their commodity.

There are several elements that set Grower Support apart from other similar software management programs.

"I've designed Grower Support to eliminate duplication so at audit time growers are able to select only the forms and checklists they need relevant to the audit," Mrs McKee said.

Grower Support offers access to unlimited users, and all data is kept securely behind a firewall.

Mrs McKee was recently a finalist in the Queensland Rural Women's Award and said the recognition was validation.

Mrs McKee has some big plans for the future of Grower Support including long-term partnerships with government and leading industry groups. However, she is conscious of ensuring Grower Support continues to remain relevant to its clients.

"We need to ensure the product we deliver is always current and up-to-date," she said.



Jennifer McKee is taking her compliance manageme software to the nation's farmers.



#### **BUNCHY TOP**

# BANANA BUNCHY TOP -THE WAY FORWARD

#### Grant Telford, BBTV Program Manager

Banana Bunchy Top is just one of the many pests and diseases that pose a serious risk to the banana industry in Australia. And its risk should not be understated.

In an ideal world banana production should just be centred on production of quality products, marketing those products, making a profit, and supporting business and employees. Unfortunately, these days it's not so simple. Aside from running a business, growers face many other significant challenges such as Panama TR4, Reef Regulation, or extreme weather. Each business also relies on actions of other growers to do the right thing to minimise biosecurity risks keep up with new biosecurity threats and understand biosecurity requirements. With biosecurity, at least, there is a clear way forward. It's not just banana producers that need to pay the price. The concept of 'shared responsibility' is not a new one and it's an obligation that requires everyone to play their part - not just growers.

#### What does 'shared responsibility' mean?

In essence, shared responsibility means that each party (government, industry and the community) is playing its part. For growers their consideration is about the best way to remain profitable, implement reasonable and practical biosecurity measures that support their business, while relying on government regulations to minimise the risk of infestation on their property that is beyond their control. For ABGC, their role is to protect and support industry through consultation with government and reduce risk created by the community. Reducing risk created by the community is both a government and ABGC shared obligation.

#### What role does ABGC play?

Traditionally the project has been focussed mainly on surveillance and destruction of Bunchy Top on farms where it has been detected, and engage the



Bunchy Top Team engaging a grower prior to a joint inspection and destruction visit.

community in the same way. The current and future project is also focused on education and training, while developing resources to build capacity and capability for all growers alongside members of the community.

"The specialist skills of our inspectors are quite unique, however it's been quite clear when training inspectors even within our own team, how quickly current and former banana growers can pick these skills up," said Grant Telford, BBTV Program Manager.

"Growers generally have a good knowledge of the health of their plants and are also very familiar with chemical use."

Project Leader Dr Rosie Godwin has noted the benefits of expanding industry capability with Bunchy Top through greater education, training and involvement of growers and better utilising limited project resources. "We now have some of the most heavily infested properties within control zones adding to and working with the team and treating their own infested banana plants during and between inspections," Dr Godwin said.

"Not only does this reduce our costs but it frees up our time to work with others. Within the last six months, the NSW team has noted that 39% of growers are competent in inspection, and 8% are competent in destruction. In SE QLD, 24% of growers are competent in inspection and 33% are competent in destruction."

Inspector Samantha Stringer has taken the lead on conducting and delivering both grower and community education sessions and producing educational resources.

"We generally target community groups in infested



Dr Kathy Crew conducting research assisted by Bunchy Top Inspector Lachlan Hohnberg.

areas while making sure that we have online resources like videos that they can find to assist them in identification and destruction," Ms Stringer said.

"Growers also have been provided with similar resources including a video on Bunchy Top identification and control. The project aims to produce further videos highlighting the importance of beneficial farm management and demonstrating the impact and challenge of Bunchy Top management if it gets into uninfected properties."

ABGC continues to support and assist Bunchy Top researchers and collaborators to better understand the disease and improved bunchy top disease management.

Consultation with QDAF and NSW DPI continues. This includes involvement in the Project's Project Reference Group, government promotion of Bunchy Top advice to industry and the community and the maintenance of legislative controls that allow Bunchy Top assistance to proceed.

"It's very rare that we need compliance assistance from government," Mr Telford said.

"However, on rare occasions we do.

"We don't have to the powers to really deal with compliance problems. In general, we rely on the support of growers and community, who really understand what an economic impact this has on the industry its workers and associated regional communities'.

"I really must also acknowledge the support given by the NSW government of late.

"They clearly see the industry as a partner and consult regularly and promote the resources we have developed to assist their growers," he said.



Samantha Stringer at a community engagement event.

#### WA NEWS

### PROJECT AIMS TO INCREASE REGENERATIVE AG PRACTICES IN WA

#### An innovative extension project underway in the industry's Western Australian banana growing region of Carnarvon aims to support growers transition to regenerative farming practices.

The Carnarvon Sweeter Banana Co-Operative secured a \$91,150 Community Stewardship Grant from the Western Australian Government's Natural Resource Management Program, for the project which will be delivered by local agronomic services provider Scott Brain from Field Capacity in conjunction with RegenWA, Rangelands NRM and the University of Western Australia. The project is also supported by the ABGC and Real Futures.

"The project involves undertaking applied research to demonstrate the performance of the biomineral production system in when compared with grower conventional practices," Mr Brain said.

"This includes working with the members of the Sweeter Banana Co-operative to assist them with transitioning to regenerative farming practices.

"Proof of concept activities have demonstrated that these practices can be readily adopted as they are more cost effective and efficient to implement than the current practices.

"It has also been observed that as well as mitigating the loss of nutrients, the biomineral system has the capability to increase soil health and organic carbon levels as a result of enhanced biological activity. "

The project aims to increase nutrient and water use efficiency and soil health whilst improving fruit quality. This will be achieved through an adaptation of well researched and understood techniques which mitigate nutrient loss and optimise plant uptake.

Demonstration sites will be established over the life of the project to quantify the changes that occur and to assist participating growers in transitioning to these practices.

The sites will monitor changes to soil nutrition and biology, plant health, nutrient and water use efficiency, production levels, shelf life and fruit nutrition over three years against control data.

Mr Brain said although an increasing number of growers were adopting regenerative agricultural practices, it was the first time that resources have been made available to provide support and undertake extension activities, with the objective being to increase adoption rates. "Overall this work is extremely significant as it completely changes agricultural enterprises from an economic and environmental perspective," Mr Brain said.

"It actually demonstrates that reducing nutrient inputs and increasing profitability are in fact complimentary as opposed to being mutually exclusive, which is the usual assumption."

Carnarvon Sweeter Banana Co-Operative business manager Doriana Mangili said the science on soil health was attracting the attention of farmers and consumers across the world.

"Sweeter Banana already grow bananas without the use of pesticides, insecticides and fungicides," Mrs Mangili said.

"It was a natural progression for us to examine the inputs into our soils and understand how we can take better care of our soils and improve productivity, plant health and fruit nutrition.

"We have seen some promising results from our proof of concept site, and we are excited to be bringing our members on this journey which we are confident will provide economic and environmental benefits."

Growers wishing to find out more can contact Scott Brain at scott@fieldcapacity.com.au



Agronomist Scott Brain will lead a regenerative agriculture project in the Carnarvon bananagrowing region.

#### WESTERN AUSTRALIA'S BUMPER BANANA PRODUCTION

Optimum growing conditions over winter has contributed to bumper production in the Western Australian banana industry, the best the region has experienced for almost a decade.

Grower Chris Collins, Mundillya Farms, and chair of Carnarvon Sweeter Banana Co-operative, said Sweeter growers were currently enjoying the highest, sustained production cycle for nine years.

"We had quite nice weather here up until summer," Mr Collins said. "Winter was reasonably mild, certainly not cold, and quite wet.

"From October to December we can have a lot of choked trees.

"This happens when it's been cold and the leaves are congested up to the throat of the plant, so the bunch can't force its way out.

"But this time at our farm at least, and from growers I have spoken to, there has been minimal choking, well under 10 per cent.

"In some years, we can get 50% of choking which results in massive fruit loss.

"This year has been good.

Mr Collins said the industry didn't escape the impacts from a long, hot summer – one of the hottest in recent years - which burnt banana bunches, without which would have seen production rise further.

Carnarvon Sweeter Banana Co-Operative business manager Doriana Mangili said the co-operative had supplied more than one million kilograms of bananas to the Western Australian market since September last year.

"The co-operative had its busiest summer in nine years with great volumes and great quality fruit," she said.

Mr Collins said while bumper production was positive for the industry, growers had not seen an increase in prices.

"Our prices have been below cost of production since October," Mr Collins said.

"We are small part of the Perth market and supply, and demand dictates returns.

"Bumper production is a good thing and growers are hoping that prices turn around which usually it does for us in winter as production drops away." **NSW NEWS** 

# COFFS BYPASS CONSTRUCTION NEARS



## Coffs Harbour banana growers who have been fighting government for a fair deal from land buy-outs needed for a new bypass are eyeing off the end to the near two-decade battle.

The project will build a new 14-km, four-lane bypass road.

Banana grower and NSW Farmers Coffs Harbour branch secretary Paul Shoker said growers had an early win with the route for the bypass changed to tunnels, over an open cut design.

He said while the design changes meant more funding was needed to build the project, it resulted in the ridge line being maintained and intact.

"It also meant less land was required for the project," Mr Shoker said.

Mr Shoker said impacted landowners were at different stages of negotiation with the NSW Government, however most had reached agreements.

"Where agreements haven't been reached, the land has been compulsory acquired," Mr Shoker said.

"It's been a draining process that has taken up time for the best part of two decades – for some it provides closures, for others they are still fighting for a better outcome."

Mr Shoker said surplus land had been identified, which the government had compulsory acquired but no longer needed due to project changes.

Parties had expressed an interest in growing bananas on surplus land, he said.

The tender process for the project is being finalised, with the successful contractor expected to be announced mid 2022.

Work to date has been on relocating essential utilities, at-house noise treatment, structural removals and environmental work.

Major construction is expected to start in 2023.

A Transport NSW spokesperson said the Coffs Harbour bypass project team had developed a Panama Disease Control Management Plan to protect the banana farming industry.

"This plan was developed in consultation with the

Banana Growers Association and DPIE Agriculture," the spokesperson said.

"The plan outlines specific control measures such as cleaning and wash down procedures for plant, vehicles, equipment and personnel.

"It also details specific controls for the management of risk material such as vegetation and topsoil.

"The basic principle for all team members and contractors on the project is "Come Clean, Leave Clean".

TNSW has been working through procurement for the main contract works to ensure appropriate controls are considered within the construction methodology.

"We will work closely with the successful contractor to ensure the control measures are implemented to minimise the potential risk of spreading Panama Disease Tropical Race 1 to adjacent farmlands and introducing Panama Disease Sub-Tropical Race 4 into the region."



# **A TRIBUTE TO YOLA HOVE** (5/5/1923-17/2/2022)

Yola Howe, matriarch of the successful horticultural Howe family on the Atherton Tablelands, passed away on 17 February, 2022.

#### Yola Howe was the matriarch of the Howe family on the Atherton Tablelands.

The family is among the largest banana and avocado growers in Australia - Dennis Howe (Howe Farming Enterprises), Peter Howe (Rock Ridge Farming) and Louise Kleyn nee Howe (Lakeshore Avocados). The following is part of the eulogy delivered at Mrs Howe's funeral and is reprinted with permission from the Howe family.

"Yola Howe was born Yola Di Felice on the 5 May, 1923, in the small town of San Potito, Abruzzo, Italy. Yola's father Carmine Di Felice travelled to Australia in 1924 in the pursuit of a better life. He purchased a small farm at Pine Creek, south of Cairns, and paid for the journey to bring his wife Antonina, Yola and son Philip to Australia by ship in 1930. On arrival in Brisbane, the family travelled to Cairns by train and then journeyed by horse and sulky to Pine Creek, and rowed across the river to the little one room house that Carmine had built on the property.

From Pine Creek the family moved to Biboohra in search of a more fertile farming area where they started growing tobacco and vegetables.

Right from a very young age, Mum learned to work hard as her and her brother worked on the family farm anytime they were not at school.

In Mum's late teens/early 20s she decided she did not want to live and work on a farm and took the courageous step of moving to Sydney. She found accommodation with an elderly couple and worked in a factory. Mum attended night classes and completed a tailoring course where she proved to be an extremely skilled seamstress.

In Sydney, Mum met her husband Thomas Howe, who she always called Tom, and they were married on the 18 January, 1947. Mum enjoyed Sydney and did not want to return to North Queensland. Dad suggested they go to North Queensland for three years 'make their money' then return to Sydney.

As our father had served in World War II, he was able to get a soldier's settlement loan which they used to buy a block of land at Bilwon where they grew tobacco and vegetables. As you may have gathered, Mum and Dad never did return to Sydney to live.

The modest house on Mum and Dad's first farm was made of corrugated iron with a mud floor which they lived in for six years with no electricity. Electricity was connected in September 1961. Yola worked tirelessly on the land during the day and at night would sew for the family.

Some of my earliest memories of Mum include her picking watermelons on our Emerald Creek farm. She picked every single watermelon that went to market. She would walk ahead of the men, tapping watermelons with her fist to gauge the readiness of the melon. If the melon was ready, she would cut its stem and roll it over so the men could identify which melons to collect.

Mum always seemed to have an innate agricultural intelligence. Not only watermelons, but her ability to grade tobacco, and when we moved to the Walkamin farm, she seamlessly transferred her farming knowledge to new crops such as avocadoes, lychees, mangoes and then bananas. For someone who never wanted to be a farmer, she certainly proved to be an exceptional one. She was also a proud advocate for Far North Queensland. Not only did Mum have a connection to the land but her commitment to her family and her God were second to none.

And Mum was a fighter; she had no choice to give up. Apparently, Dad was anxious one day about not having sufficient funds to pay for boarding school fees and Mum said, 'Tom, don't worry, we'll just plant another crop of tomatoes.' She never had the luxury of self-pity, not even at the end. Just months before Mum's passing, she would need to be convinced by her children, that she was not needed in the paddock or the shed. Sometimes a phone call to Dennis was required and he would say, 'No Mum, we just finished the packing. Everything is done.' Only when she heard this, was she settled. Imagine at 98 still feeling she was expected to do manual toil.

Mum only spent the final 10 nights of her life in the Carinya Nursing Home. Up until that point her children cared for her from the age of 96. She loved all her children equally but seemed to have a soft spot for her sons. I said to Dennis how Mum was always so happy to see him, and his words were, 'That's because over the years Mum and I have been through some valleys together.' RESEARCH

# **SOIL MATTERS:** HAZEL'S QUEST FOR HEALTHIER SOILS



### A wise person once said, *'Don't treat your soil like dirt'* which perfectly summarises Hazel Gaza's research and commitment to improve soil health.

Originally from the Philippines, Ms Gaza studied at the University of the Philippines, first attaining her Bachelor of Science in Biology, then a Masters in Genetics and minor in Biochemistry. After moving to Perth with her family in 2009, Hazel attained her Doctorate in Plant Biology at the University of Western Australia.

As a research officer at the School of Earth and Environment at the University of Western Australia, Ms Gaza applied her molecular knowledge to explore the biological, physical and chemical constraints to soil carbon storage.

In 2018, she moved to Far North Queensland to join the Department of Agriculture and Fisheries as a soil ecologist based at South Johnstone.

Ms Gaza is a key researcher in an Australian Centre of International Agriculture Research project developing an integrated management response to the spread of Fusarium wilt of banana in Southeast Asia. She seeks to determine how farm management practices change the microbiome of bananas and the susceptibility of bananas to Fusarium wilt.

Ms Gaza is also developing a soil health kit for use by overseas project-partners to assess the physical, chemical and biological properties of soils under different farm management practices. This kit will also be made available to local growers, agricultural consultants and researchers for monitoring in-field soil health. "I am excited about the potential uses and benefits of our results for soil and plant health," Ms Gaza said. "I am motivated to strive hard thinking that the results of our work could assist in ensuring a healthier Australian banana industry for the future."

Outside of work Ms Gaza enjoys tending to her veggie patch and walking on a treadmill while watching Netflix. Since moving to FNQ, she has been exploring the different islands along the Great Barrier Reef with her family.

Her favourite banana recipe is 'Turon' which is deep fried spring roll wrapped sliced Saba (a cooking banana originating from the Philippines) coated with brown sugar.

#### MARKETING

## NATIONAL BANANABABA 2022 AND BANANA ADVERTISING INITIAL RESULTS SUPPLIED BY HORT INNOVATION

#### **National Banana Day**

National Banana Day, 1 May, is a day to celebrate and champion the mighty yellow fruit.

This year, activity will tie into the overarching Australian Bananas marketing campaign message; whatever your thing, there is a banana to make your body sing.

The 'Karaoke Banana' will be introduced to consumers with a corresponding Spotify playlist to celebrate, featuring all of the top banana related music tracks. This will include an array of songs that nod to the banana, for example music from the band Bananarama, Harry Belafonte's iconic 'Banana Boat' song, Gwen Stefani's "B-A-N-A-N-A-S", and of course the Australian Banana's 'Make Your Body Sing' soundtrack. The Karaoke Banana is set to get Aussies bursting into song!

#### Hero Talent Partner:

To launch the Karaoke Banana and bring the playlist to life, we have partnered with Rob Mills – former Australian Idol contestant, current Dancing With The Stars contestant, and performer in the upcoming Hairspray on-stage musical. Rob will promote National Banana Day and the Karaoke Banana through media interviews, sharing the Karaoke Banana playlist on his social media channel, ultimately energising consumers and get them singing about bananas and enjoying eating bananas on our national day.

#### **Public Relations Media Activity:**

On National Banana Day, the Karaoke Banana Playlist will be live on Spotify and will be shared with media outlets along with a media release, imagery and interviews with our talent partner Rob Mills and a grower representative.

#### **Social Media:**

From mid-April the Australian Bananas owned social media channels (Facebook, Instagram, and TikTok) will introduce consumers to the Karaoke Banana and National Banana Day, to build excitement and anticipation in the lead up to the celebration on 1 May.

#### **Retailer Partnerships:**

Retail supermarkets will be promoting National Banana Day through a range of activities such as;

- Display incentives to increase banana visibility in-store and build staff engagement, with awards for best banana displays in each state
- National Banana Day update on staff communication platforms
- Catalogue and e-newsletter inclusion
- Social media callouts to the day

Posters and flyers that provide an overview of National Banana Day activity will also be supplied to each of the wholesale markets.

#### How can growers get involved?

Ultimately, National Banana Day is a day to celebrate all things Australian bananas and showcase the growers behind our mighty yellow fruit! If you're willing to be in a video that heroes growers and the 'Make Your Body Sing' song, we'd love for you to record yourself singing with a Karaoke Banana. This video may be shared with local news media and on social media to highlight the day. To get involved:

- 1. Find a friend you're comfortable singing in front of to hold your smartphone (in landscape)
- 2. Pick the most delicious looking banana you can find
- 3. Head out to the plantation or packing shed and find a quiet space
- 4. Play the Make Your Body Sing song a few times to get yourself energised and familiar with the lyrics (scan the QR code on Page 17 to bring up the Spotify playlist, to listen to the 'make you'd body' sing soundtrack)
- 5. Sing your heart out into the Karaoke Banana (without backing music)
- 6. Upload the video to a Google Drive or WeTransfer and send the link to bananas@elevenpr.com.au



#### MARKETING



#### **Banana Advertising Initial Results**

In January 2022 the new Australian Bananas marketing campaign launched, with the objective of driving frequency of consumption. Through continuing to own energy, the new campaign captures the range of activities bananas fuel in an enjoyable way – demonstrating that whatever your thing, there is a banana to make your body sing. Since the launch of the campaign a total of 21 million Australians have been reached, which is equal to 86% of Australian grocery buyers aged 25-54.

**Television** drives mass awareness of key campaign communications and ensures key messages for Australian Bananas are established in metro and regional markets. The television advertisement has reached (total number of people who have seen the ad) 721,000Kgrocery buyers aged 25 – 54 years of age. The advertisement has featured across top TV shows including SAS Australia, Gogglebox, 10 News, Sunrise, Morning Show, Graham Norton & The Project. Watch it here: youtube.com/watch?v=Tol4YBStdlc

**Catch up tv** is utilised to create awareness and increase consideration of Australian Bananas amongst main grocery buyers. So far, more than 211,000 Catch up tv users have been reached at an average viewing frequency of 1.23 times. Video competition rate, which is the rate at which consumers watch the end in full rather then closing or leaving the program, is high at 99 per cent versus a KPI of 95%. **Radio** is a high reaching cost effective media that communicates with shoppers often on their way to store and is designed to keep Australian Bananas top of mind throughout the day. 15 second advertisements are being used – as opposed to 30 second advertisements– in order to prioritise the number of grocery buyers reached across Australia. Radio activity commenced 14 February and will continue to be on air until the 19 June, across Nova, Smooth, HIT and Triple M networks in Australian metropolitan markets. Bananas have played 814 ads across the five capital cities and 4,973,408 people have been reached, equal to 33.82% of the total Australian population.

On average, the Australian Bananas message has been heard twice by listeners. Listen to the ad here: youtube.com/watch?v=4JZNgLwcb4M

**Out of home** panels are on display in close proximity to retail supermarkets, as a reminder prestore to include bananas in the basket or trolley, to encourage frequency of purchase. Some 889 panels have been delivered nationally, including 193 bonus panels through media negotiation.

**Social media** is always on via Facebook (facebook.com/AustralianBananas), Instagram (instagram.com/australianbananas) and TikTok (tiktok.com/@australianbananas). The objective of this activity is to reach people likely to consider bananas as their fruit of choice to drive consideration and increase frequency of consumption.

Since the launch of the campaign social media advertising has delivered 4.9 million impressions (impressions measure how many times a post has been shown in users' feeds).

The Australian bananas advertising continues to keep bananas top of mind, with advertising continuing through to late June 2022. Further results will be shared in the next issue of the magazine.

#### Your help please to make this National Banana Day the best one yet !

We'd love for you to record yourself singing our 'Make Your Body Sing' soundtrack with a Karaoke Banana! Please see the instructions above. We look forward to hearing from you.

#### **BANANA DISEASES**

# UNDER THE MICROSCOPE: EUMUSAE LEAF SPOT

#### Andre Drenth, University of Queensland

#### Under the Microscope profiles the industry's emerging and exotic diseases. Sometimes you just need the facts, fast.

#### What is Eumusae leaf spot?

Eumusae leaf spot is caused by a fungus called Pseudocercospora eumusae (previously called Myscosphaerella eumusae) which belongs to a group of pathogens that cause leaf disease in bananas. It is related to Yellow Sigatoka and Black Sigatoka. The impact of Eumusae leaf spot is through early death of leaves reducing yield and the green life of fruit causing premature ripening of the fruit.

#### What are the symptoms?

- small yellow specks are visible on the leaves at the early stage
- specks expand to form yellow narrow streaks with grey or light brown centres or black margins parallel to the leaf vein
- spots develop a dark brown border
- centres of lesions become depressed and turn grey
- many spots close together will cause large dead areas surrounded by a small yellow halo and collapse of the leaf

 symptoms can appear similar to those produced by Yellow Sigatoka (present in Australia) and Eumusae leaf spot (not present in Australia).

#### How does it spread?

Spread of the fungus causing Eumusae leaf spot is by movement of infected plant material (mainly leaves) and by spores produced in the dead grey areas on the upper leaf surface.

Two types of spores are produced on the leaves. Conidia are formed first and are water dispersed over short distances within plantations, while ascospores are formed in older lesions and are mainly wind dispersed over large distances between plantations.

#### Where in the world is it found?

Eumusae lea spot is currently found in Thailand, Sri Lanka, India, West Malaysia, Sumatra, Mauritius, Reunion, and Nigeria. In India, Eumusae leaf spot is more common than Yellow Sigatoka. Eumusae leaf spot is exotic to Australia.

### What are we doing to protect our industry?

- strict regulation concerning import of plant material
- regular surveillance of leaf diseases in North Queensland
- use of molecular diagnostics to distinguish between Yellow Sigatoka, Black Sigatoka and Eumusa leaf spot
- increase awareness among industry stakeholders

#### What can I do to protect my farm?

- use only disease-free planting material
- effectively protect young fully expanded leaves through application of fungicides as they are most susceptible to infection
- removal of inoculum from older leaves through regular deleafing
- check your farm frequently for unusual leaf spot symptoms



Eumusae leaf spot on AAA variety in Malaysia (Photo: Juliane Handerson).



Eumusae leaf spot advanced.

Photos and text provided by Prof André Drenth, University of Queensland as part of project BA16005 Strengthening the banana industry diagnostic capacity.

**EVENTS** 

# FEAST OF THE SENSES

Hundreds gathered to enjoy Innisfail's annual Feast of the Senses again this year. As always, the Australian Bananas stall – run by the Cassowary Coast Banana Growers' Association – was a huge hit, offering an array of banana merchandise, freshly made banana smoothies and a Guess the Weight of the Banana Bunch competition.









ANAMAS

AMALIAS





### A FEAST OF TR4 EDUCATION

Biosecurity Queensland's Rebecca Breaden joined new ABGC recruit Jael Napper to host a Panama TR4 information stall at Innisfail's Feast of the Senses.

The stall recorded 85 engagements to make sure the community remains aware of the disease, and how we can all help to protect banana farms.



# Experience leading Sigatoka control.



# **Luna** EXPERIENCE



#### Control yellow Sigatoka, leaf speckle and cordana leaf spot with Luna<sup>®</sup> Experience fungicide.

- Built-in resistance management with fungicide Groups 7 & 3 in one formulation, no need to tank mix
- The only Group 7 fungicide available in bananas
- Non-treated surface protection through translaminar movement
- One-day withholding period

### Speak to your advisor or visit crop.bayer.com.au to find out more.

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