

PRESIDENTS WORD

Troy Prichard
ASPG PRESIDENT



Welcome to the first edition of a series of industry newsletters from the Australian Sweetpotato Growers Association (ASPG). The purpose of this newsletter is to keep you in touch with important news about research and development (R&D) occurring in your industry, past R&D results, upcoming events and other information necessary to help you run your sweetpotato business effectively.

I have now been in the president chair since the AGM in November 2021. After many years of significant effort and dedicated service Rodney Wolfenden stepped down as the Association's president. Rodney guided us through the establishment of the R&D and marketing levies as well as moving ASPG to an incorporated association. I would like to personally thank Rodney for the leadership he provided and acknowledge that such dedication often came at time away from his family and business.

2022 has started with more of the same challenges for growers: depressed farm gate prices, excessive rainfall and flooding events and the ongoing battle to attract and retain workers. On a positive note, the management committee, with the support of Peter Long, is working hard to improve relationships with Hort Innovation and ensure we gain the greatest value from your grower R&D and marketing levies. My door is always open if you would like to discuss an industry matter or have an issue the Association may be able to help with. Please give me a call.

Troy Prichard, President

FROM THE EXECUTIVE OFFICER

I have now been in the executive officer's position on a part time basis since May 2021. I would like to thank all growers I have met for your welcome, patience and understanding as I get to know you personally, better understand industry issues, production approaches, marketing challenges and where I need to best focus my efforts. I appreciate that your time is valuable, as you focus on growing and marketing quality sweetpotatoes.



Over the past three months ASPG has been successful in being awarded two Hort Innovation projects. The first one is a communication project which provides funding for this newsletter, to be delivered over the next three years. The project is funded using your research and development levies with matching funds from the Australian Government. The second project, to be led by ASPG, is a very exciting project where up to 15 emerging leaders from the sweetpotato industry will be supported in a three-year professional development journey. Year one involves a three-day study tour of Sydney with visits to the markets, processors, supermarkets, and a distribution centre. I would encourage all in the industry to nominate someone from their business, whether growers or key staff.

Peter Long, Executive Officer

Australian Sweetpotato Growers Association Management Committee

Troy Prichard (President)
Matthew Prichard (Vice-President)
Eric Coleman (Treasurer)
Peter Long (Executive Officer)
Damien Botha

Rodney Wolfenden
Simon Doyle
Russell Mortimer
Russell McCrystal

Rainfall and flooding damage disaster support Queensland growers



In Queensland grants of up to \$75,000 are available for affected primary producers following three separate rainfall and flooding events in Queensland. Applications are assessed by the Queensland Rural and Industry Development Authority (QRIDA).

What assistance is available?

Growers need to show they are an eligible primary producer and demonstrate they have suffered direct impact from the disaster. For each event there is a maximum grant ranging from \$50,000 to \$75,000 through two applications:

- An initial amount of up to \$10,000 to \$15,000 to support an initial claim. Evidence of the direct damage is required such as photographs, quotations, tax invoices or official receipts.
- A subsequent amount of up to \$40,000 to \$60,000 to support subsequent claims for which full evidence of payment is required.

How can the assistance help you?

Eligible clean-up, reinstatement activities and emergency measures include:

- Equipment and materials to undertake clean-up
- Additional labour costs (above and beyond normal wage expenditure i.e. day-to-day staffing)
- Disposing of damaged goods including associated costs
- Repairs to buildings (other than housing)
- Reconditioning/ repairing essential plant and equipment
- Purchase or hire/ lease costs for equipment essential to the immediate resumption of the business
- Payment for tradespeople to conduct safety inspections.

Where to go for more information and help

<https://www.qrida.qld.gov.au/contact-us> or phone your local QRIDA office.

Events	Which local Government areas can apply	Applications Close
10 Nov – 3 Dec 2021	Bundaberg, Lockyer, Scenic Rim, South Burnett	30 June 2022
7 to 10 Jan 2022	Bundaberg, Fraser Coast, Gympie, North Burnett, and South Burnett	29 July 2022
22 Feb - 7 March 2022	Lockyer, North Burnett, Scenic Rim and South Burnett	5 Sept 2022

Marketing insights for ASPG

A number of recent marketing insights identified that consumers value sweetpotato because they are: healthy, delicious, easy to cook, nutritious and versatile. We need to build on these positive attributes and focus on the brand's position to ensure sweetpotato is added to more consumer shopping lists.

To produce this newsletter ASPG has established a small part time team. Mel Jurgens of Manea Creative and Emma Crust have been working with me on the content and layout to produce this newsletter. Mel is a Graphic Designer and many of you would know Emma as a former Department of Agriculture and Fisheries (DAF) researcher.

Finally, the publication team would love to hear your feedback on the newsletter and suggestions for future articles. I would welcome a call 0490 324 671 or email me your feedback: aspg.sec@gmail.com

Sweetpotato Emerging Leaders Program 2022-24

The program will be conducted over three years

Year 1: Three day Sydney industry study tour (July 2022)

Year 2: Two day professional development workshop and Work place project

Year 3: One day report back workshop

About the program

The program challenges participants to reflect on what is expected of a modern leader. During the program, you will acquire a solid set of tools and skills that will help you lead a team, either in a business or a representative context.

Who is the program for? Anyone working in the sweetpotato industry in any role.

Who is delivering the program? ASPG together with Jill Rigney from The Right Mind

What does it cost? There is a one off \$400 contribution together with some travel and meal costs. The Sydney study for the year one trip are covered. Flights and accommodation

For more information please contact Peter Long
M. 0490 324 671 | aspg.sec@gmail.com

Hort Innovation SWEETPOTATO FUND

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

SWEETPOTATO

VIRUS RESEARCH UPDATE

The conclusion of ACIAR Project 'Supporting commercial sweetpotato production in Papua New Guinea' resulted in several firsts for Australian sweetpotato research. This newsletter will focus on two of the experiments.



enhance the Australian industry's capacity to rapidly monitor for SPVG and SPMSV incursions and provide confirmation of health status of plants in the clean seed scheme and grower seedbeds. The LAMP machine is fully portable and rechargeable and takes only half an hour to run.

The second experiment, the first of its kind in Australia, was a pilot study conducted by DAF to gain an understanding of sweetpotato virus transmission by the insect vector, silverleaf whitefly. Insights into how insect vectors carry and transmit sweetpotato viruses are key to combating the risk of virus reinfection in field conditions and maintaining virus free status in nursery conditions.

This replicated experiment looked specifically at the transmission of SPLCV by silverleaf whitefly into clean plants of Australian commercial sweetpotato cultivar Beauregard and PNG cultivars Tambul Mai and Wahgi Besta (white fresh varieties). Silverleaf whitefly raised in a clean laboratory culture for multiple generations were assumed to be free of known sweetpotato viruses.

The virus free silverleaf whitefly were introduced to sweetpotato plants with single infection of SPLCV for 96 hours. After this incubation period the whitefly were introduced to virus free cultivars of Beauregard, Wahgi Besta and Tambul Mai for an allocated time; 4, 24 or 48 hours. After the respective time, the silverleaf whitefly were removed and the sweetpotato plants held for virus testing.

Results indicated that all 3 cultivars of sweetpotato plants exposed to SPLCV infected silverleaf whitefly for 4 or 24 hours did not successfully transmit SPLCV. Plants of Beauregard and Wahgi Besta tested positive to SPLCV after the 48-hour incubation period whereas Tambul Mai tested negative. These results are not conclusive as the whitefly were observed on plants, but it could not be confirmed whether they were feeding or resting during the 4-, 24- or 48-hour periods. Due to COVID restrictions, a repeat study was not conducted as originally planned. A repeat study would add further replication to draw firmer conclusions.

The experiment conclusions indicate that, in practical terms, there may be more time than initially thought to control silverleaf whitefly entering a screenhouse after minor storm damage or early infestation in field conditions.

New virus detection method

The first experiment delivered three new rapid tests for sweetpotato viruses using LAMP (loop mediated isothermal amplification). The LAMP machine at Gatton Research facility was purchased by the Department of Agriculture and Fisheries (DAF) with project funds. The LAMP test works in the same way the qPCR Covid-19 tests work (molecular detection of DNA) but is cheaper, faster and easier to use.

The new tests developed will be used in Australia to screen for the exotic, sweetpotato virus G (SPVG) and sweetpotato mild speckling virus (SPMSV) and the endemic sweetpotato leaf curl virus (SPLCV). The LAMP tests for SPMSV & SPLCV were developed by DAF staff. The LAMP test for SPVG was designed by Papua New Guinea UQ Masters student Winnie Maso under the supervision of DAF. Winnie was enthusiastic to be involved in this project saying,

'Viruses are a major production risk to the PNG sweetpotato industry'. They are spread by planting infected materials and can result in significant yield reduction of 50 per cent or more.'

These tests will provide PNG researchers with a complementary method to ensure that planting material distributed to PNG growers is virus free. Reducing the virus burden in PNG also lessens the chances of an incursion into Australia. The tests further



Introduction of a new department of agriculture and fisheries researcher

The DAF sweetpotato team would like to officially welcome Ms Jean Bobby to the team.



Jean was the successful candidate for the PO2 position left vacant when Emma Crust retired. Jean has been working with the sweetpotato group as a casual alongside Emma for more than seven years and is experienced at everything from seedbed

installation, planting, grafting and virus diagnostics to nematode trapping fungi culture and microarthropod extraction.

Jean has a Masters in Agricultural Science from the University of Queensland and a Graduate Certificate in Biosecurity from Murdoch University. Jean also manages our large germplasm collection (virus and other pathogens) at the Gatton Research Facility.

Rotation crop cultivars resistant or highly resistant to two species of root-knot nematodes



It is best practice to plant cover crops to reduce erosion, increase rainfall infiltration and add organic matter to your soil. There are a range of cover crops available; however, it is very important to choose crops which are resistant to root knot nematodes. Cudgen fields have predominantly *M. incognita*, while fields in Bundaberg and Rockhampton are predominantly *M. javanica*. The best advice is to use a rotation crop that is resistant or highly resistant to both species of root knot nematodes. Resistant and highly resistant Rotation crops:

Rotation crop	Cultivar	Nematode Species	
		<i>M. incognita</i>	<i>M. javanica</i>
Peanuts	Alloway	Highly resistant	Highly resistant
Peanuts	A237	Highly resistant	Highly resistant
Peanuts	Holt	Highly resistant	Highly resistant
Oats	Swan	Highly resistant	Highly resistant
Oats	Williams	Resistant	Highly resistant
Sabi grass	<i>Urochloa mosambicensis</i>	Resistant	Highly resistant
Signal grass	<i>Urochloa decumbens</i>	Highly resistant	Resistant
Sorghum	Dyna Powa	Resistant	Resistant
Sorghum	Jumbo	Highly resistant	Highly resistant
Sorghum	Sweet Jumbo LPA	Resistant	Resistant
Sunn hemp	<i>Crotolaria juncea</i>	Resistant	Resistant
Sweet smother grass	<i>Dactyloctenium australe</i>	Highly resistant	Highly resistant

Department of Agriculture & Fisheries

Sweetpotato research update

The Department of Agriculture and Fisheries (DAF) sweetpotato project team welcomed in a busy 2022 with trial harvests, assessments, resistance screening, surveys and investigative pot trials as part of the Nematode project (PW17001) funded by Hort Innovation.

Data analysis from the second commercial harvest of the intensive trial block indicated that nematicide treated plots produced a higher average number of roots per plot, but the organic amended plots produced a higher average root weight per plot.

The incidence of wireworm damage was significantly higher in the organic matter treatment than all other treatments, but this requires further monitoring before any firm conclusions can be drawn.

The nil treatments (control plots) had a significantly higher incidence of pimpling (symptom of nematode infection) than all other treatments.

Host range and pathogenicity trials continue. Experiment number 20 is due to be harvested this in May. As results become available, they are distributed to growers via the ASPG secretary and added onto the cover crop resistance list. The latest updated summary was provided in February 2022.

The intensive surveys throughout production regions are continuing, hopefully now free from travel restrictions. Nematodes, both plant parasitic and free living, are being monitored in selected on-farm blocks over time to understand how on-farm practices influence nematode populations.

This survey will continue for the life of the project.



Diagnostic sampling is also available anytime for growers who want ad hoc information about nematode numbers in particular blocks. Please call Rach on 0436 928 512 if you would like a block sampled.

The nematicide trial was harvested in mid-January 2022. Thanks to McCrystal Ag and AGPD for their involvement. An assessment of over 7000 roots was performed and results from an analysis of the data collected is expected from the DAF statistician any day.

Maintenance and cover crop rotation schedules continue in the long-term trials at Bundaberg Research Facility, along with a range of soil sampling, (nematode surveillance screening, physical soil properties, microarthropods and NTF) at critical points in the trials.

There are two separate long-term trials: an intensive trial with four sweetpotato crops in five years with a similar farming system to current grower practice, and an extensive trial with three sweetpotato crops in five years and preformed beds.

The rotation crop was sprayed out in the intensive trial, amendments were added, and the block was planted to Beauregard on 11 February 2022. This block is scheduled to be harvested in winter 2022. The second harvest of the extensive trial was conducted on 21 March 2022.

Assessment of over 12,000 individual roots is now complete and data is being collated. A new round of amendments has been applied and soil samples collected. This block will be planted to Swann oats and a brassica variety in April 2022.

A long-term pot trial to investigate RKN damage to two commercial sweetpotato cultivars (Beauregard and Bellevue) was also harvested and assessed in March.

The project team completed a Nematode Project milestone report in February. This has since been approved by Hort Innovation and sent out via Peter Long (ASPG) for distribution to growers in March. The team hope to host the next project update in June/July 2022, and hold a herbicide workshop this winter. A second Nematicide field trial is in the planning stages proposed for spring/summer 2022. We would especially like to thank McCrystal Ag, Windhum Farms and Mortimers Farms for their assistance with the long-term trial in Bundaberg.



SWEETPOTATO EXPORT STRATEGY

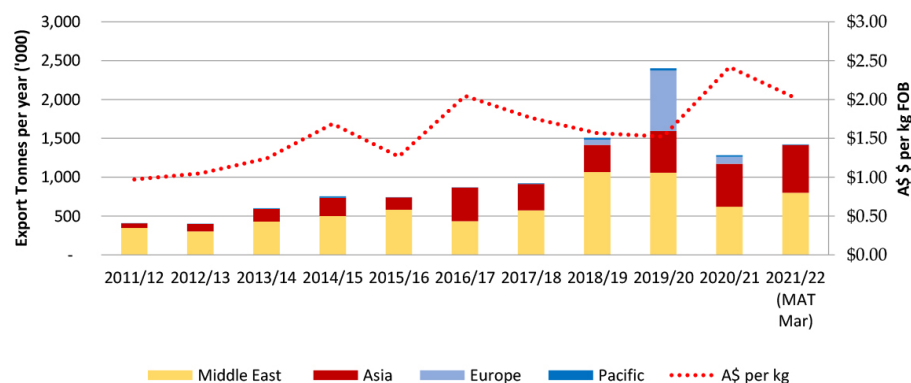
Wayne Prowse - FRESH INTELLIGENCE CONSULTING

The Sweetpotato Export Strategy was a project funded by Hort Innovation's sweetpotato grower levy fund to assist the Australian sweetpotato industry to develop exports to achieve their real potential in a global environment experiencing large expansion in demand for sweetpotatoes.

The critical elements of the project involved gathering the global intelligence and trade information, mostly from an existing project, and other sources. These included latest analysis trade statistics, and an assessment of the Australian Sweetpotato industry production capabilities by region including varieties, biosecurity analysis and the industry aspirations. The Australian Sweetpotato industry data shows the industry produced 106,715 tonnes of sweetpotatoes in 2020, of which 90 per cent were gold and 10 per cent reds and purple varieties.

Exports reached almost 2,400 tonnes in 2019/20 or slightly over 2 per cent of production mostly to the United Arab Emirates and Europe, though fell to 1,284 tonnes in 2020/21 as trade to Europe subsided. Europe is the world's largest importer of sweet potatoes, importing over 200,000 tonnes mostly from the United States and Egypt, which are highly competitive.

Sweetpotato export growth by region
2011/12 – 2020/21



Source: IHS Global Trade Atlas; Fresh Intelligence analysis

KEY RECOMMENDATIONS

The global sweetpotato market is polarised with gold sweetpotato varieties dominant in the US, Europe and the Middle East, while Japanese style reds and purple sweetpotatoes are more widely grown and consumed in Asia. Europe and Middle East markets have greatest demand opportunities for the Australian gold sweetpotatoes; however, the returns to growers, particularly to Europe, are not attractive.

Asia is much closer for Australian exporters; however, these markets favour the red and purple varieties, that, for Australia, have a higher production cost and are not as competitive against the large production stemming from Vietnam supplied to other Southeast Asian markets. China is the world's largest producer of sweetpotatoes and has no recorded imports. Similarly, Japan and Korea are large producers for their own markets and do not import from outside sources.

Key recommendations for the Australian sweetpotato industry export strategy are to:

1. Develop reliable and consistent trade for GOLD sweetpotatoes to UAE and other Gulf markets as the supplier of choice from April to October during the Egyptian off season.
2. Develop consistent trade in "small" size GOLD sweetpotatoes in Southeast Asian markets (Singapore, Malaysia and Thailand) to position as an alternative market proposition to other more dominant varieties supplied from Vietnam.
3. Maintain niche trade for premium

quality reds and purple Australian sweetpotatoes to Southeast Asian markets.

4. Support large players to seek opportunistic trade to Europe to meet markets such as UK and Netherlands when there is a shortage in US supply and cost structures in the supply chain are viable.
5. Maintain and moderately expand existing trade to Pacific Islands
6. Maintain a watching brief for North Asia (Japan, South Korea and Taiwan) for any sign of potential trade opportunities, albeit, not evident, nor likely, in 5 years.

The strategy recommends the sweetpotato industry's peak body, ASPG, establish a multi-sector Sweetpotato Export Development Working Group to drive the export agenda for the industry. This includes Hort Innovation levy funded projects, and upscaling the level of systematic trade and market intelligence information available to the industry.

With a strategic commitment to developing export programs rather than opportunistic approaches, the industry could see exports reach 6,000 – 8,000 tonnes by 2026.

Improving quality of sweetpotatoes

Project Objective

To improve the quality of sweet potatoes by engaging key stakeholders (growers and retailers) to increase the consumption and demand of Australian sweet potatoes.

Why?

To increase:

- > Purchase frequency
- > Average weight of purchase (AWOP)
- > Returns/profitability
- > Stock-turn frequency (reduced waste)

How?

- > Work collectively as a supply chain (growers, packers and retailers)
- > Focus on ALDI, Coles and Woolworths
- > Partner with key growers

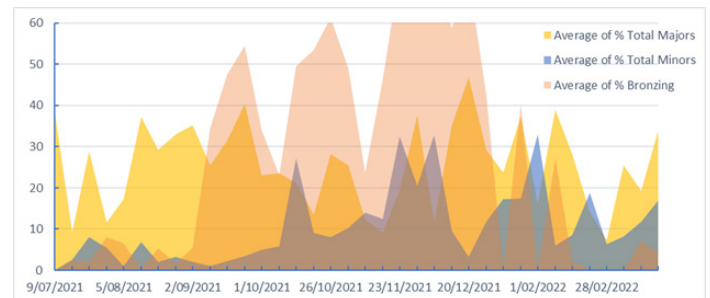
Year 1: Build the data set to extract insights and inform decision-making

- > Retailer engagement (ALDI, Coles, WW) and grower engagement via 6-monthly workshops
- > Root-cause analysis of key quality issues (using historical data; retailer DC rejections and customer complaints)
- > Monitoring of product quality (in stores and DCs)
- > Propose and agree Minimum Quality Standards
- > Annual Grower Roadshows with key grower groups (x3)
- > Update articles via Australian Sweetpotato Growers.

Example of a Weekly Quality Update:
All retailers Vic

28/3/22

Major and Minor Defects



The Quality Project team of Tristan Kitchener and Andreas Klieber presented two industry project updates in Cudgen and Bundaberg in May.

