

| DAVID CARTER - COVER STORY | HORT CONNECTIONS 2017 - A TRULY COLLABORATIVE EVENT | | POTATO INDUSTRY EXTENSION FORUM - GROWERS DISCUSS KEY ISSUES |

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They say that two heads are better than one, and the truth in this statement was brought to life at Hort Connections 2017.

For the first time in Australian horticulture history, AUSVEG and the Produce Marketing Association Australia-New Zealand joined forces to merge the National Horticulture Convention and PMA Fresh Connections, and bring industry members a one-stop convention and trade show.

This partnership was strengthened through the support of eight industry co-hosts that ensured further segments of horticulture were represented at the event, including irrigation, onions, certified organics, wholesalers, nurseries, potatoes and Queensland horticulture.

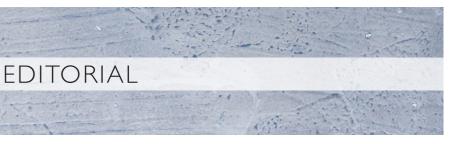
There is unlimited potential for industry collaboration in Australian horticulture, as greater collaboration allows voices to unite on issues that matter and extend knowledge and new ideas to the largest audience possible.

The feedback received from Hort Connections was overwhelmingly positive, with many delegates noting that such an event was long overdue for the industry. It is understandable – there are many important events that are held throughout the year, from large conferences to smaller, regional farm visits. Despite the size of the event itself, it demands participants to invest valuable time and

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money away from their businesses to open their minds and develop their networks.

Regardless of where you sit in horticulture, there are certain issues that can have a ripple effect on growers and supply chain members - from catastrophic weather events to political decisions or pests and diseases that affect a variety of crops.

It is easy to become so entrenched in your own business or sector that you forget to step back and look at the bigger picture. Something as simple as understanding that there are others who experience the same challenges, or have come up with a solution that can be applied to multiple industries, is made all the more easier in an open forum where people of varying backgrounds, experience and knowledge come together to build a better future for the horticulture industry.

Understandably, Hort Connections takes pride of place in this edition of Potatoes Australia and we have included wrapups of the overall event as well as the Potatoes South Australia luncheon and Potato Industry Extension Forum (page 14), and launch of the Growcom Fair Farms Initiative (page 35).

Hort Connections 2017 was a great starting point to further industry collaboration, and we are already working hard to ensure that next year's offering in Brisbane from 18-20 June builds on the value and success of this year's event.

| MESSAGES FROM THE CHAIRMAN AND CEO |

It was a great pleasure to witness the success of the inaugural Hort Connections 2017, with approximately 2,500 delegates travelling to the Adelaide Convention Centre for the groundbreaking conference held from 15-17 May.

This event was an overwhelming success for AUSVEG as well as our conference partner, the Produce Marketing Association Australia-New Zealand (PMA A-NZ) and eight industry cohosts: Fresh Markets Australia, the Central Markets Association of Australia, Potatoes South Australia, Growcom, Irrigation Australia, Australian Organic, Onions Australia and Nursery and Garden Industry Australia.

Hort Connections exceeded all expectations, breaking delegate and exhibitor records previously set by PMA Fresh Connections and the National Horticulture Convention. The industry collaboration demonstrated at Hort Connections was a testament to the event's overall success.

As a result of this year's positive response, AUSVEG and PMA A-NZ have announced that Hort Connections will be returning in 2018, this time at the Brisbane Convention Centre from 18-20 June. I hope that those who attended the event this year found it to be highly beneficial, both personally and professionally, and we are looking forward to bringing you an even more informative and valuable event in 2018.

Hort Connections provided important networking opportunities for delegates, including members of the Australian potato industry who were able to come together at the Potatoes South Australia luncheon and the Potato Industry Extension Forum held on Monday 15 May.

The luncheon and forum provided an avenue for around 50 members from across the industry to meet, share information and hear about the latest industry issues and innovations. Presentations at the workshop included tomato-potato psyllid management, emerging technologies such as aerial and satellite crop surveillance, as well as soil health monitoring, management and improvement. For those who were unable to attend, a full wrap-up of the event can be found on page 14.

In other positive news, the Australian potato and vegetable industry is set to benefit from a significant investment in biosecurity, with Horticulture Innovation Australia securing a Federal Government grant and co-investor funding to deliver a \$21 million, five-year plant biosecurity project.

This investment will ensure the horticulture industry has both the technology and expertise to detect, identify and treat plant pest incursions. It will also assist in the management of key endemic pests, the importance of which is clearly demonstrated by the recent incursion of the tomato-potato psyllid. This investment is vital to protecting the viability of Australia's vegetable and potato industries and will contribute significantly to ensuring our industry remains strong and stable well into the future. On behalf of AUSVEG, I would like to take the opportunity to thank each and every delegate who attended Hort Connections 2017 as well as our event partners, the Produce Marketing Association Australia-New Zealand (PMA A-NZ), our industry co-hosts, exhibitors and speakers for helping to deliver a truly world-class event for Australian horticulture.

The inaugural amalgamation of two leading industry events – the National Horticulture Convention and PMA Fresh Connections – resulted in the largest and most comprehensive convention in the history of Australian and New Zealand horticulture and we are excited for Hort Connections to return from 18-20 June 2018 at the Brisbane Convention Centre.

The highlights of Hort Connections 2017 included presentations from thought-provoking leaders and an expansive trade show, which showcased 148 local and global supply chain organisations. Delegates saw the latest in technology and innovation, heard from industry experts, met leading local and global agribusinesses and networked at the most highly anticipated social events on the industry's calendar, including the Gala Dinner.

With over 1,200 people in attendance, the Gala Dinner was the capstone event of the three-day convention. It not only gave delegates the opportunity to network and socialise with friends and colleagues, it also honoured growers and other members of the Australian horticulture industry for their outstanding achievements.

This included Anthony Staatz from Queensland, who received the prestigious Grower of the Year award while Victoria's Daniel Adams was presented with the Young Grower of the Year award. Victorian grower Lisa Brassington was rewarded for her ongoing contribution to the organic sector by taking home the coveted Women in Horticulture award.

The importance of taking care of your mental health and its impact on individuals and communities in regional Australia was also highlighted at Hort Connections 2017, with a Mental Health Panel contributing to industry efforts to break the stigma surrounding mental health and encourage growers to speak up when they're feeling down. beyondblue Chairman and former Victorian premier Jeff Kennett led the session, while panellists included Young Potato People founder and *Potatoes Australia* columnist, Stu Jennings. The panel provided an open forum for attendees to ask questions about mental health and learn tactics to assist themselves or those close to them, and received significant positive feedback from attendees. As farming is often quite isolating, it is imperative to encourage an open discussion about mental health. I congratulate growers such as Stu who continue to encourage

congratulate growers such as Stu who continue to encourage conversation around issues such as depression and anxiety and hope that the panel inspired more members of the potato industry to follow the same path.



Juff Moar

Geoff Moar Chairman AUSVEG



James Whitesde

James Whiteside CEO AUSVEG



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Trade Show had plenty on offer for delegates



HORT CONNECTIONS 2017: A TRULY COLLABORATIVE HORTICULTURE EVENT

The inaugural Hort Connections 2017, hosted by AUSVEG and the Produce Marketing Association Australia-New Zealand, attracted around 2,500 delegates who heard from a wide array of speakers, took part in a variety of networking opportunities and recognised the best and brightest in the horticulture industry over three eventful days.

The most eagerly anticipated event in Australian horticulture kicked off on Monday 15 May, with approximately 2,500 local and international delegates making their way to the Adelaide Convention Centre for the inaugural Hort Connections 2017.

For the first time, the event was hosted by AUSVEG and the Produce Marketing Association Australia-New Zealand (PMA A-NZ), bringing together the largest number of growers, supply chain members, government stakeholders and industry service providers in the Australian horticulture industry.

Hort Connections 2017 was co-hosted by a range of horticulture industry bodies including Nursery and Garden Industry Australia, Australian Organic, Onions Australia, Irrigation Australia, Growcom and Potatoes South Australia. Fresh Markets Australia and the Central Markets Association of Australia were official trade show sponsors as well as co-hosts.

The three-day event presented the nation's vegetable and potato growers with the opportunity to discuss industry issues and learn from each other and their overseas counterparts. It was also a great way for members of the wider horticulture industry to connect and discuss areas of mutual concern.

MONDAY 15 MAY

During the first day of Hort Connections, Potatoes South Australia hosted a luncheon before the Potato Industry Extension Forum, which was well-attended by members

of the potato industry (see page 14 for more information). Meanwhile, the Horticulture Field Day allowed over 50 growers and industry members to tour a range of facilities focusing on the supply chain, research and innovation, and on-farm development. Delegates toured the TORO factory and met with leading researchers at the South Australian Research and Development Institute (SARDI) and Plant Biosecurity Cooperative Research Centre (PBCRC). The next stop was Eastbrook Farms at Mount Barker, where delegates met Brussels sprout grower Scott Samwell who is hosting a Soil Wealth/Integrated Crop Protection field trial site.

In the evening, delegates gathered for the Welcome Reception, where Master of Ceremonies Toby Travanner introduced the Hon. Tung Ngo, the first Vietnamese-born Member of Parliament in South Australia. The welcome ribbon was cut by Mr Ngo, AUSVEG Chairman Geoff Moar and PMA A-NZ Chairman Andrew Francey, marking the official opening of Hort Connections 2017. With more than 200 industry booths on display, the Trade Show certainly offered plenty of thought-provoking discussion over the next couple of days.

TUESDAY 16 MAY

At the Perfection Fresh Breakfast on Tuesday morning, Tom O'Toole from Beechworth Bakery entertained the crowd and spoke about how attitudes in the workplace are fundamental to a great organisational culture, and why customer service matters.

The first plenary session featured Assistant Minister for Agriculture and Water Resources, Senator the Hon. Anne Ruston, who provided the opening address and urged the industry to take ownership of its levy funds.

Sean Sands from Monash University spoke about the changing consumer decision journey and outlined seven key themes that impact consumer purchasing behaviour, known as SCAMPER (simplify, convenience, activist, membership, personal, editorial and responsibility). He was followed by Jaquie Scammell, a customer relations expert who discussed the trends in Australia impacting the workplace and the three personas taken on by those in business - explorers, teachers and makers.

Bega Cheese Executive Chairman Barry Irvin addressed the crowd about encouraging growth and developing new intellect within business, while Cultivate Principal Lone Jespersen discussed the importance of cultivating a food safety culture in the horticulture industry.

After lunch, delegates could visit the Trade Show, join the Adelaide Retail Tour, or attend the concurrent speaker sessions dedicated to Global Innovations in Horticulture, Fresh Marketing Insights, Fresh Business Perspectives, Irrigation Australia and Onions Australia.

After a busy day of speaker sessions and networking, delegates attended the DuPont 'Australiana' Theme Night, which gave them the opportunity to relax with friends and colleagues while being entertained by an acoustic band and, in keeping with the theme, two Australian whip crackers.

WEDNESDAY 17 MAY

It was an early start for some, with delegates getting up before sunrise to tour the South Australian Produce Market. Delegates also met with the Australian Produce Collective and learnt about export opportunities with 'Fresh Please', as well as networking with industry representatives.

Two breakfasts took place on Wednesday morning - the



State of the Industry discussion with AUSVEG CEO James Whiteside (right) and PMA A-NZ CEO Darren Keating.

Convention breakfast sponsored by Syngenta, and the Women's Fresh Perspectives Roaming Breakfast, which is a supportive platform built to connect, inform and cultivate women's potential within the fresh produce and floral industry.

Mental health issues and their impact on individuals and communities in regional Australia were also highlighted at Hort Connections. beyondblue Chairman and former Victorian premier Jeff Kennett opened the discussion to a captivated audience, where he outlined the prevalence of depression in rural areas of Australia, and looked at tactics to help those who are struggling.

A Mental Health Panel comprising Mal Coutts from Talk to a Mate, Linda Bertram from the South Australian Country Women's Association and Victorian potato grower Stu Jennings also encouraged growers to speak up when they're feeling down (turn to page 38 for more details).

The panel was followed by a State of the Industry discussion facilitated by former ABC radio broadcaster Tonya Roberts, where AUSVEG CEO James Whiteside and PMA A-NZ CEO Darren Keating spoke about the issues facing their respective industries and discussed the value of industry collaboration.

After morning tea, delegates again broke off into concurrent speaker sessions that targeted issues in their respective industries. This included Fresh Business Perspectives, Fresh Marketing Insights, Australian Organic, Irrigation Australia, Horticulture Innovation Australia and the launch of Growcom's Fair Farms Initiative, which aims to ensure that growers are supported with tools and information to implement good employment practices that comply with workplace relations laws and industry standards (see page 35 for more information).

POTATO PRESENTATIONS

In the dedicated Vegetable and Potato Stream on Wednesday afternoon, Freshlogic Managing Director Martin Kneebone discussed the top 20 Australian vegetables as ranked by their domestic wholesale volume and value. Visy's Simon Gray then spoke about trends and innovation in smart packaging, while



Assistant Minister for Agriculture and Water Resources Senator the Hon. Anne Ruston with Tonya Roberts at the Women in Horticulture event.



Around 1,200 delegates attended the Gala Dinner to celebrate the best and brightest in the horticulture industry.

Watermark Advisory Services Russell Gooch and Trainee Patent and Trade Marks Attorney Renee White looked at building a brand for the Asian market and its traceability.

Nicholas Bennett from Syngenta focused on innovation through collaboration and the importance of choosing value chain partners, while Len Tesoriero, a Senior Plant Pathologist with the New South Wales Department of Primary Industries, spoke about managing fungicide resistance in vegetable crops.

The tomato-potato psyllid (TPP) was also brought to the audience's attention by Plant & Food Research New Zealand Research Associate Dr Rebekah Frampton, who spoke about the history of TPP and zebra chip spread across New Zealand.

There was a detailed discussion on TPP diagnostics (both laboratory and field-based) and the diversity of host plants. Nursery and Garden Industry Australia National Biosecurity Manager John McDonald also discussed the ways to reduce the biosecurity risk in planting material, including on-farm biosecurity, industry biosecurity preparedness and awareness, plus the minor use program.

Davin Phillips from the Australian Competition and Consumer Commission (ACCC) rounded out the presentation and provided advice about the Horticulture Code of Conduct, and how it can be used to assist growers and traders in the horticulture industry.

NETWORKING OPPORTUNITIES

In addition to the speaker sessions, the annual Women in Horticulture networking event also took place on Wednesday afternoon. Around 100 delegates gathered to recognise and celebrate the pivotal role that women play in the industry and highlight the ways that they can get involved and add value to their businesses.

Held at the InterContinental Adelaide, the event was hosted by Tonya Roberts and opened by Senator Ruston, who spoke about her rise in politics and her passion for her agriculture portfolio.

Susie White from Eat.Drink.Innovate sparked plenty of interest with her presentation 'Creativity hacks for innovative product

creation', which again looked at the idea of SCAMPER. Horticulture Innovation Australia's Christian Patterson followed with a presentation about the organisation and his role as a Relationship Manager in the industry.

Delegates were also treated to an entertaining cooking demonstration from celebrity chef Geoff Jansz, before the Women in Horticulture award winner was announced.

Lisa Brassington of Peninsula Fresh Organics in Victoria received the award in recognition of her passion for promoting the diverse role of women in the industry and her ongoing contribution to the organic sector.

In addition, the NextGen Young Grower event got participants' adrenaline pumping after they completed an Adelaide Oval roof climb. It was also a chance for younger industry members to get to know each other and establish vital networking connections.

HONOURING THE BEST

As the groundbreaking Hort Connections 2017 came to a close, delegates turned out to the Adelaide Convention Centre in their finest evening wear for the Gala Dinner. This was the night for AUSVEG and PMA A-NZ to celebrate the best and brightest in the horticulture industry.

Honoured for his outstanding work across all aspects of vegetable production was Queensland grower Anthony Staatz, who picked up the Grower of the Year Award.

Third generation Brussels spout grower, Victorian Daniel Adams, was named the Young Grower of the Year for his on-farm innovation, as well as demonstrating a high level of commitment to the wider industry. The full list of award winners can be found on page 11.

AUSVEG would like to thank PMA A-NZ for its partnership in hosting Hort Connections 2017, as well as the support from industry co-hosts, strategic partners, delegates, speakers and exhibitors. Without this ongoing collaboration and support, the event would not have been such a success.

AUSVEG looks forward to Hort Connections 2018, which will be held in Brisbane from 18-20 June.

HORT Adelaide Convention Centre

pma AUSVEG

2017 NATIONAL AWARDS FOR EXCELLENCE

The Hort Connections 2017 Gala Dinner celebrated the outstanding achievements and contributions made to the Australian horticulture industry by growers, researchers and supply chain members.

GROWER OF THE YEAR



L-R: Diane Staatz, Anthony Staatz (winner) and Syngenta Corporate Affairs Manager Rob Cairns.

MARKETER OF THE YEAR



L-R: PMA A-NZ Head of Marketing and Member Engagement Renee Harrison, Matt Stillwell (winner) and Produce Plus journalist Gabrielle Easter.



YOUNG GROWER OF THE YEAR

L-R: Daniel Adams (winner) and Dow AgroSciences Horticulture Business Manager John Gilmour.



WOMEN IN HORTICULTURE

Peninsula Fresh Organics Land and Quality Manager Lisa Brassington.

COMMUNITY STEWARDSHIP



DuPont New Zealand Country Business Manager Mark Christie, on behalf of Michael Tran.

INNOVATION PARTNER

RESEARCHER OF THE YEAR



L-R: Matthew Stein (winner) and Ben DeWitt from A-GAS Rural and Bayer Marketing Manager Peter Sullivan.

INDUSTRY IMPACT AWARD

L-R: Boomaroo National Sales Manager Steve Winter, Steve Natsias, Steven Roberts, James Bertram and Frances Tolson from Rijk Zwaan (winner).



L-R: Sundrop Farms (winner) Managing Director Steve Marafiote and Visy State Sales Manager Kym Ziersch.

MERITORIOUS SERVICE



L-R: Trish Skinner (winner) and Fresh Markets Australia Chairman Shane Schnitzler.

TRADE DISPLAY OF THE YEAR: SINGLE BOOTH



L-R: Lenswood Apples (winner) Julian Carbone and Sam Clayfield from AUSVEG.

CALENDAR

04

7-9 AUGUST: FRESHCARE FORUM AND FRESH PRODUCE SAFETY CENTRE CONFERENCE

Where: Sydney, New South Wales

What: The Freshcare Forum will deliver technical and program updates on food safety, guality and environmental assurance, with social and networking opportunities. The Fresh Produce Safety Centre provides an event for a wider fresh produce food safety audience, reporting on research outcomes, innovation and industry opportunities. The theme for the fourth annual conference is Science + Culture = Safe Food.

Further information: freshproducesafety-anz.com.

EXPORTER OF THE YEAR



L-R: Sumich (winner) owner Vincent Tana and NAB Agribusiness Head of Asia Desk Roger Gaudion.

ENVIRONMENTAL AWARD



L-R: Toby Travanner and Butler Market Gardens CEO Rick Butler, on behalf of Hills Transplants.

FMA COL JOHNSON YOUNG ACHIEVER'S AWARD



L-R: Peter Koukos (winner) and Fresh Markets Australia Chairman Shane Schnitzler.



TRADE DISPLAY OF THE YEAR: MULTI BOOTH

L-R: Mitolo Group (winner) Frank Mitolo, Sam Clayfield from AUSVEG and Callum Cormack.

18-20 JUNE 2018: HORT CONNECTIONS 2018

Where: Brisbane Convention Centre, Queensland

What: A joint initiative between AUSVEG and the Produce Marketing Association Australia-New Zealand (PMA A-NZ), Hort Connections is returning in 2018. A combination of the National Horticulture Convention and PMA Fresh Connections, this premier event of two of horticulture's leading organisations is set to deliver another world-class program and trade show to growers and whole-of-supply-chain companies alike.

Further information: hortconnections.com.au

R&D | POTATO INDUSTRY EXTENSION PROGRAM |



Fresh Produce. Images courtesy of Good Fruit and Vegetables.



L-R: Adrian Pederick MP, Potatoes South Australia CEO Robbie Davis and Potato Growers Association of WA Executive Officer Simon Moltoni.

FORUM INFORMS AND CHALLENGES POTATO INDUSTRY STAKEHOLDERS

The Potato Industry Extension Forum at Hort Connections 2017 attracted more than 50 potato industry stakeholders and provided an avenue for robust discussion about the future of the industry. Australian Potato Industry Extension Project Manager Adrian Dahlenburg provides a recap of the event.

Arris Pty Ltd, coordinator of the delivery of the Potato Industry Extension Program, held its inaugural forum at the Adelaide Convention Centre on 15 May. More than 50 potato industry stakeholders attended the event, including growers, researchers and industry service representatives.

Presentations at the workshop were topical and outlined challenging and thought-provoking opportunities that could impact future industry direction and development. A short, simple survey taken at the workshop also canvassed participants' opinions on matters that could be used to guide the format and direction of the extension project in the future.

CONTROLLING TOMATO-POTATO PSYLLID

Melbourne-based entomologist Angelica Cameron from IPM Technologies was among the presenters at the forum. She reiterated the basics of Integrated Pest Management (IPM) for the control of insect pests in potato crops, with a particular emphasis on the care needed and likely impact of increased crop protection applications for the control of tomato-potato psyllid (TPP).

Participants heard that it was essential to keep a balanced approach when controlling TPP, as experience from New Zealand had shown other pests can re-emerge as significant problems as a result of a single-minded emphasis on TPP control.

Ms Cameron indicated that IPM programs and strategies to

control TPP have been developed and that Australia has some additional environmental and native predator factors that could potentially deliver further advantages to Australian producers.

EMBRACING TECHNOLOGY

Aerial and satellite crop surveillance is an emerging technology that has the potential to deliver benefits to both individual growers and whole industries. Jasmine Muir, a Research Fellow from the University of New England Precision Agriculture Research Group, spoke to the audience about the type of work the group is undertaking in a wide range of crops using satellites, planes, drones and ground-based robots.

The information that has been collected using these technologies on either a paddock or regional scale includes yield forecasting, crop maturity and harvest scheduling, fruit size and quality, disease and pest incursions, crop nutrition, varieties and irrigation efficiency. While the group currently has no potato industry projects, it is open to exploring this opportunity with industry.

Some key issues for the advancement of this technology for the future benefit of the potato industry are the need to clearly identify the most beneficial components to focus on, and the development of mapping and data presentation standards or guidelines to help ensure outputs from a wide range of users and developers can be used for whole-of-industry development.

PUTTING SOIL ON THE AGENDA

Four short presentations also highlighted different aspects of soil health monitoring, management and improvement that could be beneficial to potato growers. Peats Soils Managing Director Peter Wadawitz spoke about the benefits of organic soil amendments for improving the microbiological health of soils which can reduce fertiliser inputs and improve crop yields and product quality.

Composts are one form of organic soil amendment, with demonstrated benefits through the research work of Darren Cribbes from ConNexusGlobal. Mr Cribbes also highlighted the increasing range of soil and organic amendment tests and analysis that are now available to better characterise these materials and provided the linkages to crop performance and general soil health.

Michael Rettke, one of the key South Australian Research and Development Institute (SARDI) researchers in the development of the DNA-based soil pathogen testing service, PreDicta Pt, explained the economic benefits and reduced risks associated with the routine use of the service. Meanwhile, HortEx Executive Officer Bryan Robertson spoke about the possible economic benefits of using soil fumigation to control nematodes.

HAVING A SAY

Attendees at the forum were asked to complete a brief survey, which was designed to provide a snapshot of the experiences, thoughts and ideas of industry stakeholders when they obtain and implement new information in their enterprises.

After identifying the industry sectors of the participants (which will allow Arris to segregate the other data), respondents were asked to select their top two responses to questions about extension methods, information resources, new approaches to information delivery and building expertise in the industry.

Around half of the respondents were from the service industries sector and a further 20 per cent were from the R&D sector, which must be considered in the analysis of the results. Some trends were evident, with growers favouring extension methods that are casual and farm-orientated, as well as delivery approaches that are electronically-based, such as phone apps, internet searches and web pages. Figure 1 outlines the responses received in relation to

CELEBRATING AUSTRALIA'S POTATO INDUSTRY AT HORT CONNECTIONS 2017

On 15 May, Potatoes South Australia welcomed around 100 guests to its luncheon at Hort Connections 2017. This unique networking event, which preceded the Potato Industry Extension Forum managed by Arris Pty Ltd, was an opportunity for members from all facets of the potato industry to meet, share their ideas and discuss the key issues affecting their sector.

The luncheon proved to be a popular event with plenty of thought-provoking discussion, courtesy of Andrew Taylor the man who lost over 50 kilograms by eating nothing except potatoes for a year.

Potatoes South Australia Chief Executive Officer Robbie Davis was thrilled by the reception that the luncheon received.

"I was so delighted that horticulture had united in a combined entity at a conference like Hort Connections and it just seemed like a fabulous opportunity to hold a function at the start of it," Ms Davis said.

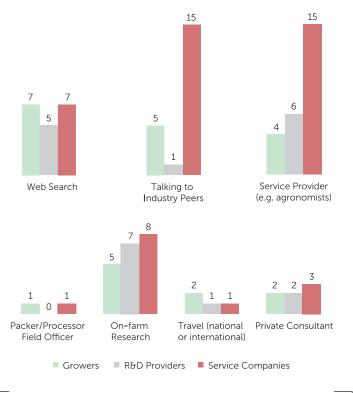
AN EXTRAORDINARY STORY

A Melbourne schoolteacher, Mr Taylor turned to a diet of potatoes to help cure his food addiction – and not only did he

the information resources used by the participants from the various industry sectors.

The results from this survey have been compiled into a summary report. Please contact Adrian Dahlenburg for a copy (details below).

FIGURE 1: SURVEY RESULTS OF INFORMATION **RESOURCES (NUMBER OF RESPONDENTS)**



INFO

For further information or to discuss the Potato Industry Extension Program, please contact Project Manager Adrian Dahlenburg on 08 8313 6706 or adahlenburg@arris.com.au or Arris Pty Ltd Managing Director Jim Kelly on 08 8313 6706 or jkelly@arris.com.au

The Potato Industry Extension Program has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government. Horticulture Innovation Australia

Project Number: PT15002

drop 52 kilograms, the man known through his 'Spud Fit' blog and website also revived both his physical and mental health.

Mr Taylor was interviewed by Adelaide breakfast radio host, Mark Soderstrom. Joining the pair was Dr Katie Wood from the University of Adelaide, a research dietitian with the FOODplus Research Centre, who spoke about the nutritional benefits of potatoes.

"I don't think we've ever had a function where there has been so much discussion." Ms Davis said.

"Andrew was able to talk about the health benefits of potatoes and this was supported by the University of Adelaide, in a room full of people dedicated to the potato industry – it was a very positive experience.

"We've done considerable research with the University of Adelaide, our major research partner, and engaged with marketing agencies in South Australia and we've realised there are three main messages.

"Firstly, we have to dispel the myth that potatoes are high in carbs. In fact, they've got less carbs than rice or pasta.

"Secondly, we need to educate people about how potatoes are highly nutritious, and finally, we just need to reposition them in a more positive way."





TOMATO-POTATO PSYLLID AND ZEBRA CHIP: WHAT POTATO GROWERS NEED TO KNOW

The Department of Agriculture and Food, Western Australia (DAFWA) is continuing its surveillance and management of the tomato-potato psyllid. The psyllid can vector *Candidatus* Liberibacter solanacearum, a bacterium that causes zebra chip in potatoes. In this edition of *Potatoes Australia*, DAFWA answers the most frequently asked questions about zebra chip disease.

As of 16 May 2017, the Department of Agriculture and Food, Western Australia (DAFWA) has put its surveillance and diagnostic resources focus in the metropolitan Control Zone to further increase confidence levels that *Candidatus* Liberibacter solanacearum (CLso) in tomato-potato psyllid (TPP) is not present in Western Australia.

The determination that TPP is not technically feasible to eradicate was endorsed at a National Management Group (NMG) meeting held in April (turn to page 18 for more information).

A Quarantine Area Notice currently remains in place to direct the movement and treatment of specified commerciallyproduced fruit, vegetables and seedlings to contain and control the pest. It divides Western Australia into three quarantine zones – a Control (red) Zone, Suppression (orange) Zone and Watch (blue) Zone. More information can be found at agric.wa.gov.au/tpp. In the meantime, DAFWA has provided answers to commonly asked questions about zebra chip disease.

CLSO AND ZEBRA CHIP DISEASE - WHAT IS IT?

CLso is a bacterium that causes zebra chip disease in potatoes and can be carried by TPP.

The disease causes infected potatoes to develop visible dark stripes after frying. While not harmful to human health, zebra chip disease causes quality issues which renders potatoes not suitable for commercial sale.

Infected tubers may also fail to produce plants.

TPP was detected for the first time in Australia earlier this year. At this time, the psyllid has only been found in Western Australia.

To date there has been no detection of CLso in TPP or host plants within Western Australia.

VICTORIAN GROWERS ASKED TO REMAIN VIGILANT

Agriculture Victoria is reminding potato growers to be aware of signs of tomato-potato psyllid (TPP) and regularly check their crops.

There have been no detections of TPP in Victoria to date. TPP was first detected in Western Australia in February 2017 and Agriculture Victoria has imposed strict restrictions on the importation of any risk material from Western Australia as a precautionary measure to prevent the pest from entering Victoria.

Agriculture Victoria began a state-wide surveillance program in May 2017 in an effort to confirm Victoria remains free of the exotic pest. Agriculture Victoria is using best practice diagnostic protocols through its state accredited laboratory AgriBio at La Trobe University to test the plant samples. Confirming Victoria's Area Freedom of TPP is of the utmost importance and will ensure growers are able to continue to trade.

Agriculture Victoria appreciates the support of industry as it conducts the surveillance program.

A fact sheet is available for growers to help identify the signs of TPP on solanaceae, convolvulaceae and brassica plants.

Growers and community members are reminded that it is an offence under the *Plant Biosecurity Act 2010* not to report a suspect TPP outbreak. This can be done by calling the Exotic Plant Pest Hotline on 1800 084 881, Agriculture Victoria on 136 186 or by emailing plant.protection@ecodev.vic.gov.au. For more information, please visit agriculture.vic.gov.au.

WE HAVE FOUND THE PSYLLID, WILL AUSTRALIAN POTATOES EVENTUALLY GET THE DISEASE?

Not necessarily. Canada has had the pest for decades without testing positive to the CLso bacterium.

As part of the national response to the detection of TPP, DAFWA has set thousands of sticky traps on commercial and residential properties throughout the state within host crops, including tomato, potato, sweetpotato, capsicum, chilli, eggplant, goji berry and tamarillo. These traps provide surveillance data as well as collecting insects for CLso testing.

DAFWA has tested 1,000 psyllids as well as 6.6 tonnes of potatoes (over 32,000 tubers) with no positive detections of CLso.

HOW DO YOU TEST FOR CLSO?

The first step in CLso testing is to conduct a fry test, where potato samples are fried and inspected for signs of the bacteria, which presents as dark bands or stripes.

Suspect samples are retested and if required, a polymerase chain reaction (PCR) test – a DNA test – is conducted in the South Perth lab. Of the 32,000 tubers tested, 794 have undergone PCR testing as part of the TPP incident response.

HOW SHOULD I REPORT SUSPECTED SIGNS OF TPP OR ZEBRA CHIP?

Commercial potato growers, particularly in regional areas of Western Australia, should continue to check for signs of TPP. Report any suspect signs of the pest to DAFWA through the MyPestGuide Reporter app or to your state's biosecurity department.

Alternatively, growers who suspect that TPP may be present in their crop need to report this to their state or territory department of agriculture or primary industries by phoning the Exotic Plant Pest Hotline on 1800 084 881.

INFO

For more information, contact DAFWA on 08 9368 3333 or visit agric.wa.gov.au. This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government.

Project Number: PT15007



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R&D | BIOSECURITY BRIEF





TOMATO-POTATO PSYLLID: BIOSECURITY UPDATE

As this issue reaches readers of *Potatoes Australia*, the tomato-potato psyllid incursion in Western Australia will be in its fourth month. As noted in the previous *Biosecurity Brief*, eradication was not regarded as technically feasible and we are now at the end of the first month of a transition to management program. AUSVEG Biosecurity Adviser Dr Kevin Clayton-Greene explains what this means.

Transition to Management (T2M) was agreed and approved by all parties in 2016 and is "the undertaking of activities for transitioning the management of an EPP (Emergency Plant Pest) from seeking to achieve eradication of the EPP during an Emergency Response Phase to management of the EPP outside the EPPRD (Emergency Plant Pest Response Deed)".

In other words, it is a program that can be cost-shared by all parties to the incursion (government and industry) to help these parties manage the pest going into the future.

This can include a range of activities such as addressing market access issues, ongoing control to minimise further spread, developing on-farm strategies to reduce impact at the farm level and also preparing other areas in the country, outside of the current incursion, should the pest spread further. Typically activities included under a T2M plan would be:

- Potential control options including new chemical registration.
- Building capacity in the industry and community around pest management.
- Developing an understanding of the pest's behaviour.
- New government regulations or legislation.
- · Codes of practice review and development.
- Communication, training and engagement.

A NEW APPROACH

This is a relatively new addition to the Plant Health Deed and is a result of a working group set up by Plant Health Australia to investigate how T2M could be prosecuted under the existing Deed. It had been recognised for some time that there was a significant gap in the Plant Health Deed: once a pest was deemed beyond eradication, there was no formal mechanism to cover the question of 'what happens now?'

The tomato-potato psyllid (TPP) incursion is one of the initial incursions that is using this new provision of the Deed. A T2M plan can have a maximum timeframe of 12 months under the Deed, after which all parties are then expected to manage the pest themselves.

As with an eradication response, a T2M Response Plan has to

be prepared and the budget approved by all parties. Preparation of the plan is the responsibility of the host state and in the case of TPP, this is Western Australia.

ZEBRA CHIP TESTING

Of particular interest in the TPP incident is whether or not the psyllids are also carriers of *Candidatus* Liberibacter solanacearum (CLso), which causes zebra chip and is fatal to many solanaceous plants. Thus a key part of the T2M plan will be ongoing testing of psyllids to determine if there is any CLso present.

It has been agreed that this should extend over two seasons and if no CLso has been detected after such a comprehensive testing regime, then Western Australia and perforce Australia can make a claim for area and country freedom. The current surveillance for CLso is by sampling TPP, as the technical advice at present is that this is the most reliable method.

In plant parts and potato tubers, it can take some time (up to three weeks) for CLso to be distributed and sampling of plants parts may yield a false negative. Potato tubers are problematic as the bacteria is not uniformly distributed in the tuber even when present.

The current plan is to recommence with TPP testing once numbers 'increase' in summer when obtaining sufficient numbers is not too problematic.

It will be important for the industry in Western Australia to get behind the CLso surveillance program, otherwise it will fail to achieve its objectives.

INFO

For more information, contact AUSVEG on 03 9882 0277 or email info@ausveg.com.au.

This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government.

Project Number: PT15007

INTERNATIONAL R&D | ZEBRA CHIP



Zebra chip disease, which stems from the bacterium *Candidatus* Liberibacter solanacearum (and is vectored by the tomato-potato psyllid; *Bactericera cockerelli*) was first identified in the United States in 2000.

Zebra chip then spread to the seed production regions of Colorado and Nebraska and in 2011, the disease was detected in the Pacific Northwest region of Washington, Idaho and Oregon, where the majority of all potato production in the United States is grown. Fortunately, it has not yet been found in the eastern part of the country.

VARIETY SCREENING

In 2016, Texas A&M AgriLife Research Plant Pathologist Dr Charles Rush and his team undertook variety screening of potatoes with resistance to zebra chip.

"The research focus of my lab is on pathogen/vector ecology and plant disease epidemiology (dealing with the incidence and distribution of diseases), but we also work on disease control and have worked with breeders in evaluating their germplasm," Dr Rush said.

"We have worked with the Texas Breeder Creighton Miller (who is now retired) as well as a US Department of Agriculture-Agricultural Research Service scientist, who primarily works on wild relatives of commercial potatoes looking for traits and genes of interest.

"Progress is being made and it is clear some lines are much more resistant to the disease and less favoured by the vector than other lines, but all commercially available germplasm is susceptible to zebra chip."

Despite this progress, Dr Rush said that there are currently no commercially acceptable zebra chip resistant cultivars, either resistant to the bacterial pathogen or to the vector.

"Some of the lines we've evaluated show very little internal tuber disease symptoms when fresh cut but they still exhibit defects when fried," he said.

"This means that the breeders are finding certain types of resistance to actual disease progression in the tubers, but the tubers are still infected with the pathogen and show defects when processed."

A LONG PROCESS

Research into zebra chip resistant cultivars is continuing, however Dr Rush said results won't occur overnight.

"These are typical results for breeders seeking to identify resistance

ENCOURAGING RESEARCH IN THE BATTLE AGAINST ZEBRA CHIP

Zebra chip disease has severely impacted potato industries in both the United States and New Zealand. To combat this, the Texas A&M AgriLife Research pathology team is investigating the possibility of developing a potato variety that is resistant to the disease. Plant pathologist Dr Charles Rush spoke to *Potatoes Australia* about the research.

to almost any new plant pathogen. Progress is incremental – but clear progress is being made so everyone keeps working."

According to Dr Rush, if zebra chip resistant potato varieties were discovered, it would save the potato industry millions of dollars each year.

"Farmers currently are treating almost every week to 10 days to control the tomato-potato psyllid so not having to do that would be beneficial both from an economic and an environmental standpoint," he said.

"In our experience, the bacterial pathogen is usually only detected in about three per cent of the psyllids captured on sticky traps (in regional surveys) but this level can result in significant disease if not managed."

Local and international collaboration is essential when dealing with a highly destructive potato pest, and this has proved beneficial in the case of tomato-potato psyllid.

"Scientists from New Zealand came to the United States each year and several collaborative studies were initiated between the two countries," Dr Rush explained.

"I think growing conditions in some parts of Texas and other production areas in the United States are very similar to Australia and information generated will be of great value and application to Australian scientists and growers alike."

OPTIMISTIC FUTURE

Dr Rush offered a word of hope to Australia's potato growers, and said that while zebra chip is certainly a very serious and potentially damaging disease, it can be managed.

"It will be very important to monitor psyllid populations and get a good idea of where they come from, when they show up in growers' fields and if they are carrying the bacterial pathogen. It is also important to be timely with vector management and not fall behind."

INFO

For more information, please contact Dr Charles Rush at crush@ag.tamu.edu or visit agriliferesearch.tamu.edu.

This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government.

R&D | IPM CASE STUDY



KANGAROO ISLAND POTATO GROWERS CHAMPION INTEGRATED ADOPTION

Kangaroo Island's seed potato industry continues to adopt Integrated Pest Management (IPM) on their farms. Dr Paul Horne, Angelica Cameron and Jessica Page from IPM Technologies have captured an insight into the approach from grower Peter Cooper and agronomist David Oddie.

The struggle to control certain pests and diseases in potato crops led seed growers on South Australia's Kangaroo Island to enlist the help of Integrated Pest Management (IPM) entomologists.

"Before using IPM, we were heavily reliant on chemicals," Kangaroo Island seed potato grower Peter Cooper explained.

"We sprayed every 10-14 days, using a mixture of soft sprays and broad-spectrum chemicals, which meant we were killing beneficial insects and didn't get the full value out of the softer products."

This approach was both costly and time-consuming, and it didn't provide adequate control of the most important pests of seed potato crops – the aphids and thrips that vector potato leafroll and tomato spotted wilt viruses.

Growers and agronomists on the island recognised that this approach was not working, and in January 2015 they invited Dr Paul Horne and Angelica Cameron from IPM Technologies to help them improve their pest management.

A NEW STRATEGY

Starting with a workshop, Paul and Angelica helped the group develop an IPM strategy involving biological, cultural and chemical controls that were all compatible and would deal with the full range of pests. At the end of the workshop, several growers agreed to trial the strategy with the help of agronomists Derrick Cameron and David Oddie from DJ's Grower Services.

During the next season, Derrick and David provided regular monitoring, support and advice, backed by additional expert advice from IPM Technologies as required. According to David, ready access to practical advice from experienced IPM specialists gave growers the confidence to try something new and unfamiliar. The trials were a success and achieved excellent control of insect pests with only minimal use of soft selective insecticides. No broadspectrum products were applied during the life of the crops.

SHARING KNOWLEDGE

In January 2016, Peter hosted a field day for local growers to showcase the success of his trial to other growers on the island. Seeing the success of the initial demonstration trials first-hand gave other local seed growers the confidence to try IPM for themselves. In the 2016-17 season, the majority of the island's seed potato growers implemented IPM across their farms, and David expects that soon the entire Kangaroo Island seed potato industry will have adopted IPM.

While potato growers on the island were initially sceptical about IPM, they have now seen it work and understand what is involved.

"Like most farmers, we used to think IPM was about not spraying and just hoping for the best," Peter said.

"Now we know it is all about understanding good and bad insects and the effects of different chemicals on those insects. We still use insecticides when we need to, but we are more careful about the products we use, making sure the good insects can still help protect our crops."

The experience of growers on Kangaroo Island demonstrates that IPM can give better results even in an industry where tolerance of insect pests and associated insect-vectored diseases is very low.

CURRENT PROJECT

IPM Technologies is currently funded by the potato and onion industries to demonstrate the value of IPM through the Horticulture Innovation Australia-commissioned project MT16009 – An IPM Extension Program for the Potato and Onion Industries.

This project brings the IPM Technologies extension model used on Kangaroo Island to all the major potato and onion production regions around Australia. Paul, Angelica and Jessica Page will deliver IPM workshops, field training and one-on-one support for growers and agronomists to trial IPM. They will also help growers and agronomists prepare to manage tomato-potato psyllid within an IPM strategy.

INFO

IPM Technologies invites potato growers and agronomist to participate in MT16009. For more information about the project, please contact Dr Paul Horne and his team on 0419 891 575 or email info@ipmtechnologies.com.au.

An IPM Extension Program for the Potato and Onion Industries has been funded by Horticulture Innovation Australia using the onion, fresh and processing potato research and development levies and funds from the Australian Government.

Project Number: MT16009





COVERING ALL BASES OF SEED CERTIFICATION



NAME: Luke James AGE: 37 LOCATION: Yarragon, Victoria WORKS: ViCSPA (Senior Certification Officer)

HOW DID YOU FIRST BECOME INVOLVED IN THE POTATO INDUSTRY?

I am a qualified horticulturalist and trained at the University of Melbourne's Burnley School of Horticulture. I have been in my current role with ViCSPA for over 10 years (with a three-year break a few years ago).

WHAT DOES YOUR ROLE IN THE BUSINESS INVOLVE, AND WHAT ARE YOUR RESPONSIBILITIES?

I am a Senior Certification Officer for ViCSPA. My role in the business involves all facets of seed potato certification. My district covers eastern Victoria from Kinglake to West Gippsland, East Gippsland, South Gippsland, Central Gippsland and northeast Victoria. My tasks include potato cyst nematode (PCN) soil sampling, field crop inspections, leaf sampling, tuber inspections and various other roles.

Providing training is a significant responsibility – training other ViCSPA staff as well as interstate and international certification officers. I recently returned from New Zealand after conducting certification training for NZ potato inspectors.

WHAT DO YOU ENJOY MOST ABOUT WORKING IN THE POTATO INDUSTRY AND HOW DO YOU MAINTAIN YOUR ENTHUSIASM?

I enjoy working outdoors and getting dirty, and production horticulture. The work we do is the basis of the whole potato production system for Australia and supports trade both domestically and exports overseas.

My work is very autonomous; on a daily basis, I work by myself with individual growers but have the support network of our fantastic office staff and management.

In this role you need to be self-motivated. I have a young family – Angus, who is three years old and Angelica (four months) and this is more than enough motivation to keep your enthusiasm up. But it is always good to see certified seed that meets the conditions of the scheme and is really good seed that is produced by professional seed growers.



WHAT ARE THE BIGGEST CHALLENGES YOU FACE WORKING IN THE INDUSTRY, AND HOW DO YOU OVERCOME THEM?

Biosecurity is the industry's biggest threat. Pest and disease incursions can devastate production systems and have massive ramifications on the industry.

Disease threats such as metalaxyl-resistant late blight are also a massive concern.

Reporting anything unusual or symptomatic is essential to maintaining a healthy potato industry. Having clear and transparent communication is always important when handling suspicious plants. In doing so, we work closely with relevant state departments and laboratories.

Internally, we keep informed on issues and have awareness of disease and pest symptoms in the field. Biosecurity is something I take very seriously as a crop inspector.

WHERE DO YOU RECEIVE YOUR PRACTICAL ADVICE AND INFORMATION FROM?

I receive a lot of my information from my colleagues both here and abroad. ViCSPA has strong international connections, vast and varied, with our General Manager Dr Nigel Crump attending regular UNECE meetings. This is where countries from all over the world attend to discuss all things seed potato related. I attend and arrange workshops and presentations throughout the year. The ViCSPA biannual potato industry conference also provides a wealth of information with presenters from across the globe.

Most recently, we've spent time with Willem Schrage, the

director of the Potato Program for the North Dakota State Seed Department, and Dr Steven Johnson, a crops specialist with the University of Maine when he visited late last year.

WHAT AREAS OF RESEARCH ARE IMPORTANT TO THE POTATO INDUSTRY AND SEED CERTIFICATION?

Disease management and diagnostics are essential areas of research for seed potato certification. This includes diseases such as powdery scab, late blight, pink rot and potato virus Y. The list could be endless, but the main point is to have the researchers there for problems that could arise in the future rather than the current trend of a declining number of researchers not having funding and industry losing that technical skill set that is critical for our industry. This to me is a massive issue on the horizon and a challenge that must be addressed.

IN YOUR OPINION, WHAT IS THE IMPORTANCE OF SEED CERTIFICATION IN THE POTATO INDUSTRY?

Seed certification is as important as water, fertiliser or sunshine and is essential to growing a crop. Seed potato certification provides reliable high health planting material for increased yields and product quality for production of commercial crops in the fresh and processing industries.

Ultimately, seed certification is an extremely successful practice for the management of diseases that limits yield and quality as well as reducing the reliance on the use of pesticides to manage pest problems.

Importantly, seed certification restricts the spread and introduction of potato pests and diseases including pests such as



PCN, black leg and other diseases. It also protects trade, both interstate and export.

WHAT NEW DEVELOPMENTS, INNOVATIONS OR RESEARCH HAS VICSPA IMPLEMENTED RECENTLY?

I have recently returned from Canada with A&L Laboratories in London, Ontario and learnt about the emerging use of unmanned aerial vehicles (UAVs) and NDVI technology for crop scouting and disease detection in potatoes.

Internally, ViCSPA has achieved compliance with ISO9001:2015 *Quality management systems – Requirements*, which demonstrates the organisation's commitment to quality assurance and compliance. ViCSPA records are all centralised on our Certmaster database which has been built by ViCSPA and continues to streamline all our data and record management including the issue of certification labels.

WHERE DO YOU SEE OPPORTUNITIES FOR GROWTH IN THE AUSTRALIAN POTATO INDUSTRY?

Opportunities are increasing with expanding export market access potentially opening for the certified seed potato industry.

Commercial potato growers in all areas of fresh, processing or crisping need to embrace the benefits of using certified seed potatoes in their production systems, and the improved yields, quality, storage and saleable product. I see this as a massive opportunity.

Domestically, the health benefits of potatoes need to be featured more heavily – like everything else, they become trendy again and an increase in consumption is a win-win forthe consumer and the farmer.





Potatoes are full of vitamins and are very low in fat, low in calories, rich in minerals and contain complex carbohydrates and high grade iron. They are, in my opinion, a true super food that taste great.

WHERE DO YOU SEE YOURSELF IN FIVE YEARS?

Five years is a very long time in the potato industry. I am still enjoying the challenges of the industry and I continue to be given amazing opportunities to learn and travel as part of my role. I also enjoy sharing my knowledge with others. Just between you and I, I have the best job in the world.

WHAT IS YOUR VISION OF THE AUSTRALIAN POTATO INDUSTRY IN THE FUTURE?

I hope that the potato industry remains profitable into the future and there are more opportunities for using Australian certified seed in both domestic and international markets. I get to work with highly professional potato growers and if their business is doing well then the entire industry benefits.

HOW DO YOU THINK MORE YOUNG PEOPLE COULD BE ENCOURAGED TO STUDY AND TAKE UP JOBS IN THE POTATO INDUSTRY?

The industry needs to stop talking itself down, and start selling its positive aspects. It is a great industry that we work in and certified seed potatoes are a critical part of the food production chain. Personally I enjoy telling my mates at the footy that I played a

part in producing their hot chips.

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DEVELOPING AN ON-FARM BIOSECURITY PLAN FOR POTATO GROWERS

The recent incursion of tomato-potato psyllid in Western Australia, as well as potential risk from high priority exotic pests such as Colorado potato beetle, has highlighted the importance of allocating time towards farm biosecurity planning.

While biosecurity practices reduce the likelihood of the introduction and spread of new pests on your farm, they can also reduce the impact of endemic pests, such as viruses and soil borne pathogens, like fungi and nematodes.

Most farm biosecurity plans contain several common practices, such as signs directing visitors to the contact details of the owner/ manager and appropriate parking directions. However, it is also important to undertake an assessment of your farm and its risks to determine the priority areas that require immediate attention.

Tools that will aid in the effective development of a Farm Biosecurity Plan are risk matrices, checklists and risk management plan templates, all of which can be obtained from AUSVEG. A procedure for developing a full Farm Biosecurity Plan is outlined below.

1. CONDUCT A RISK ASSESSMENT

- · Identify risks.
- Assess likelihood and impact.
- Prioritise risks.
- Tool: Risk matrix.

2. CONDUCT A GAP ANALYSIS

- Identify measures for implementation or improvement.
- Prioritise measures based on risk assessment outcomes.
- Tool: Checklist.

3. DEVELOP A RISK MANAGEMENT PLAN

- Populate a plan template.
- · Consider scope, time and budget.
- Integrate measures into farm management plan.
- Tool: Biosecurity plan template.

FOLLOWING PLAN DEVELOPMENT:

- 1. Ensure farm employees are familiar with the plan.
- 2. Implement policies and infrastructure to support the plan.
- 3. Review and update the plan on an annual basis.
- 24

Routine checking of crops is an important aspect of maintaining crop health and gives you the best chance of identifying a new pest before it becomes established. It is important to be aware of major pests, diseases and weeds in your region and especially those that are often found on your property.

During routine monitoring, record the date and all observations such as pests identified, growing area affected, the level of infestation and proposed treatment plans. If no detections of pests are made, this observation should also be recorded.

To obtain a Farm Biosecurity Plan Work Booklet (a step-by-step educational guide for developing a plan) and an AUSVEG Farm Biosecurity Planner, which includes an extended checklist and additional information about biosecurity practices and biosecurity risks, please contact AUSVEG (details below).

A list of exotic pests that may impact potato growers can be found in the Potato Industry Biosecurity Plan at ausveg.com. au/biosecurity-agrichemical/biosecurity/. Further resources for improving your biosecurity practices can be found on the AUSVEG website ausveq.com.au or the farm biosecurity website at farmbiosecurity.com.au.

In the meantime, complete the checklist on page 25 to identify some areas where biosecurity practices are required on your farm. As well as aiding in the planning process, you may use this checklist to benchmark your farm against future assessments.

INFO

Any unusual plant pest should be reported immediately to the relevant state or territory agriculture agency through the Exotic Plant Pest Hotline (1800 084 881). For further information, contact AUSVEG Biosecurity Coordinator - Callum Fletcher on 03 9882 0277 or callum.fletcher@ausveg.com.au

The Vegetable and Potato Biosecurity Program is funded by the Plant Health Levy. This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government

Project Number: PT15007

BIOSECURITY PRACTICE

Wash down facilities are provided on-site for machinery, equipment a Clean down facilities are located near farm entrances and away from Visitor vehicle access is restricted to designated parking areas Only on-site vehicles are used to transport equipment and visitors arou Vehicle movement is kept to a minimum in growing areas Designated tracks are used to limit vehicle movement on growing area Machinery and vehicles are cleaned before moving off the property Footbaths and brushes are easily accessible and used Visitor clothing, footwear and tools are checked for soil and organic m Staff are trained in biosecurity and farm hygiene practices Visitors are inducted in biosecurity expectations prior to moving aroun Visitors sign a register to monitor on-farm movements Appropriate hygiene supplies are available to staff and visitors (hand sa Contractor entry is conditional to a biosecurity induction and hygiene Gate signs requesting phone check in and providing owner/manager co Farm is divided into 'zones' with restricted or minimised people, machine Planting material for all crops grown are sourced from reputable suppl Imported micro-tubers have been tested as per BICON conditions Symptom monitoring is regularly conducted in crops Staff are trained to recognise symptoms of disease infection Activities and results of pest monitoring are recorded, including lack of A farm management plan is maintained for endemic pests Pallets are clean of organic material and soil

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PLANTING THE SEED: PRE-CROP PLANNING IN POTATOES

In this edition of Potatoes Australia, Syngenta Technical Services Lead Scott Mathew explains what to look for when choosing potato seed and provides advice on planting and treatment options.

When planning your potato crop, there are many things that should be considered and arguably the most important component is the seed potato.

The contracting and purchase of good quality certified seed that is both cosmetically sound and of the correct physiological age - is one of the most important decisions that a grower will make. It is very valuable for commercial growers and seed growers to have open discussions throughout the season, ensuring that each party understands 'what they want the seed to do' in the commercial phase.

MAKING SEED DECISIONS

It is important to consider the physiological, as well as the physical, age of your potato seed. There are many factors that can affect the physiological age of your seed tubers, including growing season stress, storage temperature and time. Temperature is very important because warmer storage temperatures will speed the ageing process of the tubers.

One of the things to look for when you receive seed potatoes is excessively sprouted tubers; these may lead to performance problems and any broken sprouts could produce excessive and weaker stems. You should also look for mechanical damage to the seed, as bruising or damage is an indication of rough handling during harvest and transport, which can cause physiological ageing and increased levels of disease.

Inspecting seed for disease symptoms and general condition as soon as you receive it from the seed supplier is also important. Some disease symptoms can be easily treated using fungicides applied to the seed piece (e.g. MAXIM®) or fungicides applied in-furrow (e.g. AMISTAR®), but the presence of others, above certification standards, could be grounds to reject the seed.

FURTHER CONSIDERATION

You then need to decide whether you are going to plant whole seed or cut seed. Properly cut seed pieces feed correctly in the planter and provide uniform plant stands. Mechanical cutters can handle

large volumes of seed and cut tubers into two or more pieces. Alternatively, hand cutting minimises the number of blind pieces, but is slower and more labour intensive. Remember, the size of a potato seed piece can have an impact on early plant vigour and larger seed pieces usually emerge faster than smaller ones.

Disinfect all equipment before each seed cutting session and between seed lots and keep the seed cutter blades sharp and straight to prevent ripping the potato surface (any damage from the cutting process provides an ideal area for disease).

TREATMENT OPTIONS

When you are ready to plant, you then need to consider what fungicide treatment to use to minimise disease. Whether seed treatments are directly applied to the seed piece or as an in-furrow application, it will be one of the most important decisions to be made by growers for the early management of their commercial potato crop.

As disease pressure differs from one growing region to another, both seed and commercial growers should carefully select the seed and/or in-furrow treatment that best meets their needs.

A variety of fungicides are available to growers that provide effective control of multiple diseases. Fungicides can be applied either to seed pieces prior to planting, at planting, or as in-furrow treatments, and you should speak to your agronomist about the best options for your operation.

INFO

For more information or to ask a question, please contact your local Syngenta Territory Manager, the Syngenta Advice Line on 1800 067 108, visit syngenta. com.au or email *Potatoes Australia*: info@ausveg.com.au. Please note that your questions may be published.

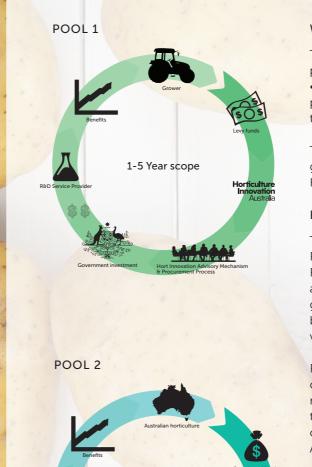
The R&D content for this article has been provided to *Potatoes Australia* to educate Australian potato growers about the most relevant and practical information on crop protection technologies and their on-farm applications.

This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government

Project Number: PT15007



THE NATIONAL POTATO R&D LEVY AT WORK



Six 'Foundation Funds' have so far been established in Pool 2 and will work with an expert panel to direct strategic projects. They are: The Leadership and People Development Fund

HOW CAN GROWERS GET INVOLVED?

1-15 Year scope

Potato growers play a fundamental role in advising on the allocation of both levy and co-investment funds, and will be engaged in extensive consultation with Hort Innovation in regional grower meetings, industry-specific consultation programs and individual grower and grower group consultation. Growers can also submit ideas for R&D projects via Hort Innovation's Concept Portal at horticulture.com.au/concept-proposal-form.

For more information about the National Potato Levies, visit ausveg.com.au/resources/the-levy-system/potato-levy.

This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government. Project Number: PT15007



WHO PAYS THE NATIONAL POTATO LEVY?

The levy is paid by growers who produce and sell either fresh or processing potatoes in Australia.

• The charge is set at 50 cents per tonne for fresh and processing potatoes and must be paid by the producer of fresh potatoes or the owner of processing potatoes.

The Federal Government also provides funding in addition to grower levy payments. Once paid, these funds are managed by Horticulture Innovation Australia.

HOW IS LEVY MONEY INVESTED?

There are now two pools with different funding priorities. Pool 1 is funded by grower levies with contributions from the Federal Government. This pool has a one to five year scope and will invest in applied R&D designed to directly benefit growers. This includes pest and disease management and biosecurity matters, with findings communicated through a variety of channels including Potatoes Australia.

Pool 2 has a one to 15 year scope and matches strategic co-investment funds with at least \$20 million, at the Pool's maturity, of government seed funds annually. This pool aims to address multi- and cross-industry challenges and opportunities of strategic and long-term importance to Australia's horticulture industries.

The Fruit Fly Fund

The Asian Markets Fund

The Green Cities Fund

The Health, Nutrition and Food Safety Fund

Pollination Fund.





INDUSTRY STALWART CALLS TIME AFTER SIX DECADES

After 60 years of working in the Australian potato industry, Crookwell Potato Association mini-tuber producer David Carter is retiring this year. David spoke to Michelle De'Lisle, reflecting on his time in the industry and his love for producing premium mini-tubers for seed growers in New South Wales.

David Carter's potato growing journey began in 1957, after watching his father employ share farmers to manage the family's potato crop.

Over 30 years later, in November 1988, David's career took a different turn when he began to grow mini-tubers for the Crookwell Potato Association. While he continued to grow potatoes in the field, mini-tuber production took over completely in 2003, fuelled by an interest in pushing the boundaries and developing new ideas.

"I travelled overseas in 1964 for three months and studied potatoes in the United States and the United Kingdom, and then my wife Barbara and I went over to Holland and studied their potato production in the '80s," David says.

"We've always been interested in mechanising as well; we introduced half tonne bins, basic harvesters and irrigation. It's always been a bit of a challenge to make things more efficient, keep it operating and make it easier for the growers."

David was also a state representative on many potato seed boards over the years, and contributed to the formation of the Australian National Standard for Certification of Australian Seed Potatoes.

MINI-TUBER PROCESS

David explains that mini-tuber production is a very time-consuming exercise, which requires a lot of patience. However, the results can be very rewarding: at one stage, David was growing up to 30 varieties in three polyhouses and subsequently produced up to 60.000 mini-tubers.

"We buy the plant material from a laboratory facility such as ViCSPA. Then we plant them out in growth medium or potting mix and grow them for about 12 weeks for each plant," he says.

"Depending on the variety, the plant material will produce somewhere between 1.5 potatoes per plant at worst, and up to about nine, at best. The mini-tubers range in size from a golf ball down to a marble

"The technical term is limited generation, so we're introducing new material every year into the system so any virus that may occur in later generation crops can be replaced quickly. Also, it's very quick for introducing new varieties - it's probably 10 times faster now."

David's mini-tuber facility is accredited by ViCSPA and must comply with all of its inspections and regulations to ensure the conditions of seed certification standards are being met.





"The name of the game is to supply certified seed growers with clean material to begin with," he says.

AN EVOLVING INDUSTRY

David has experienced many changes in potato production over six decades, including the introduction of plant variety controlled lines resulting in outlet control of these varieties. When irrigation was introduced into seed production, it also contributed significantly to increasing yield and making the production process more economically viable.

However, there have been plenty of challenges and learning curves along the way.

"Keeping our facilities aphid or thrip-proof is always a challenge - we've got fine mesh up and that's probably our most difficult part," David says.

"We also started off doing what was recommended, which was block spraying where you just sprayed pretty regularly in the glasshouses. We found that it wasn't necessary and, if anything, doing more harm than good.

"We've reduced chemical use radically in the houses - almost to the extent of using one chemical a year. That's dependent on the facility being up to standard, not allowing insects in and keeping quarantine practices in place. For example, using a foot bath and wearing clean clothes, a clean hat and having clean hands.

"We've been able to improve that using a lot less chemicals, which is so much better."

CAREER HIGHLIGHTS

The development of Technitubers, which occurred over a period of five years during the 2000s, was a very exciting time for David and Barbara.

Developed in Australia, Technitubers are produced aeroponically (growing in an air environment), and they're very small – about the size of a pea to a marble.

"It involves sequential harvesting where you continually take potatoes off the plant, so one plant might produce 40 or 60 little tubers. It just reduced the cost tremendously," David explains.

"It's a relatively small market, so it was brought into China and India, and became very big in both countries. We got involved in the very early part of that with growth trials. Barbara and I travelled around Australia, planting trial plots for Technitubers and we built a facility at home. It was a real challenge and very exciting work because you're dealing with overseas companies and people investing in it. We learnt a lot in that period.

"We were lucky enough to see the production system open in Kunming, China, which was very exciting and very different to Australia."

NEXT PHASE

Although David is retiring from supplying mini-tubers to Crookwell, he is intent on continuing his association with the potato industry and working with the younger generation.

"You can get very set in your own ways as you get older and you probably get a bit more conservative. That's where I think the youth coming through provides some balance. My aim is to work with the state and with our local board, but encourage younger ones to take it over gradually."

As for David's advice to his peers in the industry, it is simple: "The important thing is to enjoy it. I think that applies to all jobs - if you really enjoy it and do it well, you'll get a lot of satisfaction from it and you'll continue to do it for a long while.'

R&D | POTATO PROCESSING |



POTATO PROCESSORS REFLECT ON THE LATEST SEASON

In this edition of *Potatoes Australia*, the Potato Processors Association of Australia talks with its processors about the past season and the outlook for the next, as well as the tomato-potato psyllid incursion.

SIMPLOT: WEATHER BATTLES

At the time of writing, Frank Mulcahy from Simplot said the Tasmanian potato season was halfway through the harvest phase and the season was driven by significant weather events.

The summer of 2015/16 was the hottest on record, followed by the wettest winter in 50 years. Spring was also wet, which delayed planting. Tasmania enjoyed a hot period at the end of December 2016 but that was the end of good growing weather until the third week of February. While the mainland recorded extensive periods of very hot weather, those same systems held low pressure over Tasmania.

"We were averaging four overcast days per week and by 20 February, soil temperatures had dipped to an incredibly low 12 degrees," Mr Mulcahy said.

"This weather pattern was followed by nine weeks of very good weather to finish the season. While February was the coldest in 39 years, March was the third warmest ever recorded so farm yields have been pleasing."

MCCAIN FOODS: CHALLENGING HARVEST

Over in Victoria, Josh Opas from McCain Foods reported that the latest harvest was challenging. The wet spring of last year delayed planting, which resulted in a delayed harvest. Harvest conditions were generally good up until the end of March when Victoria and South Australia received extensive rains which slowed everything down.

Wet conditions have resulted in some rot issues that need to be considered in storage crops. Overall, the quality and yield of potato crops has been good this season and given the wet autumn and full dams, the outlook for the next season should be positive.

SNACKBRANDS: GOOD GROWING SEASON

On the crisping side, Michael Hicks from Snackbrands has described a good growing season in southern Australia. Victoria produced generally good yields and quality, with some rain and favourable growing temperatures during the season.

Common scab levels in some crops were a little higher than expected given the wet start to the season. This may be attributed to seed that was grown in the very dry conditions of the previous season. Like other companies, Snackbrands has had some challenges in harvesting owing to the wet April conditions.

PEPSICO: OVERCOMING CYCLONE DEBBIE

Brett Pemberton from Pepsico said that harvesting at the start of the year was quite challenging for a number of southern crops as they had grown through a wet and cold spring, slowing maturity and impacting yields. The heat waves experienced in January and February kept the irrigators busy, and despite the difficult conditions most crops fared well.

Cyclone Debbie put the planting of Queensland crops on hold in late March. The growers have recovered guickly after the cyclone, and the season is back on track. Outside of the usual pest and diseases, there have been a number of Rutherglen bug outbreaks in crops across southern Australia.

TOMATO-POTATO PSYLLID: A LOOMING THREAT

The Australian processors share the view that should tomatopotato psyllid (TPP) arrive in the eastern states and become rapidly established, its control and management has the ability to undermine the viability of potato production in this country.

The processors of potatoes led the way in establishing surveillance for TPP in Australia in eastern states six years ago. To date, there have been no detections but speculate that it is only a matter of time until wind currents or contamination brings the pest from our western shores.

As the previous edition of Potatoes Australia captured, Integrated Pest Management (IPM) options exist but the extra cost of management and the possibility of restricted flow of material across states will challenge the viability of the industry. More than ever as an industry, we need to work together to embrace innovation and tackle productivity head-on if we are going to face the imminent threat of TPP.

The processors would like to hear from you: where can growers and processors partner to invest in on-farm research and development that will result in the greatest productivity gains on-farm?

INFO

For more information or to provide your feedback, please contact Anne Ramsay on 0400 368 448 or email ppaa.eo@gmail.com.

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Project Number: PT15007





Pink rot is a serious soil and tuber-borne disease, which is prevalent in Tasmania, south-east South Australia and areas of Victoria that receive substantial rainfall.

Caused by the fungus *Phytophthora erythroseptica* and sometimes by P. cryptogea, pink rot infects all below ground parts of a potato plant and can be spread by symptomless tubers as well as water.

In its early stages, pink rot causes a leathery look to the infected "Developing the actual molecular test for detecting the tuber. Unlike soft rot, pink rot is a more solid rot. When exposed pathogen is relatively easy; it's actually working out what it means for disease risk in the field – that's the bit that takes the most to air, the cut tubers turn a characteristic pink colour within 15 research." Mrs Hall explained. minutes of cutting and then turn black over a couple of hours.

Pink rot can spread rapidly in the right conditions - warm (15-25 degrees Celsius) and wet soils. Cultivars vary in susceptibility, and while *P. erythroseptica* mainly affects solanaceous crops, it has a wide host range and can survive on plant roots without any symptoms. It can also survive for long periods in the soil.

South Australian Research and Development Institute (SARDI) Senior Research Scientist Barbara Hall was involved in two projects funded by Horticulture Australia Limited (now Horticulture Innovation Australia): Pink rot control in field and storage, and Potato pink rot control in the South East of South Australia.

"We did guite a bit of work on pink rot in 1997-02. There was a problem with pink rot in the south-east, and growers were having a bit of trouble with it so they wanted to look at how to control it both in the field and in storage," Mrs Hall said.

Over the two projects, 15 field experiments were undertaken to investigate fungicides including metalaxyl (Ridomil) for controlling pink rot.

DISEASE MANAGEMENT

While previous research has found that there is some benefit of using phosphonic acid as a foliar spray, Mrs Hall said that metalaxyl is still the best fungicide to manage pink rot in potato crops.

"There are some other fungicides in that same group, but certainly metalaxyl was the one that seemed to work the best. The issue is that in some areas, it started to show reduced sensitivity and there seems to be a problem with control of pink rot for the whole season, because it's usually applied at planting," Mrs Hall explained.

Potato growers are advised to practice good crop rotation and

Many Australian potato growers struggle with the disease pink rot, particularly after experiencing a high amount of rainfall on their crop. Potatoes Australia spoke to South Australian Research and Development Institute (SARDI) Senior Research Scientist Barbara Hall about managing pink rot, and previous projects that have been undertaken into the disease.

avoid practices that lead to water logging, such as compaction. Removing all volunteer and potential hosts from paddocks, as well as avoiding the harvest of contaminated tubers, are also recommended to control pink rot.

PreDicta Pt diagnostic services are available through accredited SARDI trained agronomists, however the predictive test for pink rot is still in the development phase.

FURTHER ADVICE

The key message from Mrs Hall is to avoid relying wholly on fungicides to manage soil borne diseases such as pink rot, and utilise all tools available including crop rotation, water management and inoculum reduction.

Growers should also make sure they are aware of whether pink rot is the cause of issues in their crop, or if it's another problem.

"Most of the time when it gets to harvest, the rotted tubers get invaded by soft rot. So you can get a lot of soft rot at harvest and you won't necessarily know whether it's come in on the pink rot or not " she said

"It's important to be aware of whether you've got the problem or not because there's no point in putting out a lot of metalaxyl if you don't have the problem."

INFO

For more information, please contact Barbara Hall at barbara.hall@sa.gov.au. The topic for this article was selected following the results of PT13013 A review of knowledge gaps and compilation of R&D outputs from the Australian Potato Research Program

This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government.

Project Number: PT15007

Horticulture Innovation Australia

INTERNATIONAL R&D | FUTURE LEADERS |



DEVELOPING THE NEXT GENERATION OF POTATO INDUSTRY LEADERS

The Agriculture and Horticulture Development Board in the United Kingdom completed its second Potatoes Next Generation Programme in February. This programme enables future industry ambassadors to learn about areas of business that they would not ordinarily be exposed to, and prepares them to be the catalysts of future industry success.

The Agriculture and Horticulture Development Board (AHDB) is looking ahead to the future of the United Kingdom's potato industry, with its second Potatoes Next Generation programme concluding earlier this year.

AHDB Potatoes staff run the programme and work with multiple potato supply chain organisations and the National Farmers' Union (NFU), which represents farmers across England and Wales, to host individual day sessions.

Participants are chosen based on their commitment, enthusiasm and aspiration to lead. It is an advertised and competitive process, with a video pitch being added into the process for second-year programme applicants.

Participants are a blend of farmers, supply chain fieldsmen, marketeers and economists, ensuring there is a solid leadership group to steer the industry in the right direction for many years to come.

DEVELOPING LEADERS

AHDB Potatoes Strategy Director Rob Clayton spoke to Potatoes Australia and explained why the programme was implemented.

"We looked at succession planning about four years ago and recognised that most of the strategic input, the leadership roles, the input into advisory committees and other duties were being fulfilled by folk who simply weren't getting any younger," Dr Clayton said.

"Our concern was that when the sage and the wise hang up their boots, there were less people stepping forward with the rounded knowledge and the leadership skills to help shape the future for the sector.

"Full leadership courses are quite costly and take key players away from the business for a long time - what we've devised is something that gives recent entrants a good spectrum of knowledge across all aspects of the industry and some tasters around committee and leadership work."

GAINING INDUSTRY KNOWLEDGE

As Dr Clayton explained, AHDB Potatoes' Next Generation participants gain an insight into all facets of the potato industry.

"First there's the 'look and learn' aspect where participants learn about all aspects of the sector from mini-tuber production, agronomy, machinery manufacture, processing, retail and lobbying," he said.

"Interspersed with that, we introduce lots of team-building and

leadership exercises. For example, a group nominee will take on the responsibility of introducing their peers to MPs in our Westminster session - guite daunting if you've never done it before but ultimately a great way to build confidence."

Participants have reaped the benefits of being involved in the programme - they have been able to meet different people, and learn about different aspects of the potato industry that they are not directly involved with. It has also allowed the younger industry members to come together to share their challenges and their ideas for progression.

Steven Bell, Fieldsman for Albert Bartlett & Sons, explained how the programme helps develop the future leaders of the potato industry.

"Through a broadening of perspectives, and enhanced understanding, I'm hoping that better supply chain relationships will arise which will ultimately support and encourage collaborative approaches to tackling industry challenges and protecting its future," he said.

Following the success of the programme, AHDB Potatoes has also developed a similar succession plan for PhDs and Fellowships.

AN INTERNATIONAL PERSPECTIVE

While it is up to the Australian potato industry to consider implementing a programme similar to the AHDB Potatoes Next Generation, it is a worthy consideration.

"A quick stock-take doesn't take long – have a look around at the committees, the industry groups, the advisory panels, the councils - if you've got no fresh faces then it's probably time to start the ball rolling," Dr Clayton said.

He added that the real benefits of the programme will present themselves in years to come.

"Each year we sit our Next Generation participants down with our PhDs and fellows at a key industry conference. A few beers later and you can feel the buzz; you know the future is in good hands."

INFO

AHDB will be recruiting at the end of the year for round three of the programme, which will commence in April 2018. For more information, please visit potatoes.ahdb.org.uk.

This communication has been funded by Horticulture Innovation Australia using the fresh potato research and development levy and funds from the Australian Government. Horticultur

Project Number: PT15007





017. Image courtesy of Anna Geddes

Following recent publicity around the 7-Eleven workplace scandal and unethical employment arrangements on a number of horticultural farms, it is essential that farm businesses follow the letter of the law when it comes to workers' wages and entitlements.

At the recent Hort Connections 2017 conference, the Fair Farms Initiative was launched. The initiative aims to ensure that growers are supported with tools and information to implement good employment practices that comply with workplace relations laws and industry standards.

The initiative is timely. In a move aimed at addressing the exploitation of vulnerable workers, a Bill to amend Australia's Fair Work legislation has been introduced into parliament. The amendments are largely in response to the 7-Eleven scandal but they are clearly designed to act as a deterrent to all employers who would underpay or otherwise exploit workers.

PROPOSED AMENDMENTS

The Fair Work Amendment (Protecting Vulnerable Workers) Bill 2017 reflects current government policy and proposes to:

- Significantly increase the penalties that apply to employers who underpay workers and who fail to keep proper employment records (some 10 times higher).
- Introduce a new higher penalty category of 'serious contraventions' that will apply to any employer that has intentionally ripped off workers, regardless of the employer's size.
- Deliver a \$20 million funding boost to the Fair Work Ombudsman (FWO) to increase its capabilities and workforce.
- Strengthen the powers of the FWO so that it can more effectively deal with employers under investigation by compelling them to produce information and answer questions.
- Establish a Migrant Workers Taskforce to target employers who exploit migrant workers.
- Introduce new offence provisions that capture franchisors and parent companies that fail to deal with exploitation by their franchisees.

"Our organisation and our members consistently oppose wilful non-compliance with employment laws, and any deliberate attempt by employers to deprive employees of their employment entitlements," Growcom Chief Advocate Rachel Mackenzie said.

"We work diligently with our employers to lift standards and push for legal compliance and ethical employment practices."

MOVES TO INCREASE POWERS AND PENALTIES OF FAIR WORK OMBUDSMAN

Growcom's Fair Farms Initiative was officially launched at Hort Connections 2017, with a focus on improving the reputation of the horticulture industry in relation to the treatment of workers while giving growers the tools to ensure they implement good employment practices.

INDUSTRY FEEDBACK

From an industry perspective, it is not difficult to support the general purpose of the Bill in seeking to deliver better protection for vulnerable and migrant workers. For example, there is a clear argument for increased funding proposals to get more FWO 'boots on the ground'.

However, the Bill has raised some concerns with employer groups (such as the Australian Chamber of Commerce and Industry) and broader agricultural industries. The National Farmers Federation (NFF) raised a number of concerns in its submission to the government.

The NFF argues that key elements of the bill go far and above what is actually required to address community concerns, and while its purpose may be sound, it is neither a targeted nor proportionate response. The NFF also flagged that the amendment would take away the right to silence in almost every workplace in Australia (e.g. by compelling parties to provide evidence), and would double penalties for record-keeping and payslip errors in every case - not just the most serious. The organisation pointed out that a glitch in a payroll system could lead to multiple breaches and higher penalties for "serious contraventions".

Further, the amendments would significantly increase the regulatory burden on franchised businesses, but not dissimilar to the requirements on growers when dealing with labour hire contractors.

INFO

To find out more about the assistance available to growers under the Fair Farms Initiative, please contact Annabel Hutch at Growcom on 07 3620 3844 or email ahutch@growcom.com.au

The Fair Farms Initiative is delivered by Growcom in partnership with Freshcare and other industry groups. It is supported with funds from the Fair Work Ombudsman community engagement grants program.

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R&D | SEED CERTIFICATION |





SEED POTATO CERTIFICATION UPDATE: VICSPA

Seed certification authority ViCSPA is continuing to develop traceability systems and quality assurance processes as well as staff training to further support Australia's seed certification system. ViCSPA General Manager Dr Nigel Crump provides an update to Potatoes Australia.

ViCSPA is the seed certification authority in Victoria, South Australia and northern New South Wales, providing accreditation for all mini-tuber production and laboratory facilities in Australia. It is a member of the Australian Seed Potato Council (ASPC), which comprises all seed certification authorities in Australia.

Within the ViCSPA seed scheme, certified seed production for the 2016-17 season has been good with very low rejection rates for seed potato crops submitted, and this shows the high plant health of certified seed that is available to commercial growers.

As input costs of seed potatoes are around 20-30 per cent of the total growing costs of a commercial crop, it pays to ensure that the seed used has maximum yield potential and that seed borne diseases are not impacting on yield or quality. Seed certification provides an independent assessment of the commercial quality of a seed stock.

CHECKING SEED

When receiving certified seed, the buyer should immediately assess a sample of the seed to make sure that it meets the quality conditions and expectations. Any issues or concerns should be reported to the seed supplier and/or the seed certification authority.

ViCSPA values feedback, both positive and negative, and uses this information to better develop its policy and operational

practices. An independent audit of any issue that is raised is always conducted to identify any contributing factors such as freight period and cool store conditions. In doing so, solutions are identified - which may or may not be related to certification of the seed stock but could relate to other factors such as postharvest treatments and handling.

TRACKING INFORMATION

Of critical importance is the traceability of certified seed stocks. To assist with traceability, ViCSPA has developed the CERTMASTER database, which tracks and stores information for all seed plots, generations and varieties. The database manages all the certification labels, providing unique reference numbering and Quick Response (QR) codes.

The references to mandatory potato cyst nematode (PCN) soil testing and potato virus Y (PVY) testing is also recorded on the certification label, assuring that all relevant data and assessments have been made on any given seed stock and that any label is completely traceable.

ViCSPA has made additional improvements to CERTMASTER with the support of external funding, including a geospatial monitoring module that uses aerial imagery of fields used for certified seed potato production. This component enhances the traceability of all seed production and will contribute to industry readiness of

biosecurity threats. It also provides seed buyers with further evidence of assurances on traceability and quality assurance. ViCSPA's dedication to quality assurance and service to the industry was highlighted in 2016-17, with its internal quality management system achieving compliance to ISO9001:2015 *Quality management systems – Requirements.* The quality management system covers all aspects of seed potato certification and means that ViCSPA has documentation for all of its operational activities and systems. Recently, it became a Campaign Associate of the 'Australian Made Campaign' to support the recognition of locally grown produce.

STAFF TRAINING

ViCSPA staff perform seed certification and auditing activities to a high standard, and their attention to detail and experience make them highly regarded and of value to the industry. The organisation conducts internal training of all seed certification officers in Australia and a training program will be offered in 2017-18 (details will be available soon).

In 2016-17, ViCSPA conducted this training for seed certification officers in New Zealand, which was well received and strongly supported. The training includes all aspects of seed potato certification and includes practical methods of disease, pest and disorder diagnostics.

ViCSPA has a long history of working with regulators and others in developing policy and procedures to overcome issues and threats to production. Since 1991, all fields submitted for certification have required PCN soil sampling to confirm absence of the nematode.

Recently, ViCSPA developed surveillance strategies for potato spindle tuber viroid (PSTVd) and over the past two years of surveillance throughout South Australia, Victoria and northern New South Wales, there have been no reported occurrences of PSTVd in potatoes. This information supports export and domestic trade.

The detection of the tomato-potato psyllid in Western Australia poses a new challenge, and ViCSPA is currently collaborating with state and federal departments to ensure that there is a workable strategy for seed certification relating to this pest.

At the end of the day, the work of ViCSPA reflects the professionalism and commitment made by the certified seed producers that support the seed scheme.

INTERNATIONAL REPRESENTATION

In 2016, ViCSPA General Manager Dr Nigel Crump became a Deputy Chair of the United Nations Economic Commission for Europe (UNECE) specialised section of seed potatoes. The UNECE seed program has been in place since 1968 and Australia has only recently become involved in the past seven years through Dr Crump's participation.

The UNECE provides an international standard reference for seed certification to facilitate trade. Australia's involvement in the UNECE seed program provides knowledge of other seed schemes around the world and taps into a strong network of seed potato specialists.

INFO

For more information, please visit vicspa.org.au.

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REGIONAL UPDATES



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It was pleasing to see so many members of the Victorian vegetable and potato industries attend Hort Connections 2017 in Adelaide from 15-17 May. The conference and trade show, run by AUSVEG and the Produce Marketing Association Australia-New Zealand (PMA A-NZ), was a landmark event for our industry that highlighted the importance of collaboration, and it was great to catch up with so many growers and industry members at the many events that took place over the three days.

It was particularly pleasing to see an emphasis on addressing mental health in our industry. There is still a stigma associated with discussing mental health, especially in regional communities, and ensuring people in our industry are able to be open about their mental health is hugely important.

It was great to see our own Stu Jennings, Thorpdale potato grower and founder of social media network Young Potato People (regularly featuring in Potatoes Australia just inside the back cover), taking the stage with other representatives to answer the audience's

questions about rural mental health and the ways that issues can be addressed.

Encouraging conversation is one of the best ways we can alleviate the sense of taboo that still surrounds depression, anxiety and a number of other conditions that so many struggle with. The more we openly discuss the topic and break down the barriers about acknowledging mental health issues, the more we can encourage individuals to speak up when they are feeling down.

I would like to thank Stu for his courage in taking part in this important conversation and hope that all of us in our industry can take his lead and be more willing to openly discuss mental health.

If anyone is experiencing difficulties or have concerns about others in their lives, help and information is always available, 24 hours a day, seven days a week.

Lifeline Australia: 13 11 14 bevondblue: 1300 224 636 Suicide Call Back Service: 1300 659 467



Matthew Gay Crookwell Potato Growers'

Association President 169 Goulburn Street Crookwell, NSW 2583 Phone: 02 4832 1800 Website: seedpotatoes.com.au In the Crookwell district, potato harvest was well underway at the time of writing, with all growers enjoying perfect digging conditions. A complete turnaround from this time last year - potato bins and storage sheds were filling fast and so were the orders. All growers are very happy at the moment, and were given the opportunity to celebrate this at the recent Crookwell Potato Festival held on Saturday 13 May.

The Crookwell Potato Association had its stand with 13 different varieties on display, many colour photos of potato crops, a comprehensive display of potato growing history and loads of information about potato varieties and their individual benefits. Also, our group had two bins of eating potatoes for people to grab a few handfuls of Sebago or Pontiac eaters. A gold coin donation was the trade and all money donated will be forwarded to a local charity or not-for-profit group. This proves extremely popular and many conversations evolve 'around the potato bin'!

Members were on hand to help bag the

eating potatoes and answer all questions about potatoes. This interaction with thousands of visitors proves that people really do want to know where their food comes from. Many people were amazed at what is involved in growing certified potato seed and the importance of this seed to the potato industry.

As well as our static display, patrons could witness first-hand potato production at Garry Kadwell's property. Garry had a potato harvest experience demonstrating traditional digging methods, from the potato fork to horse-drawn diggers through to modern day harvesting. This also proved a great time for Garry to showcase not only his property with his Eco Tours, but also some new and interesting potato varieties, not to mention the unforgettable experience of listening to Garry's passionate and knowledgeable tour talks.

All in all, it was a great and well-organised weekend. There is always something for us all to learn and what better way than visiting places and events that can showcase their product and give people the real story and real experiences. Well done to all involved



Simon Moltoni

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The black cat that crossed the path of the Western Australian potato industry continues to leave its mark. With the closure of Smiths Snackfood Company Canning Vale factory, de-regulation of the state's industry and the incursion of the tomato-potato psyllid (TPP), all growers have been experiencing challenging times.

The unfolding TPP incursion is leading to hardship in many areas. Seed growers with contracts to the eastern states have been caught with seed that does not have a home.

In some cases, this product has been processed or sold on the local fresh market, which has in turn led to oversupply. Ware growers in turn are experiencing a slowing of sales and reduced returns.

At this stage, international exports are continuing unaffected. Hopefully this remains the case until such time as we can implement a national management plan, which we hope will satisfy our trading partners' biosecurity concerns and allow trade to continue.

Addressing the interstate market access issues continues to be our number one priority. This is proving to be a scientific, administrative and political minefield. We hope that by the time this article is printed, the National Transition to Management plan that has been prepared by the Department of Agriculture and Food,



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AUSVEG SA and Potatoes South Australia have recently been working together on a campaign to fight a proposal to increase primary production rates by up to 200 per cent in the Playford Council region of South Australia. In discussions with individual potato growers, these proposed increases threaten to increase rates by around \$30,000-\$50,000 for mid-sized producers that need to maintain a number of properties in the region to grow potatoes. The cost to the larger packhouses would be even more significant and could significantly impact investment and jobs growth in one of the most socio-economically disadvantaged regions of Australia. The Playford Council has not satisfied ratepayers that it has investigated

efficiencies or savings to fund its forward

Western Australia (DAFWA), with contribution from industry, is accepted by the National Management Group. This should include an acceptable way forward for all jurisdictions on market access issues.

In other biosecurity news, Western Australia is dealing with market access requests frequently, including potatoes from South Australia with Pest Risk Analysis for potato cyst nematode and, more recently, bacterial wilt. It is critical that we address these requests carefully and thoroughly according to any agreements we have with our interstate partners.

On a lighter note, Hort Connections 2017 was held in Adelaide from the 15-17 May. This massive event proved to be a great success with all the latest information and technologies on display. It was also a great opportunity for me to attend a number of meetings, which included representatives from other states and New Zealand, to discuss issues surrounding TPP and zebra chip. This networking opportunity for us will prove invaluable as we address these issues going forward.

Keep an eye out for the new potato marketing campaign. We are due to launch in early July and are very excited to deliver this significant project for all growers in Western Australia. Happy growing days.

projects, with the council being among the most expensive in the state for commercial and residential ratepayers.

AUSVEG and Potatoes South Australia have led the fight against these changes with a significant media campaign across print, radio and television. We also worked with community groups to ensure industry views were presented to council as part of the public consultation process into the proposed rate hike. Over 500 growers and community leaders attended the public consultation on Tuesday 23 May, and made representations to the Playford Council. AUSVEG SA will continue to campaign on this issue in consultation with other groups such as Potatoes South Australia and thanks the industry for pulling together to fight this unfair proposal.

YOUNG POTATO PEOPLE

Well, another year and another national convention has been and gone. And this year's was a little different than previous years. In fact, it was the first time the AUSVEG National Horticulture Convention and the Produce Marketing Association Australia-New Zealand (PMA A-NZ) Fresh Connections merged to form Hort Connections 2017.

For the first event of its type, it managed to pull what could only be described as an enormous crowd. When you start talking about having around 2,500 people from all parts of the industry, you could be forgiven for thinking it was a music festival, not something to bring a fresh produce supply chain together. With a large range of speakers spruiking the latest technologies, research and promotional material, attendees were spoilt for choice - which at times could prove to be an issue as you needed to choose what session you could go to.

I had the honour of being asked to sit on a panel talking about mental health, with former Victorian premier Jeff Kennett kicking it off by talking about his work as Chairman of beyondblue. Mr Kennett also spoke about the stresses that can cause mental health issues and how we ourselves need to have mechanisms to be able to deal with mental stress, so that we can notice changes in ourselves if they arise and be able to react to them. This was followed by the panel discussion. I, along with Linda Bertram from the South Australian Country Women's Association and 'Talk to a Mate' program worker Mal Coutts from western Victoria discussed the subject further, while fielding questions from the audience through a live texting service (see image below). It was a great way to get people talking about mental health.

Unfortunately having only arrived for the last day of Hort Connections, I missed a lot of great presentations. But I made sure I got to the Gala Dinner and with around 1,200 people in attendance, it was a great night. The Three Waiters were the night's entertainment - an ongoing skit with amazing opera singing that kept everyone guessing if these guys were serious or not.



For the short time I was able to get across to Adelaide and check out the convention made me wonder what I had missed in the previous days. If you've never been to one of the national conventions or the all-new Hort Connections, I suggest you try to make it to at least one. You would be amazed by how many people you would meet, and new friends you would make. Plus you might even learn something you never imagined you would.

Cheers,

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Stu Jennings





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