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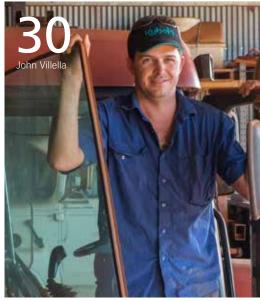
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Geoff Moar **AUSVEG Chairman**

he 2014 AUSVEG National Convention, Trade Show and Awards for Excellence has been and gone for another year and it was wonderful to see more than 1,100 delegates attend the event, which was held in the tropical paradise of Cairns from June 19-21.

From speaker presentations on the role of calcium nutrition in potatoes to the lively debate on the controversial and timely topic of foreign investment in Australian agriculture, delegates were treated to three days packed with information that addressed a range of issues concerning the potato and wider horticultural industry. I am sure that the readers of Potatoes Australia who were able to attend the event walked away with some new-found knowledge.

Of course such a feat would not have been possible without the support and collaboration of the industry. Therefore I would like to thank all industry members who took the time to attend and contribute to the most successful Convention to date, as well as the AUSVEG staff whose efforts ensure the Convention remains the biggest event in Australian horticulture.

The good news is that AUSVEG is still working hard to ensure members of the potato industry continue to be informed of the latest R&D updates through a range of workshops that are scheduled for the remainder of 2014.

One such event was held on Tuesday 5 August as part of the Potato Industry Extension Program, where a large group of potato enthusiasts travelled to New South Wales for a special potato R&D workshop and farm tour. Our host for the day was

Berrigan potato grower John Doyle, who welcomed attendees to his property in the Riverina region of the state. We very much appreciate the generous donation of his time.

Leading potato experts from around the country also attended the workshop to discuss the key issues relevant to potato growers in New South Wales. This included Dr Graham Stirling of Biological Crop Protection, as well as the South Australian Research and Development Institute's Michael Rettke and Agronomist Russell

These well-respected industry experts discussed a range of topics including nematodes in potato crops; managing the risk of soil-borne diseases; and crop management practices that focused on Target spot, PVY, Potato moth and biofumigation. This is yet another example of the importance of the Potato Industry Extension Program in communicating such significant issues to growers on the ground.

We hope those who attended enjoyed the workshop and we look forward to bringing Australian potato growers many more of these invaluable events in the future.

Geoff Moar Chairman **AUSVEG**



Richard Mulcahy **AUSVEG Chief Executive Officer**

am delighted to say that this year's AUSVEG National Convention, Trade Show and Awards for Excellence was the biggest and best held to date. In June, a record number of attendees made the trip to Cairns and the feedback from Australian potato growers showed they were clearly impressed with the raft of invaluable information and networking opportunities available

The event culminated in the annual Awards for Excellence, celebrating the outstanding contributions of leading growers, researchers and agribusinesses. I offer my congratulations to all nominees and winners of these prestigious industry accolades and must note that certain members of the potato industry made quite an impression on the night.

In particular, I would like to congratulate award-winning potato growers Sam Humphries and David Nix; Brenda Coutts, a joint recipient of the Researcher of the Year Award; and the South Australian Research and Development Institute, which took out the Productivity Partner Award for 2014. The tireless efforts of these representatives is exactly what the potato industry needs to flourish in the future.

Such success can only be achieved, of course, through the funding of critical R&D

One of the articles in this edition of the magazine examines the contentious topic of the generic marketing of potatoes. Despite elements of industry both within Australia, and internationally, advocating for significant spends on the generic marketing of their products, I have long held the

view that such an approach simply does not work. Support for this stance can be found in a recently-released report by the UK Potato Council, which shows that potato consumption in Britain has continued to decline despite the investment of significant amounts of money in generic marketing. Those who continue to call for generic marketing of potatoes in this country would do well to consider the UK experience.

On a more positive note, there are plenty of initiatives that have proven to be beneficial for the industry. One of those was the inaugural AUSVEG Potato Field Day, which was held on Sunday 22 June following the close of the Convention. During the event a group of 50 potato growers, processors, researchers and technical experts journeyed to the picturesque Atherton Tablelands for a tour around three major potato operations.

Some of the nation's most notable researchers and technical experts were on hand to chat to the group about a selection of pressing issues facing growers; most notably the threat of Potato virus Y, as well as crop nutrition and fertiliser application practices.

We thank the participating growers and researchers for taking the time to share their valuable knowledge with the group and their ongoing support of the potato industry.

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It's all action at the moment for Australian potato growers, with a renewed sense of confidence in the industry after another successful AUSVEG National Convention, Trade Show and Awards for Excellence brought the focus to innovative and successful aspects of the industry.

One such event highlighting this was the inaugural Potato Field Day, which was held on June 22 following the Convention. It was a social and informative day out for visiting growers, processors, researchers and technical experts as they toured three

major potato operations in the fertile Atherton Tablelands region in far north Queensland (page 32).

Still on the Convention, readers can find a wrap up of the three-day event (page 8), as well as photos of every award winner (page 10). Notable winners from the Australian potato industry include Sam Humphries (Rising Star of the Year), David Nix (Community Stewardship Award) and the South Australian Research and Development Institute (Productivity Partner Award).

This edition of *Potatoes*Australia also profiles Tasmania-

based grower Glynn Williams, known as "Mr Kipfler" in the region (page 18). He speaks about his experience as a practising lawyer, which has helped him in a number of ways in the management of his potato growing operation. We also profile young grower John Villella (page 30).

In R&D updates, we take a look at the final results of a long-running project examining the Tomato potato psyllid and its potential to enter Australia (page 29), as well as an update on Potato virus Y research from the Department of Agriculture and Food Western Australia's

Brenda Coutts (page 34). We also recount the success of the 'Top 8' potato R&D topics from the last three years, as communicated by the Potato Industry Extension Program (page 14).

In international R&D, we bring to light new research from the Universities of Dundee and Aberdeen, which has closely examined the effectiveness of the spores that cause Late blight (page 35). We also question the real effectiveness of generic marketing campaigns for potatoes that aim to bolster consumption (page 26).



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2014 AUSVEG National Convention a tropical success

IN JUNE, MORE THAN 1,100 DELEGATES FROM ACROSS AUSTRALIA AND THE GLOBE – MANY OF THEM POTATO GROWERS – HEADED TO FAR NORTH QUEENSLAND FOR THE 2014 AUSVEG NATIONAL CONVENTION, TRADE SHOW AND AWARDS FOR EXCELLENCE, MAKING IT THE MOST SUCCESSFUL CONVENTION TO DATE.

THURSDAY 19 JUNE

Blue skies and perfect weather welcomed a record number of delegates to the 2014 AUSVEG National Convention, Trade Show and Awards for Excellence at the Cairns Convention Centre.

The biggest event on the Australian horticultural calendar kicked off with the Welcome Reception, where delegates were given a warm welcome to paradise by AUSVEG CEO Richard Mulcahy. One of football's greatest characters and Convention favourite, Robert 'Dipper' DiPierdomenico, reprised his Master of Ceremonies duties to announce the official opening of the Convention alongside Queensland Agricultural Minister the Hon. John McVeigh and Cairns Mayor Cr Bob Manning. The event gave attendees a valuable opportunity to network and preview more than 80 trade stalls that were on show over the next two days.

FRIDAY 20 JUNE

As delegates tucked in to an alfresco breakfast on Friday morning, Maya Smitran from Diabetes Queensland and

Georgie Knight from Growcom reminded growers of the importance of looking after their health by providing an overview of the Live Well Farm Well initiative.

Horticulture Australia Limited CEO John Lloyd led the speaker sessions with his presentation on a rational future for local horticulture. He said that while Australia will never be the food bowl of Asia, growers should make the most of the inputs they did have control over. DuPont Sales and Marketing Manager Jeremy Cocks was next to step up to the speaker's podium, giving the audience an overview of the company's Smooth Trade initiative and how it can benefit growers.

Christine Brunel-Ligneau, Senior Key Relation Manager at Bayer CropScience, advised growers on the benefits of enhancing sustainable farming as a long-term solution before Federal Minister for Agriculture, the Hon. Barnaby Joyce, addressed delegates in his keynote speech with an inspiring call to arms for Australian growers to ensure quality, not quantity, is the focus of their produce.

The presentation from eccentric Dutch cultivator Rob



Baan was a highlight for many delegates as the Koppert Cress CEO delivered an entertaining attempt to change the way we look at fresh produce and health.

Delegates were then presented with solutions to drive sustainability and productivity on their farms during a presentation delivered by Syngenta Head of Business Development Alexander Tokarz. AUSVEG CEO Richard Mulcahy was next to provide his thoughts on why the potato industry should be proud of where it stands today.

The audience was once again keen to hear the keynote speech from popular independent Senator for South Australia Nick Xenophon, who outlined his concerns for the industry and his belief that a tougher approach was necessary in the Senate



Delegates were then invited to enjoy an evening by the beach at the Kahaki Luau, where they kicked back and relaxed with some delicious food, great company and picturesque views of the Cairns Esplanade.

SATURDAY 21 JUNE

What better way to start the day than with a thought-provoking presentation from the famous Dr Karl Kruszelnicki? This is exactly what delegates were treated to for breakfast on Saturday, where the enthusiastic scientist delivered his thoughts on the importance of fresh produce in our diet.

Brand Australia consultant and entrepreneur Craig Davis spoke about the need for the industry to work together to create a singular 'brand' which represents the clean, green and safe perception that Australia's produce has around the world. before Yara International Agronomic Competence and Training Director Barry Bull gave potato growers something to think about with an overview of the role of calcium nutrition in potatoes.

The contentious topic of the Retail Code of Conduct stimulated a lively discussion from a panel of speakers, while the Hon. Bob Katter captivated the audience with a passionate address on the issues that farmers deal with when forced to sell their produce to a fierce oligopolistic market. Mr Katter's speech undoubtedly fired up the audience in preparation for the Great Debate, where the controversial and timely topic of foreign investment in Australian agriculture took centre stage.

Saturday afternoon presented an opportunity for delegates to

explore the great outdoors with two social events. The Women in Horticulture Rainforest Discovery took attendees on a unique rail journey through the lush tropical forest to the north of Cairns and the industry's youth had some fun away from the farm as they went water skiing and wakeboarding on the NextGen Saltwater Splashtacular.

As night fell, close to 700 delegates gathered to attend the Convention's highlight event, the AUSVEG National Awards for Excellence Gala Dinner. A total of 14 awards were presented on the night, with many being snapped up by hard-working members of the potato industry – including researcher Brenda Coutts, potato growers David Nix and Sam Humphries, as well as the South Australian Research

and Development Institute. Notable growers Darren Long and Garry Kadwell were also nominated for awards.

The highly coveted Grower of the Year award went to Belinda Adams of Queensland who, in a historic moment, became the first female to win the prestigious accolade. The formalities ended with a special Lifetime Achievement Award, which was presented to humble industry stalwart and former AUSVEG Chairman Silvio Favero of Victoria. The full list of award winners can be found in the following article.

AUSVEG would like to thank its Leading Strategic Partners for their ongoing support, as well as its many other Strategic Partners, which made this spectacular event possible.

AUSVEG National Awards for Excellence

THE 2014 AUSVEG NATIONAL AWARDS FOR EXCELLENCE CELEBRATED THE OUTSTANDING ACHIEVEMENTS AND CONTRIBUTIONS MADE TO THE AUSTRALIAN HORTICULTURE INDUSTRY BY GROWERS, RESEARCHERS AND ORGANISATIONS, AT A MAGNIFICENT GALA DINNER.

Grower of the Year

Belinda Adams (QLD)

Proudly sponsored by Syngenta





L-R: Syngenta Head of Vegetables Craig Thompson, Belinda Adams and Senator the Hon. Richard Colbeck.

Lifetime Achievement Award Silvio Favero (VIC)



L-R: AUSVEG Chairman Geoff Moar and Silvio Favero.

Industry Leader Award Ian Muir (VIC)

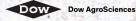


L-R: AUSVEG Chairman Geoff Moar and James Muir (on behalf of lan Muir).

Young Grower of the Year

Nathan Free (VIC)

Proudly sponsored by Dow AgroSciences





L-R: Senator John Madigan, Nathan Free and Dow AgroSciences Horticulture Business Manager John Gilmour.

Rising Star of the Year

Sam Humphries (SA)

Proudly sponsored by Coles





L-R: Shadow Minister for Agriculture and Rural Affairs, the Hon. Joel Fitzgibbon, Sam Humphries and Coles Government and Regulatory Affairs Manager Chris Mara.

Women in Horticulture Award

Melinda Brimblecombe (QLD)

Proudly sponsored by Steritech





L-R: Senator Larissa Waters, Melinda Brimblecombe and Steritech Queensland General Manager Glenn Robertson.

Researcher of the Year

Brenda Coutts (WA) and Professor Salah Sukkarieh (NSW)

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L-R: Brenda Coutts, Bayer Key Account Manager Jodie Brown and Professor Salah Sukkarieh.

Industry Impact Award

Mulgowie Farming Company (QLD)

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L-R: Senator Jacqui Lambie, Mulgowie Farming Company's Fabian Carniel and VISY National Sales Manager Wayne Dunne.

Community Stewardship Award David Nix (QLD)

Proudly sponsored by DuPont





L-R: DuPont Sales and Marketing Manager Jeremy Cocks and

Innovative Marketing Award OneHarvest (QLD)

Proudly sponsored by CMAA





L-R: OneHarvest representatives with Adelaide Produce Markets CEO and CMAA Secretariat Angelo Demasi.

Environmental Award

Colin Houston (TAS)

Proudly Sponsored by Netafim





L-R: Netafim National Marketing Manager Stuart Upton, Colin Houston and His Excellency, Ambassador of Israel Shmuel Ben-Shmuel.

Trade Display of the Year Award

Single-booth

Australian Organic



L-R: AUSVEG Director David Addison and Australian Organic's Joanne Barber and Andrew Monk.



Productivity Partner Award

SARDI (SA)

Proudly sponsored by John Deere





L-R: AUSVEG SA State Manager Jordan Brooke-Barnett (on behalf of SARDI) and John Deere Tactical Segment Manager Royce Bell.

Trade Display of the Year Award

Multi-booth

Netafim



L-R: Netafim's Agronomist Sam Birrell and National Marketing Manager Stuart Upton.



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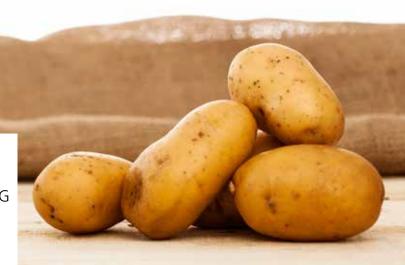


(BAĞER) Bayer CropScience

Potato Extension Program

Top 8 potato R&D

IN THIS ISSUE OF *POTATOES AUSTRALIA*, WE HIGHLIGHT THE TOP 8 POTATO R&D TOPICS THAT HAVE BEEN COMMUNICATED BY AUSVEG THROUGH THE POTATO INDUSTRY EXTENSION PROGRAM, SINCE IT FIRST COMMENCED IN JANUARY 2012.



#1 PreDicta Pt DNA testing service

Stemming from the work of Project PT09023 within the Australian Potato Research Program Phase 2 (APRP2), this prized piece of potato R&D packs some serious productivity-increasing potential.

Known as PreDicta Pt, the DNA soil testing service has rapidly become one of the most important pre-planting disease management options available to Australian potato growers since it hit the (pre)commercial phase in August 2013.

PreDicta Pt is the culmination of nearly 10 years of research, led by a dedicated team of researchers at the South Australian Research and Development Institute (SARDI), with collaboration from scientists at the Tasmanian Institute of Agriculture (TIA), the Victorian Department of Environment and Primary Industries (DEPI) and other research institutions overseas.

The service currently tests for soil-borne pathogens that cause Powdery Scab, Black dot and Root knot nematode, providing growers and agronomists with a disease risk rating based on a DNA analysis of soil samples.

PreDicta Pt is now a pivotal disease management resource for all potato growers (seed, ware and processing), and for this reason, has easily glided



#2 Potato virus Y

Leading the charge on
Australian Potato virus Y (PVY)
research is the Department of
Agriculture and Food Western
Australia Plant Virologist, Brenda
Coutts, who has undertaken
a number of important R&D
projects on this critical plant
virus over the past two years.

Ms Coutts has taken part in several Potato Industry Extension Program events held in Western Australia, Victoria, South Australia and Queensland, to speak directly with potato growers about some of the new knowledge on PVY gained through her work in this

important area of research.

PVY transmission and management options have been a key focus of discussions led by Ms Coutts. Growers have been urged to consider applying an integrated approach to PVY identification and control, with insecticide application largely proving ineffective as a single management practice.

Ms Coutts is currently undertaking a PVY scoping study (PT13006), which is examining the broad range of research activities carried out in Australia and abroad on PVY. The project will determine if, or



where, knowledge gaps on PVY in Australia still lie (see page 34 for more information).

Further information on PVY research, including an interview

with Ms Coutts, is featured in Episode #2 of the Potato Industry Extension Program Spudcasts series (www.ausveg.com.au/ potatoes/multimedia).

#3 Maintaining the health and quality of seed potatoes

We know that buying and planting certified seed potatoes is one of the most critical measures that commercial growers can take to ensure high quality, high yielding crops.



But using certified seed potatoes alone will not guarantee that a commercial crop reaches its full potential. There are many crop and postharvest management activities,

such as curing, grading, storage and transport, which can affect final seed quality.

The range of seed supply pathways and the different 'custodians' of seed potatoes who are involved in each of these pathways, for instance, can pose a significant risk to the overall quality of seed potatoes.

Major risk factors that are unrelated to technology and are often neglected include skills, knowledge, attitudes, levels of communication and organisational management, including planning and record keeping.

RMCG Senior Consultant, Dr Doris Blaesing, has been an advocate of the need for the industry to adopt good practices for storing and handling certified seed, at all stages of the supply chain.

She has highlighted that seed potatoes are unknowingly 'mistreated' along the way – which is both frustrating for seed producers and buyers alike, given the difficulty (at present) in determining whether a poorly performing crop from certified seed is the result of substandard certification delivery or, rather, the result of inadequate custodianship somewhere along the chain.

#4 Biofumigation

While it's not a farming practice that is currently the focus of industry-funded research, biofumigation has sparked strong interest in growers around the country.

Tasmanian-based fresh potato grower, Darren Long, has been a champion of practices, taking part in several Potato Industry Extension Program workshops to discuss how he has successfully used biofumigants in his operation in Sheffield for the past 10 years. Mr Long believes the use of biofumigants in potato crops can be an effective mechanism to improve soil health and structure, and potentially mitigate soil disease issues, including Powdery scab and Rhizoctonia.

Information about biofumigation has been shared through the Potato Industry



Extension Program with the aim of presenting growers with new and/or alternative crop management practices that could benefit growers' operations. Growers interested in the practice have been urged

to consider it as part of an integrated crop management approach, and are reminded that there are some factors to consider that may make biofumigation unsuitable for some growing operations.

More and more growers around the country are seeking further information on the practice, with a number of growers recently trialling it in their paddocks.

#5 Managing the threat of nematodes

Nematodes pose a consistent threat to potato growers around Australia – Root lesion nematode and Potato cyst nematode are among the different variations that can infect potato crops.

In particular, it has been found that Root knot nematodes are the most economically damaging of all the nematode species to agricultural crops worldwide.

While growers have long been practicing prevention and avoidance methods, recent advancements have been made that can help keep nematodes at bay.

PreDicta Pt effectively tests for and detects nematodes, while biofumigation has also been identified as a possible method of controlling and preventing nematodes in particular regions.

#6 Controlled release fertilisers

As we all know, nutrient delivery to crops via fertiliser is an integral part of producing a healthy and high-yielding crop.

While fertilisers provide many benefits, efficiency can be an issue, with fertiliser often being used to excess in order to ensure adequate nutrient delivery. This is also necessary to work around factors such as weather events and timing applications.

Controlled release fertilisers offer a solution to this, with the fertiliser slowly supplying nutrients to match plants' demands, optimising growth and efficiency.

Controlled release fertilisers can increase quality control and provide consistent and efficient nutrient delivery – resulting in less wasted fertiliser and reduced application costs.

#7 Tomato potato psyllid and Zebra chip disease

Military strategists and football coaches alike will tell you that 'the best form of offence is good defence'. And when it comes to the Tomato potato psyllid (TPP) and the dreaded Zebra chip disease it vectors, the best form of defence for the Australian potato industry is, by far, awareness and preparation.

TPP and Zebra chip arrived in New Zealand in 2006, and has proven to be staggeringly

destructive and costly for the country's potato industry ever since.

Through heavy industry campaigning and a concerted effort to keep both biosecurity hazards out of Australia, neither TPP nor Zebra chip have managed to cross the ditch. However, both pose a continuous threat to the nation's potato growers and the fight to keep them out will not relent.



#8 Powdery scab

Any Australian spud producer with crops growing in heavier soil types and wetter conditions can attest that their most pressing disease issue is Powdery scab. It is little wonder then that the industry has placed such a strong emphasis on the destructive potato disease over the past 5-10 years in the R&D programs undertaken.

Powdery scab disease and the pathogen which causes it – *Spongospora subterranea* – was a key focus in the APRP2 project. Thanks to research undertaken by the New Zealand Institute for Plant and Food Research, we now have much greater knowledge of Powdery scab and its causes, and importantly, can plan to effectively manage the disease.



Through crop rotation, field management, production hygiene and the right selection

of seed, growers can minimise the risk of Powdery scab incursion.

Seed certification review seeks grower input

The first stage of a project reviewing the existing seed certification framework within the Australian potato industry has recently been completed. All seed potato and commercial growers and other parties involved in growing, handling or using seed potatoes are now being asked to contribute their views as part of widespread consultation being carried out over the following month during the next phase of the project.

Dr Doris Blaesing of RMCG is heading the 'Seed Potato Certification Review'. The work is funded through Horticulture Australia Limited by the National Potato Levies and matched funds from the Australian Government.

The review has to date noted that the current Australian National Standard for the

certification of seed potatoes was last published in 2007, and was based on the knowledge of that time. In light of new research on the latest diagnostic technologies and scientific understanding of seed and soilborne diseases, the review is being carried out to provide the Australian industry the options and information required to develop the best possible seed certification system for the future.

Seed potato certification arrangements across Australia are diverse, even though principally based on the 2007 National Standard. Certification schemes and standards are comparable to those used in other countries. Schemes are run or executed by state governments or not-for-profit organisations throughout the



country's various jurisdictions. Most schemes allow some deviations from the National Standard so that different compliance levels can exist within schemes.

Following on from the first stage of the seed certification review, the second stage now includes a wider 'potato community' consultation. Dr Blaesing is currently seeking feedback from growers and other industry members on current seed certification arrangements within Australia to help determine how the system might be upgraded.

Growers and other industry

supply chain members are encouraged to take part and have their say by completing a survey prepared by Dr Blaesing. She will be consulting further with industry members in the weeks ahead and also welcomes written contributions to dorisb@rmcg.com.au.

The feedback gained during the consultation period will be used to develop a roadmap for an enhanced national seed certification scheme.



To complete the survey, visit: tinyurl.com/lwkg575 Project Number: PT13010

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Underhaug 3720 2 Row High Speed Linkage Planters (with fertilizer) RRP Less 20% **Discount Price** 50% on delivery 50% 12 mths +ast including ast from delivery \$9,000 \$3,600 = \$39,600 \$19,800 \$45,000 \$19.800 Underhaug 3720 2 Row High Speed Linkage Planters (no fertilizer) Less 20% **Discount Price** 50% on delivery 50% 12 mths **RRP** +qst including gst from delivery \$14,080 \$32,000 \$6,400 \$2,560 = \$28,160 \$14,080 Underhaug 3100 4 Row Linkage Planter - superseded model (no fertilizer) Less 20% **Discount Price** 50% on delivery 50% 12 mths **RRP** +gst including gst from delivery \$33,995 \$6,799 \$2,720 = \$29,916 \$14,958 \$14,958 **Underhaug 3742 4 Row High Speed Linkage Planter (no fertilizer) RRP** Less 20% **Discount Price** 50% on delivery 50% 12 mths +qst including gst from delivery \$8.800 \$3.520 = \$38,720 \$19.360 \$19.360 \$44,000 **Underhaug 3744 4 Row Trailing Planter (with fertilizer) Discount Price RRP** Less 20% 50% on delivery 50% 12 mths +qst including gst from delivery \$40,480 \$92,000 \$18,800 \$7,360 = \$80,960 \$40,480 **Underhaug 3760 6 Row Trailing Planter (with fertilizer) Discount Price** 50% on delivery **RRP** Less 20% 50% 12 mths +ast including gst from delivery \$61,600 \$140,000 \$11,200 = \$123,200 \$61,600 \$28,000









In 2012 AVR acquired TKS Underhaug's planting division. Since then all Underhaug models have been available in green under the brand name AVR Underhaug.





A TOUGH CHILDHOOD, COMBINED WITH THE EXPERIENCE OF A LAWYER WORKING THE RURAL CIRCUIT, HAS GIVEN TASMANIAN POTATO GROWER GLYNN WILLIAMS THE SKILLS AND DETERMINATION NECESSARY TO TACKLE ANY NEW CHALLENGE THAT COMES HIS WAY. DIMI KYRIAKOU EXPLAINS.

ife could have been very different for Glynn Williams if he had chosen not to continue working the land that had been in his family's care since the 1880s.

It was arguably the easiest option, as the land in question was tough to farm when Glynn was growing up. As he recalls, it was high and dry without any irrigation – this of course prevented cropping which was the dominant farming choice in the area during the 1970s.

"Mum and Dad struggled on as dairy farmers until 1977 when the milk cheque in July was \$100," Glynn says. "Somehow, Mum got a return to work teaching and Dad converted the herd to a beef herd, with my help as I went through high school. By the mid-'80s Dad followed his vocation into the church, becoming an Anglican

clergyman around rural Tasmania. The choice was mine: to farm or not to farm?" he explains.

"I never saw life without the farm. It is a beautiful place to live, views, fresh air and an amazing environment."

It seems the decision to carry on the family business was the right one. These days, Glynn is a proud, fifth-generation farmer who is better known as "Mr Kipfler" to the locals. He's the man behind the brand of kipflers that are grown in the deep chocolate soil of North Motton, which shoulders the picturesque coastline in the north-west pocket of Tasmania.

Knowing all too well the struggles that financial hardship can bring, Glynn decided to branch out and study law on top of his potato growing duties – just in case. He is now a qualified lawyer based in a

rural practice that is only a short drive from home, where he lives with his wife Chantal and their children

And so this was the norm, until the discovery of the kipfler.

Becoming Mr Kipfler

After 10 years of farming, some land came up for sale alongside Glynn's existing property, boasting creeks and a dam. Excited at the prospect of finally being able to introduce cropping on his land, Glynn pounced on the opportunity to buy it – but first, he had to overcome a major hurdle: both the old and new farms were undeveloped.

"Legal practice is a good income but it doesn't make you rich. The crop returns in the first few years, once we got a potato crop, were great but by 2005 returns weren't keeping pace and we were getting squeezed

at both ends," he says.

"A client insisted on a trip to Melbourne to see a QC for an opinion. On the plane he suggested I grow kipflers. Within a week I bought four tonnes of seed and it's been an adrenalin rush ever since!"

While the kipfler is very different to the traditional potato varieties grown in Tasmania, it thrives in the cool climate of the Williams' family farm.

"I love seeing the kipflers grow, fresh and with clean skins. The best moment is seeing the first pallet packed and wrapped in the cool store, followed by the first phone call, 'Send me some more.' Then the hard work has been worth it."

A juggling act

When he's not out in the field or in the courtroom, Glynn is pursuing his other passion as President of Poppy Growers Tasmania. He says the state has enjoyed the privilege of growing much of the world's exported pain relief material for some decades.

So, between poppies, legal documents and potatoes, the day-to-day responsibilities of Glynn's life can become hectic. However, it is a strong team that ensures the potato growing operation runs smoothly.

"When the crop is growing, it has to come first. Then I need a good team of people to get it out and away. Having said that, I have to be in charge. It's amazing how many times I have been walking into court, with the phone buzzing from an agent and then getting a text from the paddock about a breakdown," he explains.

"In some ways the stress of law gets you ready for that zone but it's better than working for someone else."

Secret to success

Tasmania's potato growers know of the many challenges that come with capturing the attention of a fresh market that is physically disconnected from their home state. There are logistical issues to contend with and, in Glynn's case, the costs can soar thanks to the kipfler's demand for chilled freight to maintain a quality product.

"Kipflers are hard to handle and costly to grade but in Tasmania the biggest challenge is Powdery scab. Once awakened from its dormancy, the scab organism seeks out kipfler tubers like a heat-seeking missile. Aided by rainfall or too much irrigation, it is deadly. In 2011 we lost an entire paddock of 17 acres which was a disaster. Somehow each year we have managed to get out a crop," he says.

"The other challenge is competition. With a niche market when we don't have scab, we have low prices from others chasing the dream. So we are always looking at ways to cut costs to make a return to the farm. The secret for farm survival is to find a new way, often."

Future thoughts

Glynn says his family loves to work in the fresh market system, as it goes further than simply growing a crop – it also brings about opportunity. Selling produce into the Sydney, Brisbane, Adelaide and Hong Kong markets has allowed the Williams family to take a chance on growing other small, niche crops that target the gourmet consumer, in order to remain competitive.

"The challenge is the dominance of giant retail and buying systems that favour big suppliers. My interest in economics tells me that niche producers should never chase the commodity buyers – the tipping point will be when the supermarkets want niche products enough to buy from





markets to keep their customers happy," he explains.

"In the meantime, we can only worry about today and make sure the farm is as mixed as possible."

As to whether or not the family business will continue for a sixth

generation, only time will tell.

"I was never pushed to the farm; probably the contrary. But I toughed it out and in many ways was self-taught. I wouldn't wish that struggle on the kids, but if they're keen, I could only help them," Glynn says.



New name, same game

LEADING CROP PROTECTION COMPANY FARMOZ HAS OFFICIALLY REBRANDED AS ADAMA – BUT THIS DOESN'T MEAN THE COMPANY WILL REST ON ITS LAURELS, AS IT CONTINUES TO PROVIDE SIMPLICITY IN AGRICULTURE, WHILE DELIVERING PRACTICAL SOLUTIONS TO THE EVERYDAY ISSUES GROWERS FACE.

eet Adama. While the name may be new to many, the faces and ethos of service behind the brand remain the same. On 16 July, the company formally known as Farmoz, officially rebranded as Adama, a single brand that unites more than 20 individual company brands that currently serve growers in 120 countries.

According to Adama Australia Managing Director David Peters, the global brand rollout will be complete in December this year.

"We want to create simplicity in our structure and move to one company, one identity, one culture and one brand. Adama reflects a global company in close touch with our customers and respect for our historic beginnings in Israel," Mr Peters said.

"The name Adama is Hebrew for 'earth', the essential element of farming. Our strong connection to the land represents our commitment to agriculture."

New products on the horizon

As well as streamlining the company's operations, Mr Peters said the move to rebrand also ties in with the launch of several new products that have been developed to solve real and present problems for Australian growers.

"Fungicide, herbicide and insecticide resistance management are among the biggest challenges that we face as an industry and we are pleased to be able to bring several new options to the market just as we launch Adama," he said.

"Our new nematicide, Nimitz® – due to be released this spring for use in tomatoes, capsicums and cucurbits – is a really good example of the new generation of crop protection products that are a quantum leap ahead of many traditional solutions."

Challenges ahead

Mr Peters notes that Adama's close connection to Israel will work to the advantage of Australian growers as both countries share a number of common challenges. This has been evident through the Grower Study Tours to Israel that have occurred in recent months, which Adama has supported.

"I believe that learning from other growers and vegetable industries in other countries is a simple way to help develop solutions that will enable them to capitalise on the many opportunities that await them," Mr Peters said.

He is confident the road

ahead for the industry is bright, particularly if the different players within the Australian horticulture industry continue to work together to achieve a common goal.

"I'd really like to see our horticulture industries pull together even tighter to create a united front to take on the challenges we face now and those that will confront us in the future," he said.

"We have seen the benefits of collaboration in other markets and while vegetable and potato producers are often looking for a competitive edge in daily markets, there is much to be gained by combining our energies and experiences to forge sustainable and profitable outcomes for all in the long-term."



Farmoz is now Adama, a leading global provider of crop protection solutions bringing a fresh approach to farming in Australia.

The name Adama is Hebrew for 'earth', the essential element of farming. It reflects our commitment to agriculture as well as our down to earth, practical approach and culture.

At Adama we understand that farming is complex and full of ever increasing challenges. We recognise that in order to make a genuine difference, we can't do this alone. Neither can growers. So we will work together with our partners in Australia and around the world to find ways to simplify it. Together, we will develop simple, practical and innovative solutions in crop protection and beyond. We will support our partners to ensure growers can get things done, ultimately helping farming and its status to grow. We will connect people through relationships across the global farming community with an honest, open and agile approach. We will use digital technology to build and run a powerful network that brings people together.

We look forward to telling you more about the Adama story as you join us on our exciting new journey.

ADAMA

Simply. Grow. Together.



TO ENABLE DEEPER INSIGHTS INTO THE FINANCIAL, PRODUCTION AND EXPORTING PERFORMANCE OF POTATOES, WE HAVE DEVELOPED AN INFORMATIVE VEGGIE STATS PROFILE TO UNCOVER THE KEY FACTS AND FIGURES OF POTATOES.

The potato industry is a significant contributor to both national and regional economies. In 2012-13, the potato industry contributed around \$690 million in value to the national economy, which totals approximately 18 per cent of the value of all Australian vegetables produced.

However, Australian potato growers are undoubtedly experiencing significant pressure to continuously explore new opportunities, adopt new farming technologies and adjust the scale and nature of their operations to remain financially viable.

This notion is clearly supported by recent estimates that suggest the average returns of Australian potato growing enterprises fell by 47 per cent in 2011-12, from the previous year. The main factor leading to this fall in returns are steady increases in production costs since 2009-10, according to the

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES).

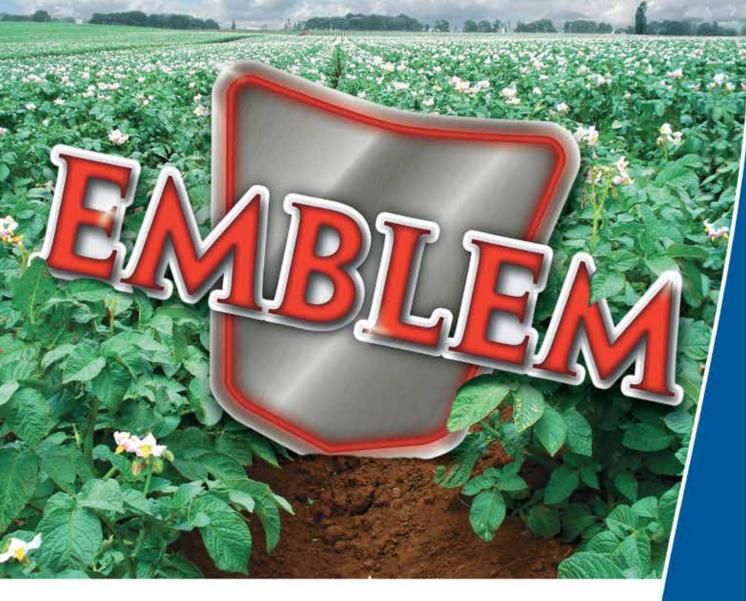
Introducing Veggie Stats

The following Veggie Stats article has been developed specifically to give readers a detailed snapshot of the key facts and figures on potatoes. It is important to note that these figures do not differentiate between seed, fresh and processed potatoes. Veggie Stats utilises data from ABARES and the Global Trade Atlas. The data itself provides a broad indication of the performance of potato growers and should be interpreted carefully.

The data is presented at the national level and therefore does not account for differences among jurisdictions. It is not specific to every Australian grower since each enterprise operates differently from one



Your badge of protection from Sclerotinia and Late Blight



Emblem® fungicide provides potato growers the only registered fluazinam product for the protection of their crops from both Late Blight and Sclerotinia.

- New group 29 chemistry for potatoes for resistance management
- · Provides very high protectant activity on leaves, stems and tubers
- · SC formulation compatible with early blight fungicides
- Can be used throughout the crop cycle
- Rainfast after 2 hours (up to 40mm of rain)
- Safe to all varieties of potatoes
- IPM friendly







Potatoes Production – Key facts and figures

- Potato growers' returns, on average, have been stagnant since 2007-08, however, fell by 47% in 2011-12.
- Since 2007-08, average domestic potato prices have increased by 7%, whilst average costs have increased by 31%.
- Potato production has increased on average by 14% since 2005-06, although potato production fell by 26% in 2011-12.
- Fresh potato exports are one of Australia's largest vegetable exports, valued at \$24 million in 2012-13.
- Indonesia and South Korea are the largest importers of Australia's fresh or chilled potatoes, occupying more than 40% of this market.

Australian Potato Growers' Financial Performance (average per farm)



Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 68 Returns: The difference between price and costs (including imputed labour).

Current Financial Performance

Australian potato growers' returns on average totalled \$59 per tonne in 2011-12, down 47% on the previous year.

In 2011-12, the average price received per tonne of potatoes was \$375, whereas the average cost to produce a tonne of potatoes \$316.

Long Term Trends

Potato growers' returns, on average, have been relatively stagnant since 2007-08.



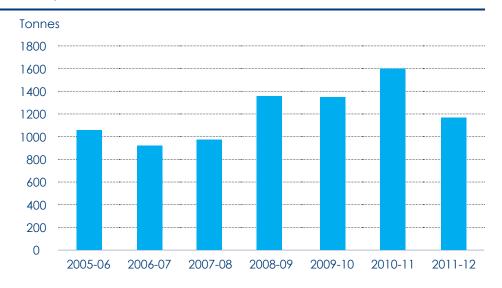
Australian Potato Growers' Production (average per farm)

Australian Potato Production

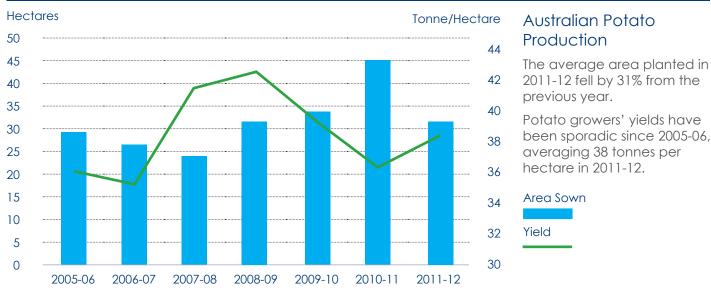
Australian potato production averaged 1,177 tonnes in 2011-12, down 26% on the previous year.

Despite annual variations, average potato production has increased over time.

Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 68



Area Planted v Yield (average per farm)



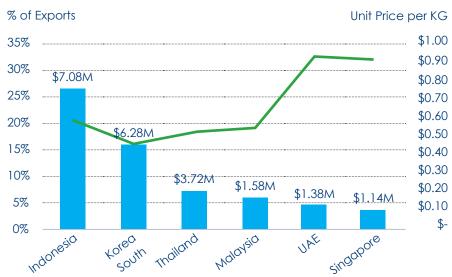
Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 68

Destination of Australian fresh and chilled Potato Exports and Export Prices Received

Exports

The majority of Australia's fresh or chilled potato exports were sent to Indonesia and South Korea in 2012-13.

Australia's fresh or chilled potato exports received the highest export price per kg from the UAE and Singapore, whilst the lowest export price was South Korea at \$0.53 per kg.



Source: Global Trade Information Service, sourced from Australian Bureau of Statistics International Trade data, various years

International R&D Update

Generic marketing: Approach with caution

GENERIC MARKETING OF POTATOES IS A PRACTICE CARRIED OUT WITH THE EXPECTATION THAT INCREASED PROMOTION WILL LEAD TO INCREASED CONSUMPTION. HOWEVER, NEW FIGURES RELEASED BY THE UK POTATO COUNCIL APPEAR TO TELL A DIFFERENT TALE.

The primary aim of taking a broad approach to the marketing of potatoes is to increase the overall consumption of the product. Despite the practice having pockets of support both within Australia, and overseas, new figures from the UK Potato Council call into question the effectiveness of such approaches.

Unlike in Australia, the British levy system allows the UK Potato Council to spend levy funds in any way, provided that they comply with European Union regulations. This includes projects for marketing purposes. However, despite ongoing investment in the generic marketing of potatoes within the UK, consumption has continued to fall.

In a bid to better understand the slide, the UK Potato Council has recently completed and released a report entitled *A Fresh Challenge: Addressing the volume decline.*

The numbers

The report studied groups who were buying up to 20 per cent fewer potatoes year-on-year. It was found that there had

been an 8 per cent drop in the volume of fresh potatoes sold in the UK in the past year, despite a 3.8 per cent rise in the value of the fresh potato category.

Furthermore, the study suggested the buying patterns of shoppers were dictated by unconscious decisions, with over 90 per cent of respondents who were buying fewer potatoes indicating they did not realise they had altered their purchasing habits.

Although UK consumers were buying fewer potatoes, the report found the health benefits of potatoes were still known to the market, with 82 per cent of those buying fewer potatoes still ranking them in the top

three of healthy carbohydrates. Consumers were also opting for a more diverse selection of carbohydrates, with 33.4 per cent of those buying fewer fresh potatoes choosing to branch into other sources of carbohydrates such as bread, pasta and rice.

While price was also an important factor to 20 per cent of respondents in the study,

more than half of those who were buying fewer potatoes believed the prices of potatoes had either risen slightly or stayed the same in the past year. Potato food waste was also front of mind for many in the UK, with the study showing that only 54 per cent of potatoes purchased were consumed. The leftovers from cooking too much, or potatoes



Last year, during discussions with UK Potato Council CEO Dr Rob Clayton, as part of the Potato International Networking project, he acknowledged marketing campaigns had likely not increased consumption but rather helped stem the decline.





not being used in time, were found to be the primary reasons for wastage.

Addressing the decline

The decline in potato consumption in the UK comes despite ongoing investment in generic marketing focused on selling potatoes as a 'package' promoting health benefits and environmental sustainability. Marketing activities carried out to date have included widely spruiking the health benefits of potatoes and initiating programs

across UK primary schools and high schools.

Last year, during discussions with UK Potato Council CEO Dr Rob Clayton, as part of the Potato International Networking project, he acknowledged marketing campaigns had likely not increased consumption but rather helped stem the decline.

Dr Clayton said that, as such, the organisation had shifted its focus from 'volume to value' in acknowledgment of the fact that while consumption may not be increasing, there may be scope to improve value.

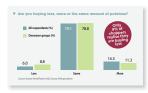


A fresh challenge

Addressing the volume decline

New research with an action plan to halt the decline:

Reducing purchase is an unconscious decision



- Need to fight for relevance against competitors and convenience is the main area to focus on
- Important to become more than a base for healthy meals
- Need to play harder at the fixture and when shoppers are planning meals
- Increase meal and purchase repertoires
- Value and price are a concern for a minority

Fighting back...







Source: UK Potato Council, www. potato.org.uk

Improving value

In an effort to increase value and stem the volume decline, the UK Potato Council has turned to a number of strategies, including promoting some varieties of potatoes for various purposes, focusing on the key words 'fluffy', 'salad' and 'smooth'.

Using the knowledge gained from the report, the UK Potato Council has also developed a 'fight back' plan that includes initiatives like increasing the focus on convenience, further promoting health benefits, using shopper signposting and attempting to increase the number of potato dishes in the weekly meal repertoire, through steps such as providing shoppers with new recipe ideas.

It remains to be seen whether or not these initiatives will help address the volume decline.

A work in progress

Stepping away from generic marketing, there have been other campaigns undertaken in the UK, linked to specific brands, which have shown some promise. A signposting campaign for Rooster potatoes

– a branded product suitable
for roasting, baking in the jacket
and chipping – is believed to
have helped increase consumer
awareness for the particular
brand of potatoes as well as
other types.

Final word

While the Australian levy system does not allow expenditure of levy funds for marketing purposes, it is important to look overseas for developments and initiatives which could assist the industry here.

Yet while Australian potato growers and the industry as a whole are constantly on the lookout for initiatives that could encourage consumers to buy more potatoes, based on the UK example, it seems clear that any steps towards generic marketing of potatoes should be taken with extreme caution.



For more information on the study, visit the UK Potato Council website: www.potato.org.uk.



A golden result in herbicide chemistry

SCOTT MATHEW, TECHNICAL SERVICES LEAD AT SYNGENTA, PROFILES AN ALTERNATIVE SOLUTION TO TACKLE PROBLEM WEEDS IN POTATO CROPS, INCLUDING ANNUAL RYEGRASS AND NIGHTSHADE.

In Australia there are seven weed species that have populations that are already confirmed as resistant to Group C herbicides. There are also growing populations of Annual Ryegrass that have developed resistance to multiple herbicide Mode of Action (MOA) groups including Group A, Group B, Group C, Group D, Group L, Group M and Group Q.

Potato growers in particular have long-awaited new chemistry for effective control of Annual Ryegrass and Nightshade in their crops. Controlling these weeds in potato crops is critical as weed competition and biomass reduces potato yield and quality. It is estimated that for each 10 per cent increase in weed biomass of annual weeds, potato crops can incur a 12 per cent decrease in yield.

The most critical time for weed control is four to six weeks after planting when eliminating competition for essential water and nutrients. As the crop develops, weeds that emerge closer to row closure will generally be suppressed by crop growth.

For Australian potato growers there are very few herbicide options for selective dicotyledon (broadleaf) and grass weed control that are suitable for use during early crop development and prior to row closure. The registered herbicides among these which do offer broadleaf control only represent three different MOA groups and are dominated by Group C herbicides.

New option

It is for this reason that Syngenta has successfully registered BOXER GOLD preemergent herbicide for use in Australian potato crops. It has been specifically developed for Australian potato growers under local conditions with excellent results and delivers alternative chemistry for problem weeds including Annual Ryegrass and Nightshade.

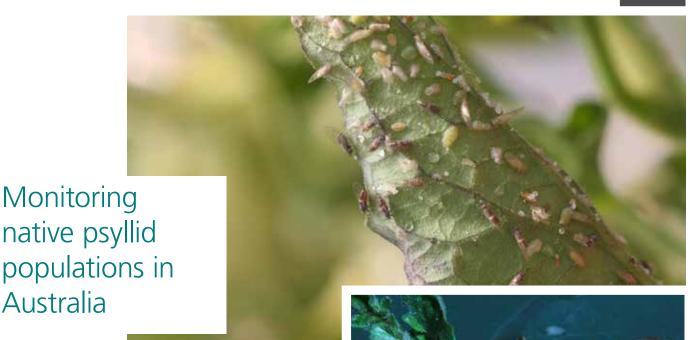
The product contains 800g/L of prosulfocarb and 120g/L of S-metolachlor formulated as a non-staining emulsifiable concentrate with Group J and Group

K modes of action. It is registered for the control of several key weed species including Annual Ryegrass (with control of Group A and Group D resistant populations), Blackberry Nightshade and Glossy Nightshade (refer to the product label for a full list of weed species).

The most effective application of this new product is after planting following the first cultivation, but no later than 25 per cent potato shoot emergence. Always follow the full product label for best use, as well as the advice of your agronomist.

Q

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



EFFORTS TO PREVENT THE DAMAGING FOREIGN TOMATO POTATO PSYLLID (BACTERICERA COCKERELLI) ENTERING AUSTRALIA HAVE EXTENDED TO THE COMPREHENSIVE MONITORING OF NATIVE PSYLLID POPULATIONS.

The Tomato potato psyllid (TPP) is a vector of the plant disease *Candidatus Liberibacter solanacearum*, which is most famously associated with causing the Zebra chip disease in potatoes.

In 2006, the psyllid was discovered infesting glasshouse tomatoes near Auckland, New Zealand; however, the pest may have entered the country as early as 2005. Between 2006 and 2009, the TPP spread to other glasshouse crops, outdoor crops such as potatoes, as well as nurseries and gardens throughout the North and South Islands, infesting mainly Solanaceous crops and weeds. The rapid spread was likely to have been through a combination of natural and human mediated dispersal, particularly through the distribution of infested hostplant material

A different plant disease, Candidatus Phytoplasma australiense, was also recently discovered in New Zealand and the TPP has been implicated in its spread. So far this particular phytoplasma has not been detected in Australian potatoes.

However, researchers have

stressed the importance of continued vigilance. To date, Australia has remained free of the damaging TPP.

Setting the trap

Yellow sticky traps were set up in various major potato growing regions in eastern Australia to detect the presence of adult TPP and to act as an early warning system to detect incursions of the pest.

Between February 2011 and March 2014, over 2,300 traps were placed in potato growing regions of Victoria, Tasmania, South Australia, New South Wales and Queensland. Fortunately, no TPP were detected but more than 9,600 native psyllid were trapped. The number of native psyllid trapped was highest in the Penola region of South Australia and lowest in south east Tasmania, and varied considerably between the potato growing regions and time of year. Most traps had no (43%) or only one (20%) psyllid present.

No evidence was found that native psyllid could transmit the *Candidatus Phytoplasma* australiense. Most of the psyllid



caught were incidental captures from nearby vegetation and were unlikely to feed on potato plants, and therefore transmit *Candidatus Liberibacter* solanacearum if it was to enter Australia.

Future action

Workshops for potato growers and other industry stakeholders were held about psyllid identification as well as *Candidatus Liberibacter solanacearum* and *Candidatus Phytoplasma australiense* infestations in potato crops to ensure incursions, if they occur, are detected as early as possible to limit their impact.

Further research to model

the potential distribution of *Bactericera cockerelli* and *Candidatus Liberibacter solanacearum* in Australia will be recommended, and for the existing sticky trap program to be extended to include other Australian Solanaceous crop industries.

An example of psyllid damage

Photos courtesy of Whitney Cranshaw, Colorado State University, Bugwood.org



For more information: AUSVEG Phone: (03) 9882 0277 Email: info@ausveg.com.au Project Number: PT10001



How did you first become involved in the potato industry?

I have been growing potatoes with my family since I left school in 1999, so it's in my blood I suppose. My grandfather Jim, father Frank and uncle Tony were also potato growers. My grandfather started growing potatoes in the 1960s and I don't think we have missed a year since. Potatoes have been good to us in the past but are becoming more competitive these days.

What is your role in the business?

My role in the business is the daily routine stuff such as ground preparation, planting, spraying, quality assurance and marketing. Because we grow a number of different crops, this happens all year round so our family is fairly busy most of the time. I am still lucky enough to have my parents in the business as well.

What do you most enjoy about working in the potato industry?

I really enjoy growing potatoes from planting to harvest. They are a really challenging crop to grow sometimes, but they are a picture to watch grow; seeing that end product going into one of our bags or boxes is really satisfying. Also events like the Field Days and the AUSVEG Convention in Cairns are great. Although it was my first Convention it was really good to meet all sorts of veggie growers and potato growers.

What are the biggest challenges that you face as a grower?

Challenges as a grower would be rising input costs, power increases, water pricing, fertiliser, chemical, freight and lower pricing. Margins are getting tighter so keeping growers like myself in the industry is getting harder. Here on the Tablelands the number of young growers has reduced by half because of these reasons.

What do you see as some of the greatest threats facing the Australian potato industry?

Challenges I think for the industry are the risk of more imports, the shrinkage of the central markets, domination of the chain stores as well as losing our good varieties. I believe that varieties are being marketed on the basis of volume because of tighter margins, and not on the basis of quality of eating, which equates to the consumer not getting what they are used to,



like the good old Sebago variety, that can be cooked in any way.

Where do you see opportunities for growth in the Australian potato industry?

I think there could be more opportunity in the fast food industry, fish and chip shops etc, if imports were reduced and we could get some good marketing back into these consumers about good Aussie potatoes. I really think good marketing is the key for good varieties.

If you weren't working in the potato industry, what would you be doing?

Still farming on the family farm just growing our other crops.

Where do you see yourself in five years?

Right here where I am now, but hopefully growing more produce for the increase in demand that is hopefully coming. I believe we will be even more efficient I think and doing an even better job of what we are already doing.







FAR NORTH QUEENSLAND WAS THE PLACE TO BE IN JUNE, AS POTATO GROWERS FROM ACROSS THE COUNTRY VISITED THEIR COMRADES IN THE TROPICS DURING THE INAUGURAL AUSVEG POTATO FIELD DAY.

With the Atherton Tablelands on the cusp of a new growing season, it was the perfect time for potato growers, processors, researchers and technical experts to come together for a Sunday outing.

On 22 June, following the close of the highly-successful 2014 AUSVEG National Convention, Trade Show and Awards for Excellence, Queensland turned on perfect weather for a tour that gave almost 50 participants the chance to look around three major potato operations in the fertile plateau of the Tablelands region.

A range of industry leaders were on hand to impart their wisdom to attendees during the Potato Field Day, which built upon the comprehensive work communicating valuable industry R&D carried out within the Potato Industry Extension Program. The event also gave participants the opportunity to network and discuss the

season ahead, as the group represented almost every major potato growing region in the country.

Farmers of the north

The first stop on the Field Day was a visit to Cuda Farms, one of the largest potato producers in north Queensland. Participants met with grower Frank Cuda, who has helped steer the Northqual co-operative which currently produces an impressive 15,000 tonnes of potatoes across 400 hectares each year.

The tour group heard that the farm's location in far north Queensland posed plenty of challenges when it comes to transportation. It was a point that Frank highlighted during the tour, as he stressed that only the best quality produce can survive the long journey to his customers along Australia's eastern seaboard.

Top-notch potatoes were also

a clear objective at the farm of David Nix, who was recently acknowledged for his efforts in developing an innovative bulk-bag-lifter paddock trailer when he received the Community Stewardship Award at the 2014 AUSVEG National Awards for Excellence.

Participants also witnessed the freshness of David's produce with a visit to a paddock of kipfler potatoes, before they tucked in to a BBQ lunch – complete with potato salad, of course.

Finally, the tour group stopped by the Pensini farm, a family-owned operation, with roots tracing back to the late 1920s. Despite the fact that potato growers endure a tough time working the land, the Pensini family remains optimistic about the future of the industry.

Expert advice

Amid the picturesque surroundings of the Tablelands,

technical experts and researchers were on hand to speak to the group about a range of research and agronomic-related issues including crop management, nutrition practices and monitoring of potato diseases.

A highlight for many growers was an update from Plant Virologist Brenda Coutts, from the Department of Agriculture and Food Western Australia, who gave an overview of the important research she has undertaken on Potato virus Y (PVY) in the past two years.

Ms Coutts, who was a joint recipient of the Researcher of the Year award at the 2014 AUSVEG Awards for Excellence, explained that she is currently completing a literature review on the current knowledge relating to PVY and conducting a survey of growers to better understand their concerns. To read more, turn to page 34.

Presentations on crop nutrition and fertiliser application

practices were also given by Haifa Australia CEO Trevor Dennis and Stephen Ziebarth, a Queensland-based agronomist from Yara Australia. Afterwards, AUSVEG representatives provided an outline of some of the industry-funded research and development projects that are currently underway and how these are being communicated to growers through the Potato Industry Extension Program.

Grower feedback

As the day drew to a close, participants walked away with plenty of newfound knowledge of the life of a potato grower in the Atherton Tablelands, as well as an understanding of the new technologies and farming practices that could have strong benefits for producers nationwide.

Sam Humphries, a thirdgeneration fresh potato grower and winner of the Rising Star of the Year Award at the 2014 AUSVEG Awards for Excellence, said it was interesting to compare the unique conditions facing a potato grower in tropical Queensland to his experiences back home in South Australia.

"It was a great opportunity to meet other growers from around Australia. I've never been to the Atherton Tablelands so it was good to see a region that's up in the tropics and completely different to where we are," Sam said.

"I think it was a really good experience to see a different growing region and to get out and see three different farms."

After witnessing the famous deep red soil that is unique to the Tablelands region, there's no doubt that participants were impressed with the quality output of their north Queensland counterparts.



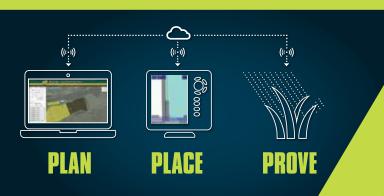
For more information on the 2014 Potato Field Day contact: AUSVEG

Phone: (03) 9882 0277 Email: info@ausveg.com.au





Jason Fritsch, General Manager Field Operations, Kagome





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Growers:Have your say on PVY

FURTHER RESEARCH INTO
POTATO VIRUS Y, A SERIOUS
DISEASE THAT AFFECTS POTATO
INDUSTRIES WORLDWIDE,
IS CURRENTLY UNDERWAY.
POTATOES AUSTRALIA
OUTLINES THE NEXT STAGE OF
THE PROJECT, WHICH GIVES
AFFECTED GROWERS THE
CHANCE TO PROVIDE FEEDBACK
ON THE ISSUE.

The damaging ramifications of a crop that has fallen victim to Potato virus Y (PVY) is nothing new to the readers of *Potatoes Australia*. Much work has been done in this area, led mostly by the Department of Agriculture and Food Western Australia's (DAFWA) Plant Virologist Brenda Coutts, a joint recipient of the prestigious Researcher of the Year award at the 2014 AUSVEG National Convention, Trade Show and Awards for Excellence in Cairns.

PVY causes yield and quality losses in potato crops and also affects seed potato certification. It is widespread in the major potato growing regions of Australia, with several strains being present. Therefore, PVY has been identified as one of the biggest problems facing potato growers.

New project

Ms Coutts is currently working on a project that will dissect the industry's current knowledge of PVY in potatoes, both in Australia and overseas. The project entails a literature review which will focus on the





Self-sown crops can be a source of PVY.

various strains of PVY, hosts and vectors of the virus, virus epidemiology, current detection methods, varietal resistance and susceptibility and management approaches.

The literature review will identify the current gaps in knowledge of PVY in Australia, with consideration given to relevant research that has been conducted overseas. The project is funded by Horticulture Australia Limited using the National Potato Levies and matched funds from the Australian Government.

Latest findings

While PVY is primarily known to be spread by aphids, recent experiments show the ordinary strain of the virus (PVYO) could be readily transmitted from infected to healthy potato plants by direct contact when leaves are rubbed against each other, such as when machinery moves through a crop.

To minimise PVY spread in potato crops, Ms Coutts recommends implementing an integrated disease management approach.

"Use virus tested seed. Selfsown potatoes are often a source of PVY; for subsequent or nearby crops these need to be controlled. Also, monitor crops regularly and virus test," she said.

Brenda Coutts.

"We recommend planting small whole seed tubers rather than cutting seed tubers if possible. If cutting seed, always use disinfectant as there are other viruses that are spread by contact, such as Potato virus X and Potato virus S."

Researchers also found that bleach (42g/litre sodium hypochlorite, diluted 1:4) or Virkon® (diluted to 1%) stopped the spread of PVYO. However, Ms Coutts said it is important to rinse equipment with water if disinfecting with bleach in order to prevent corrosion.

"This study demonstrates PVYO can be transmitted by contact and highlights the need to include removal of volunteer potatoes and other on-farm hygiene practices such as decontaminating tools, machinery, clothing etc. in integrated disease management strategies for PVY in potato crops."

Grower survey

In addition to the literature review, DAFWA has developed a short grower survey on PVY to gather feedback from affected growers. The survey will help ensure researchers better understand the current status of PVY across Australia and the grower practices used to control the virus.

The results will help provide recommendations for future research on PVY that will provide the most value to the Australian potato industry.

"I welcome and value grower input into suggesting future research and their concerns as (the research) needs to be relevant to their industry needs," Ms Coutts said.

You can access the survey by visiting: www.surveymonkey. com/s/potatovirusY.



For more information on Potato virus Y, contact DAFWA Plant Virologist Brenda Coutts. Phone: (08) 9368 3266 Email: brenda.coutts@ agric.wa.gov.au Project Number: PT13006



RESEARCHERS AT TWO SCOTTISH UNIVERSITIES HAVE MADE A BREAKTHROUGH IN UNDERSTANDING HOW THE MICROBIAL SPORES THAT CAUSE POTATO BLIGHT ARE SO EFFECTIVE AT INFECTING PLANTS.

Phytopthora infestans is a highly destructive plant pathogen. The cause of the infamous Irish Potato Famine (1845-1852), the pathogen still remains a significant global problem to this day with associated costs estimated at US\$3 billion around the world every year.

The pathogen is successful at dispersing itself via free-swimming cells called 'zoospores'. Infection of the potato plant is spread through water by the release of these tiny spores, but the mechanism by which they co-ordinate an attack on plants has been poorly understood, until now.

Researchers have found that as the spores clump together in water, increasing the chance of causing infection, they use two mechanisms to attract enough spores to attract plants. This happens over two different timescales.

What the researchers say

Dr Fordyce Davidson, an expert in Mathematical Biology at the University of Dundee, said: "One zoospore on its own is unlikely to kill a plant but they have developed a swarming behaviour which makes them much more effective. Once there are enough zoospores gathered together they generate sufficient infection pressure to allow the pathogen to get into the plant and kill it.

"A poorly understood aspect of their behaviour is something called 'auto-aggregation', the spontaneous formation of large-scale patterns in cell density. Previously there were competing hypotheses that these patterns were formed by one of two distinct mechanisms. What we have shown is that both mechanisms ... are involved, each having a distinct, time separated role.

"This greater understanding of how this pathogen works to infect plants will in the longer-term lead to advances in preventative treatment," he said.

Building on knowledge

How the spores were able to carry out this relatively sophisticated behaviour had previously been a puzzle.

As a result, the researchers placed millions of zoospores into a petri dish to establish the patterns they formed. What they saw reminded them of mathematical models they'd seen before that were formed by chemical sensing patterns.

"Bio-convection is a sort of swimming pattern we see in the zoospores. If you take a little cell, which looks like a coffee bean with a fatter bottom, then they'll swim upwards because of gravity. It's a very rapid process that works (in) the order of minutes. It sets up convective plumes, which are structures in the liquid, pushing the cells to the top where they can group together," Dr Davidson said.

The second mechanism was a form of chemical sensing.

Similar to animals being attracted to pheromones, the zoospores are able to send chemical signals to draw in other zoospores.

"The chemical-sensing mechanism happens (in) the order of four to five hours. If you have lots of these in plumes in a water drop formed by bioconvection, then the chemical sensing draws these plumes together until you get one super plume, to really drive in the infection."

Late blight photo courtesy of Howard F. Schwartz, Colorado State University, Bugwood.org



Source: Potato Pro website: www.potatopro.com; Universities of Dundee and Aberdeen.



Minimise risk to maximise certainty

THIS EDITION OF *THE FRONT LINE* HIGHLIGHTS CURRENT GOVERNMENT INITIATIVES TO IMPROVE THE MANAGEMENT OF BIOSECURITY RISK IN AUSTRALIA.



Imported plants, animals and other goods can act as a pathway for pests and/or diseases to enter, establish and spread in Australia; harming the environment, economy and community. The Federal Department of Agriculture is responsible for identifying and managing this risk.

The department's Import Risk Analysis (IRA) process identifies pests and/or diseases of quarantine concern that may be carried on an imported good. Once a pest and/or disease has been identified, the department assesses the probability of that pest or disease entering, establishing and spreading in Australia, and the magnitude of harm that could result.

Calculating risk

A number of concerns have been raised about how the IRA

calculates risk. These concerns were particularly evident following the department's 2012 release of a draft IRA for imported fresh potatoes from New Zealand. A subsequent Senate Inquiry recommended that the department review its IRA processes, in particular the mechanism used to calculate risk.

Federal Agriculture Minister Barnaby Joyce recently announced a review into the department's IRA processes.

"Our import risk analysis process is a fundamental tool in maintaining the integrity of our nation's level of biosecurity protection. Ensuring it is robust, transparent and scientifically based is essential for Australian farmers and exporters," he said.

"It's important that we maintain our relative freedom from harmful pests and diseases but it's also important that we retain an IRA process that does not create trade barriers that contravene international trade rules."

Feedback welcome

The department has released a discussion paper which explains the IRA process and Australia's international trade obligations. Readers of *The Front Line* are encouraged to access the discussion paper and consider options for change or improvement of the IRA process.

"I am asking everyone to provide their input – whether you're an importer, an exporter, a retailer, a producer, or any other organisation involved in the supply chain and even if you're just simply interested," Mr Joyce said.

The discussion paper can be accessed at www.daff.

gov.au/ba/ira/iraexamination/ discussion-paper. Submissions may be made electronically to biosecurityconsultation@ agriculture.gov.au or in writing to:

Service Delivery Division Biosecurity Regulation and Reform Policy Department of Agriculture GPO Box 858 Canberra ACT 2601



For more information, see the Department of Agriculture website or contact AUSVEG Biosecurity Officer Dean Schrieke on (03) 9882 0277 or email dean. schrieke@ausveg.com.au

Tassie growers impress visitors from the west

In July, a group of potato growers from Western Australia visited key production areas in north-west Tasmania as part of a self-funded domestic study tour.

The delegation consisted of 14 fresh market, seed and processing potato growers from the Manjimup/Pemberton region in the south-west of the state, as well as representatives from the WA Potato Marketing Corporation and Murdoch University in Perth.

The state's advances in soil and disease management were a talking point of the tour, as the group visited several leading potato producers in Tasmania. This included Sheffield-based grower Darren Long, who gave participants a first-hand look at how he uses biofumigation to enhance the structure and health of his soils.

The group then heard from Tasmanian researcher John McPhee, who outlined the key principles of controlled traffic



farming. Dr Kevin Clayton-Greene discussed some of the research findings of the Australian Potato Research Program Phase 2 (APRP2), while Simplot's Les Murdoch talked about the need to better understand the fundamentals of growing potatoes. Dr Doris Blaesing spoke to the group about a range of issues, including maintaining the health and quality of seed potatoes through the supply chain.

AUSVEG also gave an overview of the latest updates in the Potato Extension Program initiative, current potato R&D activities and findings, as well as matters relating to the National

Potato Levies and the investment of levy funds into beneficial R&D projects.

The event proved to be an extremely valuable opportunity for WA potato growers to meet their Tasmanian colleagues and hear about some of the unique production issues they are facing in their region.

CALENDAR of events







17-22 August 2014

International Horticultural Congress

Where: Brisbane, QLD

What: Held every four years at various sites around the world and attracting more than 2,000 delegates, the Congress is a world forum covering all aspects of horticulture and horticultural science. The 29th Congress, which will be held in Brisbane, is only the second IHC to be held in the southern hemisphere – so don't miss out.

Further information:

www.ihc2014.org

28-30 July 2015

9th World Potato Congress

Where: Beijing, China

What: The World Potato Congress is dedicated to supporting the global growth and development of the potato. It is the first time the Congress will be held in the Beijing region and will be staged at the base of the Great Wall of China. It is expected that more than 900 delegates from developing and developed countries will attend the conference.

Further information:

www.potatocongress.org





Well it's been another busy couple of months with a lot happening in our industry.

Unfortunately I didn't make it to the AUSVEG National Convention in Cairns in June due to commitments on the farm, but from all reports it was another cracking few days with plenty of great speakers and lots to learn at the Trade Show booths.

I received some very positive

feedback about our little page here in the back of *Potatoes Australia* which has encouraged me even more to keep sharing the YPP message. We continue to grow on Facebook every week and everyone involved seems to be enjoying the community that we are creating. If you are not already on board – hop on!

The Convention also saw the launch of the 'Farmhand' App for iPhone and iPad, aimed squarely at spud growers here in Australia. I, along with a couple of other keen YPP peeps, was approached by Adama earlier in the year (then known as Farmoz) to work with them to develop a simple tool to use in the field and in the office. We've really enjoyed working with the Adama team to build this and hope that you will have a look and find it useful.

This neat new App provides a discussion forum where users can ask questions of fellow growers, as well as Adama and independent experts to get tailored answers to specific questions. It also gives users the ability to capture all crop protection and fertiliser application records by paddock, which are easily accessible and able to be emailed at any time. There are a number of other functions too so check them out by downloading 'Farmhand' at the Apple App Store today.



Name: Sara Exton

Age: 28

Location: Kinglake, Victoria Hobbies: Netball and following the Magpies. Also working around the farm with sheep, cattle and

spuds.

What is your involvement in the potato industry?

Since a young age I have always had an interest in the farm and grew up on a spud farm. After studying and working in Melbourne, I returned home to the family farm in December 2008 to work alongside Dad growing seed potatoes.

What part of the potato season challenges you the most?

My biggest challenges each season since the 2009 Black Saturday bushfires is having to do things the hard way since losing our packing sheds and some machinery in the fires. Having limited spud bins and access to sheds is always challenging at harvest time.

If you could travel anywhere to learn more about potatoes, where would you go?

South America.

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