Horticulture Innovation Australia

Final Report

.....h '@ '- 'h

Mr Richard Mulcahy AUSVEG Ltd

Project Number: PT11004

PT11004

This project has been funded by Horticulture Innovation Australia Limited with funds from the Potato Industry Levy and the Australian Government.

Horticulture Innovation Australia Limited (Hort Innovation) makes no representations and expressly disclaims all warranties (to the extent permitted by law) about the accuracy, completeness, or currency of information in Potato Industry Extension Program.

Reliance on any information provided by Hort Innovation is entirely at your own risk. Hort Innovation is not responsible for, and will not be liable for, any loss, damage, claim, expense, cost (including legal costs) or other liability arising in any way (including from Hort Innovation or any other person's negligence or otherwise) from your use or non-use of Potato Industry Extension Program, or from reliance on information contained in the material or that Hort Innovation provides to you by any other means.

ISBN 0 7341 3775 3

Published and distributed by: Horticulture Innovation Australia Limited Level 8, 1 Chifley Square Sydney NSW 2000

Tel: (02) 8295 2300 Fax: (02) 8295 2399

Contents

Summary	3
Keywords	
Introduction	
Outputs	
Outcomes	
Recommendations	
Scientific Refereed Publications	
Intellectual Property/Commercialisation	27
Appendices	29

Summary

The Potato Industry Extension Program (PT11004) was the Australian potato industry's key source of R&D information. Aimed specifically at growers, agronomists and processors, the program aimed to bridge the gap between R&D outcomes and these key stakeholders.

The program used a number of different extension methods to do this, including modern and traditional platforms, such as email newsletters, media, magazine articles and podcasts. A hugely successful element of the program were R&D workshops that brought industry researchers to growing regions to discuss their work face-to-face with growers. The R&D workshops achieved large participation numbers and were known amongst growers as excellent opportunities to increase knowledge and build networks. Face to face farm visits were also a cornerstone component of the program.

The program was extremely successful in improving growers' knowledge of R&D outcomes, with 90% of respondents finding that the program helped to increase their awareness of beneficial R&D information.

APRP2 was important to the program and a lot of information extended was resultant of APRP2. A leading outcome was PreDicta Pt, a DNA soil test developed by the South Australian Research and Development Institute (SARDI). This outcome was recognised as a beneficial development by growers and has been used increasingly by growers in regions with suitable soils.

The Potato Industry Extension Program coordinator was a key contact for industry stakeholders seeking R&D information. As the only national extension officer in the industry, the program coordinator kept abreast of issues affecting each potato growing region and was able to ensure that necessary and beneficial information was communicated to growers, agronomists and processors.

Keywords

Potato, extension, research and development, R&D, potato industry extension program.

Introduction

From 2012 – 2015 the Potato Industry Extension Program was the Australian potato industry's key source of local and international R&D information.

The program was established after it was identified that there was a missing link between the outcomes of R&D projects and the growing community. The aim of the program was to increase the knowledge of R&D information and implementation of new practices by potato growers and the supply chain. Agronomists and processors were targeted by the program as they are key reference points for growers involved in the process of practice change.

Guided by a specialist Reference Group made up of potato industry experts, the program used a number of communication methods to target growers, agronomists and processors. The Reference Group would also provide input on key pieces of R&D information the program should communicate.

Central to the program were regional R&D workshops and field walks that brought researchers to potato growing areas to meet with growers face-to-face. These workshops provided growers with the chance to discuss industry issues with other growers, and agronomists and build networks.

Additional methods for communicating R&D information were also utilised by the program, including email newsletters, magazine articles, media and podcasts.

The Potato Industry Extension Program coordinator was a central contact for growers, agronomists, researchers and other industry stakeholders who were seeking industry information and R&D outcomes.

Methodology

The Potato Industry Extension Program was run by a dedicated coordinator. The program coordinator became the direct link between growers, agronomists, processors and R&D information and was the first point of contact for industry stakeholders seeking news and information. The program coordinator developed trust and confidence from the industry as a reliable source of information and sounding board for those wishing to have their say and share their views.

A National Potato Reference Group was established and made up of a seed potato grower, a processing potato grower, a potato processing representative, the Horticulture Innovation Australia (HIA) Industry Services Manager for potatoes, an agronomist and the AUSVEG CEO.

The program coordinator would report to the Reference Group on the program's activities and achievements. Annual Reference Group meetings were held, along with a number of teleconferences when deemed necessary to discuss the program. Annual Operating Plans were also developed for each year of the program and assessed by the Reference Group before being finalised for implementation.

Annual Operating Plans would include a timeline of all the program's outputs and information regarding events, such as proposed regions for R&D workshops. The Annual Operating Plans would be endorsed by the Reference Group, however, plans would occasionally change as each year progressed and feedback was given by the growing and agronomy communities. When possible, the Reference Group was consulted on amendments to the plans. An example of an Annual Operating Plan that was put forward to the Reference Group for consideration can be seen in Appendix 1.

The implementation of these plans were then reported on to HIA on a six-monthly basis in Milestone Reports. Milestones would discuss the program's outputs and activities and their success.

At the beginning of the program additional meetings were also held with a number of industry stakeholders including leading growers, agronomists and researchers to discuss their thoughts on the industry and the aims of the program. These meetings were also beneficial in planning information for dissemination and understanding the needs and wants of growers.

A core part of the program was face-to-face farm visits and workshops/field days in the main potato growing regions. Using AUSVEG's substantial database of growers, agronomists, researchers and supply chain representatives, information regarding the Potato Industry Extension Program was also sent around the country. A dedicated Potato Industry Extension Program contact list was then established and used to promote information solely related to the program.

This was highly beneficial in advertising regional workshops, R&D programs and annual surveys, as those who were on the contact list were actively involved in the industry and keen to improve their knowledge and practices.

The Potato Industry Extension Program utilised all platforms of communication at its disposal in order to disseminate information to growers and agronomists. As potato growers have less access to technology than some other industries, it was important that more traditional methods of communication were used. This included promoting events via post, fax and telephone, and utilising print media and radio.

Digital communication was still heavily utilised, however, as the industry is seeing uptake of new technology. This included sending newsletters, invitations and annual surveys via email.

As there are fewer state-based extension officers in the Australian potato industry than there were in eras gone by, the role of a national R&D extension coordinator was vital in terms of someone that could make knowledge and R&D information widely accessible.

Outputs

The Potato Industry Extension Program generated the below outputs against the KPI's for the program. Targets for each element were met or surpassed, with activities improved upon as the program progressed.

The below outputs provided growers with numerous networking opportunities in local regions and greater access to researchers and other industry experts. The Potato Industry Extension Program coordinator developed extensive knowledge of the industry and was able to report on relevant issues of concern in publications such as *Potatoes Australia* and the program's newsletter. By discussing issues using multiple communications platforms, growers were given every opportunity to hear about the latest industry R&D.

By participating in the National Horticulture Convention each year, the Potato Industry Extension Program was put on display to the entire industry and issues were discussed with experts from other sectors, providing a brilliant opportunity to gain a cross-industry knowledge.

Each activity of the Potato Industry Extension Program is reported on below. These initiatives were regularly evaluated and improved upon via consultation with the Reference Group and consideration of Annual Survey results.

Four workshops per year in key growing regions around Australia.

 Over the lifetime of the project 27 regional R&D workshops were held in potato growing areas around Australia. The workshops were one of the most successful aspects of the program and were widely regarded to be the most valuable and well attended events across the Australian potato industry.

The workshops were used to highlight local and international R&D and innovations in agriculture and horticulture. Guest speakers from around the country were invited to discuss research that they had conducted for the potato industry, while special international guests were also included on occasions. Highlights included Professor Richard Falloon from Plant and Food Research New Zealand and Ms Claire Hodge from AHDB Potatoes (formerly the UK Potato Council). Workshops included a mix of seminars and field walks.

Information presented at workshops was planned after consultation with industry, including the Potato Industry Extension Program Reference Group, regional grower groups, and individual growers. Feedback from previous workshops and annual surveys would also be used to guide the planning of the content and timing of the workshops.

As a result of this, presentations were also regularly provided by growers to their colleagues. This provided the opportunity for grower experiences to be shared, including information on overseas growing practices learnt on industry tours and missions, as well as successful methods for local pest and disease control.

Growers, agronomists and other relevant industry stakeholders were invited to attend the workshops, with attendance numbers regularly reaching between 35 and 50. A workshop held in Devonport in May 2014 saw a record 68 attendees.

In addition to the Potato Industry Extension Program, AUSVEG held a Farm Walk event following the Devonport workshop in 2015 at the property of fresh potato grower Darren Long (MG Farm Produce), in Sheffield, Tasmania. The aim of the Farm Walk was to complement the presentation given by Darren Long at the R&D workshop on the topic, "Using bio-fumigation in potato crops to enhance soil health."

AUSVEG provided the opportunity for 12 potato industry members to take part in the Farm Walk, including a Victorian seed potato grower who travelled to Tasmania to take part in both the workshop and farm walk event arranged by AUSVEG.

A timeline of regional R&D workshops and locations can be seen in the table below.

Date	Location	Topics
March 2012	Devonport, Tasmania	DNA assessments for potato seed, monitoring Zebra chip, common scab treatment, consumer demand for potatoes.
June 2012	Creswick, Victoria	PVY, analysis of potato petioles, DNA testing for soil borne pathogens, soil health and disease mitigation.
August 2012	Murray Bridge, South Australia	DNA testing for soil borne pathogens, Root knot nematode research and analysis of potato petioles.
August 2012	Mount Gambier, South Australia	DNA testing for soil borne pathogens, Root knot nematode research and analysis of potato petioles.
November 2012	Warragul, Victoria	PVY, analysis of potato petioles, DNA testing for soil borne pathogens, testing for Zebra chip pathogens.
February 2013	Bungaree, Victoria	DNA testing for soil-borne pathogens, weevil control, controlled-release fertilisers, crop management and soil health.
March 2013	Gatton, Queensland	DNA testing for soil-borne pathogens, PVY, potato trials in the Atherton Tablelands.
March 2013	Sassafras, Tasmania	DNA testing for soil-borne pathogens, weevil control, foliar nutrition, biofumigation.
June 2013	Creswick, Victoria	Young potato people and business networking, APRP2 and industry R&D,

		soil health and disease reduction.
June 2013	Devonport, Tasmania	Seed potato disease control and DNA testing, on farm innovations, business development strategies.
June 2013	Penola, South Australia	Controlled-release fertilisers, potato industry R&D and industry strategic investment.
September 2013	Pemberton, Western Australia	Powdery scab and soil-borne disease research, PVY, potato skin and tuber quality issues and 2013 Potato Growers Study Tour – USA and Canada.
December 2013	Ballarat, Victoria	Potato pink rot control, controlled- release fertilisers and PVY.
December 2013	Warragul, Victoria	Potato pink rot control, controlled- release fertilisers and PVY.
March 2014	Mount Barker, South Australia	PVY, potato handling and storage best practices, nutrition for high quality potato crops.
March 2014	Pinnaroo, South Australia	Irrigation efficiency and managing soil salinity, Early blight management, crop nutrition.
May 2014	Devonport, Tasmania	Cost of production management, control techniques for potato disease in Tasmania, biofumigation, biosecurity.
May 2014	Gatton, Queensland	Common scab, monitoring the Tomato-potato psyllid, controlled-release fertilisers, biosecurity.
August 2014	Berrigan, New South Wales	Nematode control, PreDicta Pt, agronomy practices for control of target spot, Potato moth and PVY, biofumigation.
October 2014	Mount Barker, South Australia	An overview of the UK potato industry, potato handling best practices, powdery scab management, herbicide plantback periods.
October 2014	Pemberton, Western Australia	An overview of the UK potato industry, potato handling best practices,

		biofumigation, Rhizoctonia control.
November 2014	Warragul, Victoria	PreDicta Pt, Potato Tracker, crop nutrition management, aphid control.
May 2015	Murray Bridge, South Australia	PreDicta Pt, biosecurity and pest and disease management, surfactant efficacy, crop nutrition and fungicide innovations.
May 2015	Devonport, Tasmania	Tasmanian Institute of Agriculture potato research programs, biosecurity and pest and disease management, fungicide innovations.
September 2015 *joint event with DAFWA	Manjimup, Western Australia	Potato virus Y, biosecurity and pest and disease management.
September 2015	Bungaree, Victoria	PCN, Late blight, biosecurity and pest and disease management, herbicide innovations, 2015 China Leadership and Development Mission and World Potato Congress.
October 2015	Warragul, Victoria	PCN, Late blight, biosecurity and pest and disease management, fungicide innovations.



Image 1: Dr Calum Wilson, TIA, presents at an R&D workshop in Gatton, Queensland.

Regional R&D workshops were advertised to industry via direct mail (email, post and fax), as well as through AUSVEG communication channels, including *Potatoes Australia*. See Appendix 2 for an example of a workshop invitation flyer from 2015.

Success in confirming attendances was also found via telemarketing. Due to technology and time constraints of growers, this was one of the most successful methods of settling RSVPs.

A two page Potatoes Extension Report to be published bimonthly in the Potatoes Australia magazine, six publications per year.

• The Potato Industry Extension Program contributed a minimum of two pages of content to *Potatoes Australia* in each edition of the magazine from 2012 to 2015, a total of 24 columns.

The magazine articles were used for a number of purposes, including to discuss industry R&D outcomes and provide updates on projects, advertise and report on Potato Industry Extension Program events such as regional R&D workshops and participation at the National Horticulture Convention, and also to provide news on the international potato industry.

Potatoes Australia is released every two months to Australian potato levy payers and other industry stakeholders including agronomists, researchers, supply chain and policy makers. With an audience of around 3,100, *Potatoes Australia* is the premier publication of the Australian potato industry.

Below is a list of each article published in *Potatoes Australia*.

Edition	Topics	Pages
February/March 2012	Reaching the audience: the Potato Extension Program	Pages 16 - 17
April/May 2012	Extension Workshop in Devonport a success Overview of local R&D programs	Pages 8, 25 – 26
June/July 2012	Overview of industry R&D programs Upcoming Potato Extension Workshops	Pages 26 – 27
August/September 2012	Full house for Potato Extension Workshop in Creswick World Potato Congress 2012	Pages 8, 28 – 29
October/November 2012	 Potato Extension Program materialises in South Australia Online and digital R&D 	Pages 8, 28 – 29
December 2012/January 2013	 Warragul Potato Extension Workshop PIEP Annual Survey An R&D day in the fields 	Pages 8 – 9, 28 - 29
February/March 2013	Tap into efficient irrigation	Pages 30 – 31
April/May 2013	 Potato Extension Program Booth at 2013 Convention From the lab to the field: R&D hits the road 	Pages 8, 30 – 31
June/July 2013	Darren Long - R&D Champion: Small changes, big results	Pages 16 – 18
August/September 2013	Potato Industry Extension Program: On the road R&D Champion Series - Buckley's chance	Pages 20 – 21, 24 – 26
October/November 2013	Future focus – Tasmanian growers talk emerging R&D	Pages 29 – 31
December 2013/January	Potato Extension Program completes its second	Pages 28 – 30

2014	successful year of operation • Potato R&D workshop held in Pemberton, WA • Potato R&D workshops held in Ballarat and Warragul	
February/March 2014	 The export game: Challenges and opportunities for Australian potato producers Spudcasts: Tune-in to Potato Extension Program Podcasts in 2014 Upcoming potato R&D activities 	Pages 18 – 21
April/May 2014	 Sowing the seed: Crookwell on the radar as PIEP touches down South Australian growers embrace potato R&D Charting the course towards effective PVY management 	Pages 18 – 21
June/July 2014	 Tasmanian potato R&D workshop smashes PIEP records Biofumigation Farm Walk held in Sheffield, Tasmania Lockyer Growers seek R&D knowledge 	Pages 12 – 16
August/September 2014	Top 8 potato R&DSpud growers have a field day	Pages 14 – 16, 32 – 33
October/November 2014	The latest news from PIEPPVY grower surveyBerrigan workshop and farm walk	Pages 12 – 14
December 2014/January 2015	R&D workshops a hit across the countryPotato Tracker continues to quiz consumers	Pages 12 – 14
February/March 2015	• PIEP celebrates 2014 and gears up for another productive year	Pages 24 – 25
April/May 2015	 Improving soil health through green manures Seed potatoes on show at the Crookwell Potato Festival 	Pages 10 – 11
June/July 2015	 South Australian and Tasmanian Potato Extension workshops National Horticulture Convention 	Pages 10 – 11
August/September 2015	 Potato Extension Program displayed at National Horticulture Convention PVY workshop in Western Australia 	Pages 32 – 33
October/November 2015	 Workshops encourage Victorian growers to look out for pests and diseases U.S Potato virus Y research 	Pages 8 - 10
December 2015/January 2016	Late Blight Update	Pages 24-25

Please see Appendix 3 for an example Potato Industry Extension Program article from 2015.

A bi-monthly email will be sent to potato growers, agronomists, the supply chain and researchers exploring current issues within the potato industry, six emails per year.

• 24 email newsletters were sent to industry throughout the duration of the project, promoting Potato Industry Extension Activities and disseminating industry R&D information and reports.

Newsletters were sent to a contact list for the Potato Industry Extension Program which was also used to promote additional program activities, such as Annual Surveys and events.

The timing of the newsletter was matched to suit industry events and R&D news, so that it could be used for useful promotional purposes.

In July 2013, a special one off 'Agronomy Update' was issued at the request of the Advisory Committee. While the Agronomy Update included useful information targeted at agronomists, it was later determined that the regular potato extension newsletters would be sufficient.

Below is a list of each email newsletter sent during the program.

Edition	Content
February 2012	Introduction of the program, upcoming
	events, local and international R&D.
April 2012	Industry events, local and international R&D.
June 2012	Local R&D, 2012 Potato Grower Study Tour
	of Belgium and the UK, 2012 World Potato
	Congress.
August 2012	Recent and upcoming events,
	local and international R&D.
October 2012	Potato extension activities and workshops,
October 2012	local and international R&D.
December 2012	Potato extension activities and workshops,
	strategic investment update, local and
	international R&D, industry news.
February 2013	Potato extension activities and workshops,
·	strategic investment update, National
	Convention, local and international R&D,
	industry news.
April 2013	Potato extension activities and workshops,
	National Convention, local and international
	R&D, industry news.
June 2013	Potato extension activities and workshops,
	National Convention, local and international
7.1.0040	R&D, industry news.
July 2013	Special agronomy update.
August 2013	PreDicta Pt information and notice of
	agronomist training, local and international R&D, industry news.
October 2013	Potato extension activities and workshops,
October 2013	local and international R&D, industry news.
December 2013	Potato extension activities and workshops,
Becciniber 2013	local and international R&D, industry news.
March 2014	Potato extension activities, Spudcasts, local
	and international R&D, industry news.
May 2014	Potato extension activities, National
,	Convention promotion, local and
	international R&D, industry news.
July 2014	National convention activities, Spudcasts,
	local and international R&D, industry news.
October 2014	Overview of potato extension activities,
	upcoming activities, local and international

	R&D, industry news.
December 2014	Overview of potato extension activities, local
	and international R&D, industry news.
January 2015	Industry news and special update on
	industry strategic planning.
March 2015	Promotion of R&D workshops and industry
	news.
May 2015	PIEP involvement in the National Horticulture
	Convention, local and international R&D
	news.
July 2015	Report on National Horticulture Convention,
	R&D workshops, PreDicta Pt information and
	notice of agronomist training, industry news,
	R&D outcomes.
September 2015	Promotion of R&D workshops, 2015 China
	Leadership and Development Mission,
	industry news, R&D outcomes.
October 2015	Report on R&D workshops, industry news,
	local and international R&D outcomes.
January 2016	Latest Spudcast, grower visits, review of
	framework and seed certification,
	international R&D news and potato extension
	annual survey.

Please see Appendix 4 for an example Potato Industry Extension Program newsletter, titled *Potato Insights*, from September 2015.

Involvement with annual AUSVEG events such as the Potato Summit will be a key priority and there will be a speaker spot allocated for the Potato Industry Extension Manager at the Potato Summit.

While AUSVEG's Potato Summit was discontinued in 2012, the National Horticulture
Convention was participated in each year in lieu of this. The National Horticulture
Convention has become the premier event in Australian agriculture and is the largest single
gathering of vegetable and potato growers in the country. This presented a brilliant
opportunity for the Potato Industry Extension Program to showcase R&D outcomes and
industry news to growers and the wider horticulture industry.

The Potato Industry Extension Program exhibited at the trade show during each National Horticulture Convention from 2012 to 2015. The program's trade booth would feature R&D information leaflets that were produced on local research programs and pest and disease management. R&D leaflets and information displayed at the Conventions included: Zebra chip, Root knot nematode, controlled traffic farming, Potato virus Y, PreDicta Pt and Potato Tracker.



Image 2: The Potato Industry Extension Program exhibition booth at the 2014 Convention in Cairns, Queensland.

From 2013, the exhibition booth featured industry researchers who discussed R&D programs with booth visitors face-to-face. Please see the table below for a list of researchers featured at the Potato Industry Extension Program trade show booths.

Event	R&D displayed
2013 – Gold Coast, Queensland	Dr Calum Wilson, TIA
	Dr Kathy Ophel-Keller, SARDI
2014 – Cairns, Queensland	Brenda Coutts, DAFWA
	Dr Doris Blaesing, RM Consulting Group
2015 – Gold Coast, Queensland	Ms Jenny Witham and Ms Fiona McKernan,
	Colmar Brunton

A telephone survey of Australian potato growers and agronomists will be completed annually to gauge growers' receptiveness to the program and obtain direct and immediate feedback.

 Surveys of potato growers, agronomists and other relevant industry stakeholders have been conducted each year to evaluate and aid the development of the program's communication and extension initiatives.

In addition to the annual surveys being conducted over the phone, digital surveys were also emailed out to the Potato Industry Extension Program contact list to increase the reach of the survey and gather a larger sample of findings. The completion of surveys was also incentivised with the offering of a prize that respondents went into a draw to win.

Information was gathered not only on the perception and success of the program's initiatives, but also to gain insight into what growers felt the most relevant information to communicate was. This was vital in ensuring that information extended was useful to growers, particularly concerning virus and disease R&D outcomes.

2015's annual survey was expanded, including a range of detailed questions on farming practices and disease management. Questions were used from a 2006 survey conducted by

Dr Leigh Sparrow of the Tasmanian Institute of Agriculture (TIA) for an APRP1 sub-program. This was done as per a recommendation from PT13013 *A review of knowledge gaps and compilation of R and D outputs from the Australian Potato Research Programs* that the survey be replicated to be used as a benchmarking tool and to assist with the extension of R&D. Results from future surveys could be used to measure the uptake of R&D and how much growers are changing their practices based on R&D findings. See Appendix 5 for a sample of questions from the 2015 survey.

Findings from the annual surveys showed that the PIEP was successful in-delivering in depth knowledge to the industry through multiple forms of extended R&D. The below findings show areas which were successful in assisting the industry.

- Attendance at AUSVEG seminars was beneficial with 78.9 percent of attendees saying the information presented by researchers and agronomists was highly relevant for their businesses.
- Awareness of R&D programs was extremely high throughout the program, with over
 87 percent of respondents finding that program helped to increase their awareness
 of beneficial R&D information.
- Over 50 percent of the respondents were likely to implement new practices as a result of information extended through the program.
- Events such as regional R&D workshops and farm walks increased in value to growers as the program went on and more growers became involved in events. A majority of survey respondents found such events to be 'moderately valuable' in 2013, however in 2014 a larger proportion of respondents found events to be 'very valuable'.
- Trends between 2014/2015 surveys continued with R&D events being well received and having a positive impact on attendances by growing operations. Growers and members of the potato industry said the increased knowledge from these workshops had improved their growing operations.
- The 2015 survey found that 92 percent of growers were actively testing their soil for nutrients with 85.7 per cent of growers acting on the advised soil data which they were provided with by agronomists.
- Publications such as *Potatoes Australia*, in which a column on the Potato Industry Extension Program was included in each edition, was found to be 'very valuable' by the majority of respondents.

Media releases written regarding issues to do with the potato industry will be disseminated via the media to growers or agronomists either nationally or specifically targeted regions Target 1 per month.

During the life of the project, a total of 53 media releases were disseminated, surpassing the
target of 48 (one per month). Media releases have been used to promote program activities,
such as R&D workshops, and to communicate local and international research outcomes to
growers and the wider industry using the media.

Releases have been targeted at regional areas when focusing on events, and on a national level when the content is of interest to the entire industry. A list of journalists who focus on the potato and agriculture industry was maintained, with releases sent directly to them to maximise impact.

Two media stories promoting the Potato Extension Program Activities and raising Awareness of the Program. Target 2 per month.

 Throughout the program's lifetime media releases have received a high level of coverage and have always surpassed the target of two media stories per month. Media coverage has been an integral part of the program, not only extending R&D outcomes and industry news to growers in targeted regions, but also promoting advancements in the industry to the wider population.

Independent monitoring of media coverage has shown that Potato Industry Extension Program related news stories are published on all platforms (TV, radio, print, online) and reach over one million Australians annually.

Throughout the year 2015 media hits were recorded at 167 hits showing an average of 4.5 hits per month, surpassing the two media stories per month target, with these media releases regularly achieving high levels of coverage. Media audience reach for the program for 2015 was 1,152,586. One of the program's most successful media releases was from July 2015 (Appendix 8), which generated over 100 news stories in publications all across Australia (including syndicated networks), including regional growing areas and capital cities. The resultant news stories reached an audience of over 875,000, including substantial TV coverage on the ABC. Interviews were recorded with the program coordinator and potato growers from Tasmania.

Another example good media read was a media release from March 2013 (Appendix 6) which achieved coverage in Fresh Plaza, The Ballarat Courier, Good Fruit & Vegetables, Countryman – Perth, The Border Watch – Mt Gambier and multiple interviews/stories on ABC regional radio stations. A release from July 2013 (Appendix 7) achieved media coverage on 2TM Tamworth, ABC Riverland SA, The Ballarat Courier, The Weekly Times and ABC South East SA.

A sample of independent media coverage reports compiled by iSentia can be seen in Appendix 9.

Closer collaboration with regional grower associations and agronomists to encourage participation in local activities and events. These relationships will be another vehicle for information sharing of the extension project.

- The Potato Industry Extension Program Coordinator has collaborated closely with a number
 of regional associations and grower groups, who have been able to assist the coordinator in
 running the program. The program coordinator has been able to target the content of
 regional events and workshops to align with the needs and interests of those particular
 potato regions.
 - Strong relationships have been built with many associations, including the McCain Grower Group, Seed Potatoes Victoria, the Crookwell Potato Association, the Potato Growers Association of WA, the Victorian Potato Growers Council, ViCSPA and the Victorian Potato Industry Advisory Committee. These groups have assisted in promoting events through their local networks and encouraging participation in program activities by their members.
- Agronomists have been an integral part of the Potato Industry Extension Program, with strong networks built across the country. R&D workshops and other program events have been strongly attended by agronomists, with many making return attendances.

Agronomists have been a beneficial stakeholder in the program, passing on information to other industry members and growers who may not have been able to attend events. Input from agronomists on the program and its content was also considered, with their detailed knowledge of issues affecting growers across all regions beneficial.

 AUSVEG was successful in utilising interstate based knowledge by facilitating Brenda Coutts from Department of Agriculture and Food Western Australia (DAFWA) with the opportunity to present to growers on farm, informing growers firsthand about research into Potato Virus –Y (PVY).

Brenda as a valuable asset to the Potato Industry Extension Program allowing AUSVEG to extend to growers the research into the PVY. Engaging Brenda into the program was done outside of the Potato Industry Extension Program milestone guidelines but was seen as a very valuable resource for the industry.

In addition to maintaining relationships with regional groups and agronomists, individual
grower visits were also a key part of the program. The program coordinator would visit
growers while on the road whenever possible, discussing industry issues and providing
information on the program.

Regional visits also gave growers the opportunity to voice any concerns they had regarding the industry and particular areas of R&D that they believe the program should cover.

Throughout the program, more than 146 grower visits were conducted across the country, equating to an average of over 48 per year. Visits were conducted in the below potato growing regions, with multiple growers from each area visited.

State	Region
New South Wales	Crookwell
	Berrigan, Oaklands (Riverina)
South Australia	Mallee
	 Mount Gambier (South-East)
	 Murraylands
	Virginia
Queensland	Atherton Tablelands
	 Killarney
	Lockyer Valley
Tasmania	Dunalley (South-East)
	North-West
Victoria	East Gippsland
	Central Highlands
	 Otways
	Portland
Western Australia	Baldivis
	Busselton
	Manjimup
	Myalup
	Pemberton

 The Potato Industry Extension Program coordinator also participated in Annual Potato Levy Payer meetings where applicable, discussing issues with growers and providing information on the program and its aims. The program coordinator also presented on local R&D at the following Annual Potato Levy Payer Meetings in 2014:

- o Devonport, Tasmania 15 September 2014
- o Ballarat, Victoria 16 September 2014
- o Mt Gambier, South Australia 17 September 2014
- o Hahndorf, South Australia 18 September 2014

One face-to-face meeting each year to address attendance at field days or trial farm visits. The nature of the face to face meeting will be determined by the activity that has been arranged.

 Face-to-face meetings with the program's Reference Group have been held in each year of the program, with additional teleconferences also held to discuss action items from meetings and program activities.

The Reference Group has provided strong direction and input on the program, with a number of initiatives implemented and information extended to industry as recommended by the Reference Group.

The schedule of meetings throughout the lifetime of the program is included below.

Meeting Date	Location
2 March 2012	Camberwell, Victoria
10 May 2012	Hobart, Tasmania
29 January 2013	Teleconference
5 February 2013	Teleconference
1 June 2013	Gold Coast, Queensland
11 November 2013	Teleconference
21 June 2014	Cairns, Queensland
27 June 2015	Gold Coast, Queensland

NSW potato grower and AUSVEG Chair, Mr Geoff Moar, served as the Chair of the PIEP Reference Group. Members of the Reference Group were:

NAME	POSITION
Mr Geoff Moar (Chair)	AUSVEG Chair and NSW potato grower
Mr Russell Fox	Agronomist - I.K. Caldwell
Mr Peter Hardman	Chair of the Processing Potato Association of Australia (PPAA) and Simplot Agricultural Manager
Mr Dean Bone	Victorian seed potato grower
Mr Brad Mills	HIA Potato Industry Services Manager
Mr Richard Mulcahy	AUSVEG CEO

Involvement in APRP2 meetings where required/appropriate.

 The Potato Industry Extension Program coordinator was involved in all APRP2 meetings and teleconferences when suitable, up until its completion in late 2014. The program coordinator was able to provide the APRP2 working group with input from growers on APRP2 and its direction for their consideration. The coordinator was also able to relay non-confidential information on APRP2 back to growers. The program coordinator also had regular dialogue with the manager of subsequent project, PT13013 *A review of knowledge gaps and compilation of R and D outputs from the Australian Potato Research Programs*, which included evaluation of APRP2 sub-programs. This allowed the coordinator to ensure that the most successful and relevant outcomes of APRP2 were communicated to growers.

In addition to the mandatory outputs that were carried out by the Potato Industry Extension Program, a number of other initiatives were also carried out by AUSVEG and implemented as part of the program. This included the development of a podcast series, titled *Spudcasts*.

Developed as an additional way of disseminating R&D news and championing grower R&D success, Spudcasts allowed growers to listen when they could – in the tractor while working or at home or in the office.

A list of Spudcast episodes is listed in the table below.

Spudcasts		
The Export Game	Discussed Free Trade Agreements and practices that can be put in place to enable export of potatoes.	
The truth about PVY	PVY research was discussed by DAFWA Plant Virologist, Brenda Coutts, as well as management practices for the virus.	
Seed potato special	Discussed the importance of certified seed potatoes and the benefits they provide to growers. Featured a certified seed grower, agronomist and seed potato merchant.	

The Potato Industry Extension Program Coordinator also attended numerous industry events, conferences and seminars to improve knowledge of potato industry issues and R&D outcomes. Industry events attended by the program coordinator included:

- National Horticulture Convention (multiple locations/years)
- Seed Potato Industry Conference (Ballarat, Victoria)
- Tasmanian Farmers and Graziers Association (TFGA) biennial conference and policy forum (Launceston, Tasmania)
- Roberts Rural Supplies Potato Industry Trade Show and Forum (Scottsdale, Tasmania)
- Crookwell Potato Festival (Crookwell, New South Wales)
- Simplot Potato Futures (Ulverstone, Tasmania)
- Society of Precision Agriculture Australia (SPAA) Conference (Wagga Wagga, New South Wales)

Information learnt at such events and seminars was used to inform Potato Industry Extension Program activities and was disseminated to the wider industry.

Outcomes

The Potato Industry Extension Program very quickly became known as the cornerstone of R&D extension in the Australian potato industry. Its reputation amongst growers was extremely good and the program coordinator became the first point of contact for growers with industry issues and those seeking R&D information.

High turnouts at Potato Industry Extension Program events was an indicator of the program's considerable success, with attendees regularly noting that attendance at regional R&D workshops was higher and more reliable than almost all other industry programs.

The 2010 Pyksis report, *Industry Development Needs Assessment: Processed Potato Industry*, stated that a viable communications system between growers and the broader industry should be established, to address a missing link between R&D outcomes and growers. The Potato Industry Extension Program was proposed off the back of this report, with the aim of addressing these issues.

The Potato Industry Extension Program was successful in addressing this and bridging the gap between the researchers and growing communities. Annual Survey results showed that awareness of beneficial R&D information increased in around 90 per cent of respondents.

Implementation of new practices resultant of the program was a larger hurdle to face, with encouraging growers to change practices a difficulty that the industry has faced for a long time. Great success was achieved, however, with survey results indicating that over half of respondents were likely to implement new practices as a result of information communicated by the program.

Further anecdotal evidence showed that uptake of new practices was improving. PreDicta Pt, a very successful development from APRP2 that was heavily promoted by the program is now, being used increasingly within the industry. Growers have commented that anyone involved in seed or commercial production who may be at some risk of powdery scab should be using PreDicta Pt tests, and uptake of this test is growing.

Survey results also showed that the industry-funded R&D program that respondents were most aware of was APRP2.

The Potato Industry Extension Program also proved to be beneficial in enhancing the cohesion of the industry and assisted growers in developing networks and strengthening relationships with other growers, agronomists, researchers and industry stakeholders.

While there had previously been a perception of an "us and them" mentality between growers and other stakeholders in the industry, the closer contact between all parties helped to dispel this and improve communication between all parties. Regional R&D workshops would also act as networking events and provided growers with a rare opportunity to discuss issues with colleagues off-farm.

The Potato Industry Extension Program increased growers' awareness and knowledge of R&D findings and outcomes and enhanced their ability to adapt their operations and implement new practices.

Evaluation and Discussion

The Potato Industry Extension Program proved to be successful in achieving its aims, that being to:

- Improve knowledge of R&D outcomes amongst growers, agronomists and processors, particularly in relation to APRP2.
- Make it easier for growers to adopt new technology and implement new practices as a result of R&D.
- Increase networking opportunities and improve the relationship between growers, researchers and other industry stakeholders.

Feedback from almost all those who participated in the program's activities said that it had increased their awareness of beneficial R&D information and that events such as R&D workshops were very valuable.

While feedback indicated that this increased knowledge did not always reflect in implementation of new practices straight away (around 50% of those surveyed indicated they would likely make changes to their operations), it was always expected that this would be a challenging hurdle to overcome. With more than half of survey respondents indicating that they would implement new practices, however, it should be considered very successful as it has been long known that uptake of new practices can be slow in the industry.

The multipronged communication approach was an important factor of the program and ensured that growers from all over the country had access to resources and information. The use of post and fax as extension tools were surprisingly successful, with growers who don't have access to technology or the technical skills to use digital media very receptive to these methods. This being said, however, online and digital communication is very important and should be increased in the future. With technology updates such as the National Broadband Network and improved accessibility to 4G mobile networks, it is expected that the growing community will become more adept at using such technologies.

Regional R&D workshops were a highly successful part of the program, with growers and agronomists regularly providing outstanding feedback. While the workshops provided an opportunity for researchers to discuss their work directly with growers, the networking aspect to the events was a major drawcard for growers. Cohesion amongst the industry and relationships between growers were greatly strengthened through R&D workshops.

The program coordinator became an important resource for the industry during the program and would be regularly be contacted by growers seeking R&D information and to discuss industry issues. The program coordinator became an asset to the Australian potato industry and filled a gap that had previously been very apparent.

Regular contact between the program coordinator and growers, the 'end users', was highly beneficial in ensuring that program content was relevant and beneficial. Grower visits were conducted on a regular basis. By being able to target R&D information properly, the buy-in from the growing community towards the program was very high. Without the two-way communication between

growers and other stakeholders, this would not have been possible.

APRP2 outcomes were regularly extended by the program, and in particular, the DNA soil test, PreDicta Pt. PreDicta Pt was highlighted as one of the best recent R&D outcomes in PT13013 *A review of knowledge gaps and compilation of R and D outputs from the Australian Potato Research Programs* and was recommended for further extension, which was done throughout 2015 after the completion of APRP2. While some growers had reservations about PreDicta Pt when they first heard about its development, attitudes towards the test changed to be more positive following regular communication and discussion between growers and its developers at the South Australian Research and Development Institute (SARDI).

Further recommendations from PT13013 were also considered by the Potato Industry Extension Program during 2015, including the expansion of the annual survey. As APRP2 finished in late 2014, PT13013 provided another reference point for R&D information for dissemination, with its analysis of all recent local research programs. Some recommendations from PT13013 were unable to be implemented by the Potato Industry Extension Program due to a short time frame and budget constraints, such as dissemination of data and fact sheets (hard copy and digital), but these should be incorporated into future extension activities.

The Potato Industry Extension Program was highly effective in providing the Australian potato industry with local and international R&D information in a direct and useable manner. The industry has become reliant on the program and its coordinator as a point of contact for potato R&D updates and industry information.

Recommendations

- Continue to implement a new iteration of the Potato Industry Extension Program. This should be done as soon as possible in order to ensure that information and updates are continually sent to industry. As the only national extension program for the potato industry it is vital that there is not a lengthy pause in activities.
- Production of data and fact sheets from PT13013 A review of knowledge gaps and compilation of R and D outputs from the Australian Potato Research Programs for dissemination. Hard copies could be produced, as well as a digital library that could be developed or built into InfoVeg, the industry's online knowledge management system.
- The addition of a project officer to assist the program coordinator could be considered. As it is expected that the program would grow during its second iteration, it would be important to ensure there are enough resources to effectively execute the program's initiatives and maintain regular contact with the potato growing community.
- Continued extension of PreDicta Pt information and other recommended R&D outcomes, as outlined in PT13013.
- Further utilisation of online/digital methods of communication as it is expected that uptake of such technology will increase in the coming years.

Scientific Refereed Publications

None to report.

Intellectual Property/Commercialisation

No commercial IP generated.

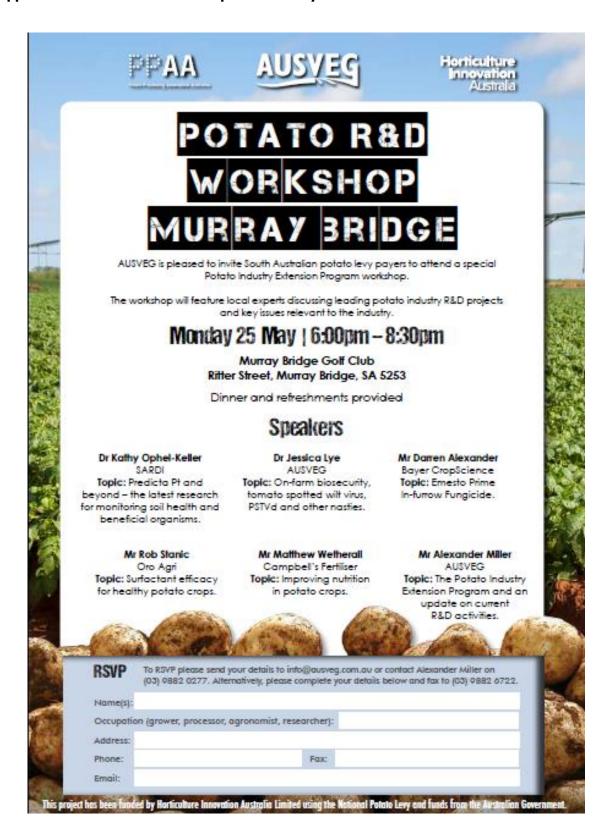
Acknowledgements

AUSVEG would like to acknowledge Australia's potato growing community for engaging so strongly with the Potato Industry Extension Program and for participating in the program and making a positive contribution to the content and overall direction of activities undertaken.

AppendicesAppendix 1 – Annual Operating Plan

		Potato Industry Extension Program - Year 3 Annual Operating Plan (2014)
	HAL	rotato manda f Enteriorem rogram. Tear o ramada o perating rian (2021)
Date		Program Activities
		Potatoes Australia Article 1 (February/March 2014 edition) Topic: Exporting opportunities and challenges for Australian potato producers - highlighting the UK potato
15-Jan	M106	industry striking a supply arrangement with the Vietnamese market
22-Jan	M106	Media Release - 1 Topic: [TBC]
		Potato Extension Advisory Committee meeting (teleconference) Key agenda items: Discuss results of 2013 Annual Survey; provide details of upcoming
5-Feb	M106	events etc.
11-Feb	M106	Media Release 2 - Topic: Upcoming events in South Australia
11-Feb	M106	Farm vists to growers in Mt Barker and Murray Bridge SA
12-Feb	M106	Potato Extension event 1: Workshop in Murray Bridge SA
		Bi-Monthly Email 1 (February/March Issue) Topics: Summary of recent events and R&D discussed; succession planning & attracting the next
28-Feb	M106	generation of growers into the industry et. al.
12-Mar	M106	Farm visits to growers based in the Mallee and surrounding areas in South Australia, including Pinarroo.
		Potato Extension Event 2: Workshop in Mallee SA (Possible topics: salinity/water issues, heat and frost tolerance, PVY, early Blight) - Potentially target
13-Mar	M106	north-west Victorian potato growers also e.g. Robinvale
25-Mar	M106	Media Release 3 - Topic: Upcoming farm walk event in Tasmania and R&D to be discussed (e.g. Bio-fumigation)
25-Mar	M106	Farm vists to growers in north-west Tasmania
26-Mar	M106	Potato Extension Event 3: Farm Walk - NW Tasmania (Possible key topic: Bio-fumigation, inc. experts from CSIRO/ACIAR)
27-Mar	M106	Potatoes Australia Article 2 (April/ May edition) Topics: Summary of SA & TAS events and all R&D issues covered/discussed
14-Apr	M106	Special Agronomy Update (e-newsletter)
22-Apr	M106	Media Release 4 - Topic: Upcoming farm meeting in Lockyer Valley, QLD
23-Apr	M106	Potato Extension Event 4: Grower farm meeting in Lockyer Valley, Queensland + individual farm visits in Lockyer Valley area
1-May	M106	Bi-Monthly Email 2 - April/May issue
9-May	M106	Booth (at 2014 Convention)
14-May	M106	Media Release 5 - Topic: [TBC]
		Potatoes Australia Article 3 (June/July edition) Topic: Potato growers farm tour to Atherton Tablelands (during 2014 Convention); PEP Information
15-May	M106	Booth (at 2014 Convention)
		HAL MILESTONE
30-May	M106	Summary of activity, outputs & outcomes from implementing the 2014 Operating Plan.
		Any implications for the remainder of the 2014 Operating Plan identified.
18-Jun	M190	Media Release 6 - Topic: R&D featured at PEP Information Booth at AUSVEG Convention; Participation in Farm Tour to Atherton Tablelands, QLD
18-Jun	M106	Potato Extension Program Information Booth at AUSVEG National Convention (Cairns, Queenland)

M190	Potato Extension Advisory Committee meeting (face-to-face)	
	Total Extension Parison Committee Meeting (Ince-to-lace)	
M190	Additional event 2: Participation in AUSVEG Potato Growers Farm Tour to Atherton Tablelands at 2014 AUSVEG National Convention	
M190	Bi-Monthly Email 3 - June/July issue	
M190	Special Agronomy Update Issue	
M190	Potatoes Australia Article 4 (August/September edition) Topic: [TBC]	
M190	Media Release 7 - Topic: [TBC]	
M190	Media Release 8 - Topic: Upcoming workshop in South Australia	
M190	Farm vists to growers in Penola, Kalangadoo etc SA	
M190	Potato Extension event 5: Workshop in Penola SA	
M190	Farm vists to growers in Mt Gambier SA, Portland VIC	
M190	Bi-Monthly Email 4 - August/September issue	
M190	Media Release 9 - Topic: Upcoming farm walk or workshop in Western Australia	
M190	[TBC] Domestic grower tour (approx. 3-4 days)	
M106	Farm vists to growers in south Western Australia - options: Albany, Manjimpup, Pemberton, Busselton and Myalup	
M106	Potato Extension Event 6: Workshop - Busselton, Western Australia	
M190	Media Release 10 - Topic: Conclusion of the Australian Potato Research Program Phase 2 (APRP2), inc. outcomes and implications for industry	
M190	[TBC] Additional event 3: Simplot Potato Futures - Tasmania (Participation)	
M190	[TBC] Additional event 4: Simplot Potato Futures - Tasmania (Participation)	
M190	[TBC] Additional event 5: Simplot Potato Futures - Tasmania (Participation)	
M190	Potatoes Australia Article 5 (October/ November edition) Topic: [TBC] Tasmania grower visits, Simplot Potato Futures	
	Potato Extension event 7: Workshop or Farm Walk in Ballarat, Victoria (Possible topics: Pre- and early-planting issues, fertiliser and fungacide	
M190	application, nutrition etc)	
M190	Media Release 11 - Topic: [TBC]	
M190	Potato Extension Advisory Committee meeting (teleconference)	
M190	Bi-Monthly Email 5 - October/November issue	
M190	Annual Potato Extension Survey 2014	
M190	[TBC] Potato Extension Event 8: Grower farm meeting and farm visits in NSW	
	Potatoes Australia Article 6 (December 2014/January 2015 edition) Topic: Summary of achievements made by the program over the past 3 years,	
M190	including key R&D information shared and growers' response	
M190	Media Release 12: Achievements made by the program over its 3 years of operation	
M190	Bi-Monthly Email 6 - December 2014/January 2015 issue (Possible topic: A look at new potato levy-funded R&D programs and projects)	
	HAL MILESTONE	
	Final Report received by Horticulture Australia Limited.	
M190	All necessary reports complying with HAL's requirements received.	
	M190 M190 M190 M190 M190 M190 M190 M190	



8 R&D Potato Industry Extension Program

Workshops encourage Victorian growers to look out for pests and diseases

POTATO CYST NEMATODE, ZEBRA CHIP AND THE POTATO SPINDLE TUBER VIROID WERE HOT TOPICS OF DISCUSSION DURING THE FINAL ROUND OF POTATO INDUSTRY EXTENSION PROGRAM (PIEP) WORKSHOPS HELD FOR THE YEAR. PIEP COORDINATOR ALEXANDER MILLER EXPLAINS HOW GROWERS SHOULD CONTINUE TO REMAIN VIGILANT ABOUT THE POTENTIAL THREAT FROM THESE PESTS AND DISEASES.



Victorian potato growers were treated to a raft of local potato R&D at a series of workshops held across the state recently. Events in the Ballarat and

Events in the Ballarat and Warragul regions attracted a large turnout of growers. agronomists and industry experts to hear about best growing practices from leading researchers and agronomy specialists.

Pest and disease control was a key theme to the workshops. with speakers Dr Dolf de Boer from the Department of Economic Development. Jobs, Transport and Resources (DEDJTR) and Dr Jessica Lye, AUSVEG National Manager -Scientific Affairs, headlining the roadshow.

Tackling PCN

Dr de Boer, a Senior Research Scientist at DEDJTR, provided information on the latest research into Potato cyst nematode (PCN) and Late blight - two pest and disease issues that Dride Boer has dubbed as the "bad boys" of potato production.

Recent research into PCN, which is a highly quarantined pest found around the globe, has focused on the susceptibility and resistance of particular cultivars and their effect on PCN populations. Atlantic, Crop 13 (marketed as Golden Delight and Moonlight in Australia) and Nicola were identified as resistant cultivars, while Trent, Coliban and Sebago

while Trent, Coliban and Sebago were found to be susceptible. While it is thought that further research under Australian conditions should be conducted. Dr de Boer believes that rotations and using

resistant cultivars are critical

tools in managing PCN.

When discussing Late blight, Dr de Boer noted favourable weather conditions for the disease and how these can be monitored to prepare for potential Late blight issues. Moist and muggy weather is believed to be inducive for Late blight, with fungicide identified as a preventative management technique for the disease.

Biosecurity update

Following Dr de Boer's presentation on issues that have affected the Australian potato industry for many years, Dr Lye discussed biosecurity control and measures for keeping new pests and diseases out of the country, including the Tomato potato psyllid (TPP) and Zebra chip.

Zebra chip has cost the New Zealand potato industry millions

of dollars in recent years and has the potential to have the same impact locally if it reaches Australian shores. Zebra chip can decrease yield and crop health, cause stem death and

health, cause stem death and reduce tuber size and quality.

The TPP - the pest that carries the Zebra chip disease - is also a serious threat to the local potato industry, as it was recently detected on Norfolk Island, approximately 1,000 kilometres east of the Australian coast

While initiatives have been put in place to restrict the movement of food and plant material between Norfolk Island and Australia, including a ban to import potatoes, it is also important that growers implement their own biosecurity measures to minimise the risk of pest incursions. TPP identification and management techniques used in New Zealand were also discussed.

In addition, Dr Lye outlined a number of practices that growers can implement to improve biosecurity on-farm, including zoning properties to restrict movement of vehicles and people that can carry pests and diseases. The use of gate signs that make visitors aware of biosecurity practices was also recommended as a simple method to reduce the risk of

on-farm incursions. Gate signs. are available from the AUSVEG website at www.ausveg.com.au/

PSTVd on the agenda

An update on Potato spindle tuber viroid (PSTVd), which was recently declared endemic in parts of Queensland and Western Australia, was also given by Dr Lye at the workshops. A National Management Strategy for PSTVd is currently being devised, to ensure that it doesn't spread further around the country.

While PSTVd has not been identified in potatoes in Australia for many years, it was noted that it is vitally important for the industry to be proactive and put measures in place to ensure that it does not spread to potato crops.

Industry developments

Growers were also provided with some of the latest crop protection developments from leading agribusinesses, Syngenta and Bayer CropSciences Syngenta was represented by Tasmanian-based Wayne Richardson at the Ballarat workshop, who discussed the latest innovations in weed control and pre-emergent herbicides for potato crops. In Warragul, Alistair Beyer from Bayer discussed management techniques for Rhizoctonia and new in-furrow fungicides.

Victorian grower Dean Bone also gave an overview of his experience as a participant on the 2015 Industry Leadership and Development Mission to China at the Ballarat workshop, where he discussed farm visits to Harbin in northern China and the World Potato Congress.



For more information about the Potato Industry Extension Program, contact AUSVEG. Phone: (03) 9882 0277 Email: info@ausveg.com.au Project Number: PT11004

Appendix 4 – Email newsletter example

View this email in your browser





www.ausveg.com.au | Email: info@ausveg.com.au | September 2015



In this issue...

Victorian R&D Workshops

Leading international PVY expert to visit Western Australia

China Leadership and Development Mission

PT13015 - Potato Tracker

Horticulture Innovation Australia membership

Potatoes Australia

Victorian R&D Workshops

AUSVEG is pleased to invite Victorian potato levy payers to attend a special Potato Industry Extension Program workshop in their local area.

Workshops in the Ballarat and Warragul regions will feature local experts discussing leading potato industry R&D projects and key issues relevant to the industry, including the latest research into Late Blight and PCN, and management strategies for the tomato potato psyllid and other potential pest incursions.

Dinner and refreshments will be provided at both events. To download the flyer with full information, please <u>click here</u>.

To RSVP for either workshop, please send your details to info@ausveq.com.au or contact Alexander Miller on (03) 9882 0277.

Leading international PVY expert to visit Western Australia

AUSVEG has teamed up with the Department of Agriculture and Food WA (DAFWA) to host a special potato growers workshop in Manjimup on Monday 21 September, featuring PVY expert Dr Alexander Karasev from the University of Idaho. For more information, please see the flyer below.





Potato growers workshop

We are pleased to invite potato growers and industry representatives to a special workshop with internationally renowned Potato virus Y expert Dr Alexander Karasev from the University of Idaho

WHERE: The Gallery at the Manjimup Library, Corner of Rose and Moore streets, Manjimup
WHEN: Monday 21st September, 2:00 to 5:00pm
Refreshments provided

Other speakers include:
Dr Roger Jones (DAFWA) – Varietal reactions to PVY
David Tooke (DAFWA) – Overview of potato certification

The AUSVEG Potato Extension Program team will be presenting the latest potato R & D outcomes and biosecurity issues for the potato industry.

For more information and to RSVP by 17 September contact Brenda Coutts <u>brenda.coutts@agric.wa.gov.au</u> on 9368 3266 David Tooke <u>david.tooke@agric.wa.gov.au</u> on 0428 920 045 Alexander Miller <u>Alexander.Miller@ausveg.com.au</u> at AUSVEG on (03) 9882 0277



China Leadership and Development Mission

A group of Australian potato growers attended a leadership and development mission to China in July, visiting local potato growing operations and the World Potato Congress.

Growers visited processing potato operations in Harbin in China's north, including McCain research and trial sites. Harbin is one of China's largest potato

production areas.

The delegation of over 10 discussed issues that Chinese potato growers are facing and exchanged information on pest and disease control.



Inspecting a Chinese potato crop in Harbin, China on the Leadership and Development Mission.

The World Potato Congress was a highlight of the mission, with growers hearing from researchers and industry experts from around the world. Growers almost got lost in the trade and exhibition space that covered 10,000 square metres and was filled almost 400 booths. Growers discovered some of the latest technology available and have already begun looking at innovations that can be implemented locally.

A number of technical sessions were also held at the congress, featuring discussion on issues facing the international industry, including water challenges, potato diseases, variety breeding and consumption.

The delegation of growers was also joined at the congress by Australian potato researcher and biosecurity expert, Dr Kevin Clayton-Greene. On the final night of the congress, Dr Clayton-Greene was presented with a World Potato Congress Industry Award, acknowledging his lifetime of work and commitment to the industry. AUSVEG would like to congratulate Dr Clayton-Green.



Dr Kevin Clayton-Greene receives his World Potato Congress Industry Award.

PT13015 - Potato Tracker



The fresh-levy funded consumer research program, *Potato Tracker*, continues to measure and evaluate Australians' purchasing behaviour and perceptions in relation to potatoes, with the tenth wave of research being released recently.

The latest wave of research included a special study on the types of consumers that buy potatoes, listing the typical triggers for purchase amongst four

groups. The four types of consumers that were profiled were Eager Explorers, Flavour Followers, Wholesome Habits and Conscious Improvers.

Eager Explorers actively explore new flavours, ingredients and recipes, while Wholesome Habit consumers are more inclined to eat the same foods they always have and not deviate away from what they know and love. Flavour Followers are in between the two and can be reluctant to move away from their usual foods, but will follow the latest trend if it is similar to what they are used to.

Conscious Improvers are driven to eat and purchase foods based on their nutritional benefit – they want to be healthy and are motivated to consume the foods that are best for them.

To access each wave of research, please click here.

Potato Tracker is being conducted on behalf of the industry by Australian market research agency, Colmar Brunton, and is funded by Horticulture Innovation Australia using the Fresh Potato Levy.

Horticulture Innovation Australia membership

As Horticulture Innovation Australia's (HIA) Annual General Meeting (AGM) approaches, AUSVEG encourages all potato growers to become a member of the grower-owned company to ensure you can have your say on the future direction of R&D investments in Australian horticulture.

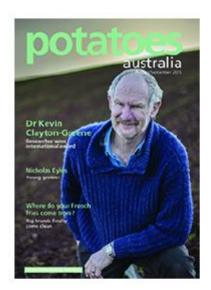
For those who have already submitted their membership form, please keep in mind that a confidential Statutory Declaration must be completed to become an eligible voting member. The form outlines the amount of levies you paid in the 2014-15 financial year, which is used to determine the amount of votes you and your business will receive. This form will forwarded to you by HIA.

Growers are encouraged to sign up and complete the Statutory Declaration by 30 September to have their say in how levy funds are managed at the AGM in November.

You can access the HIA membership application form here.

If you have signed up as a member and have not received follow-up correspondence from HIA, please contact AUSVEG on (03) 9882 0277 or at info@ausveg.com.au.

Potatoes Australia



Australia was sent to growers around the country recently, featuring all the regular R&D information and grower profiles.

On the cover is Dr Kevin Clayton-Greene, who features heavily in the magazine. In addition to his World Potato Congress Industry Award, Dr Clayton-Greene's recent analysis of Australian potato research is also discussed. Dr Clayton-Greene highlights the best local research outcomes and those he believes should be implemented by the industry.

Two Tasmanian growers are profiled, with young grower Nicholas Eyles and and fourth-generation farmer Stuart Applebee discussing their processing potato operations.

Fast food organisations continue to come clean on the origin of their potatoes, following on from a previous *Potatoes Australia* expose that found that not all operations are using 100 per cent locally grown spuds. Find out which chains do and don't use solely Australian suppliers.

Research from the United Kingdom also gets a look in, with the UK's AHDB Potatoes' project entitled Irrigation and water use: Best practice guide for potatoes being discussed in depth.

If you are not currently receiving Potatoes Australia, please contact AUSVEG on (03) 9882 0277 or

<u>info@ausveg.com.au</u> to register your details.

Potato levy payers can also download a free digital version of the magazine, available on the AUSVEG website.



Industry communication is funded by HIA using the National Potato Levies and matched funds from the Australian Government.

Copyright @ 2015 AUSVEG Limited, All rights reserved.

unsubscribe from this list update subscription preferences

Appendix 5 - 2015 Annual Survey questions



The 2015 Potato Industry Extension Program Survey is here, giving growers and the industry opportunity to provide their feedback on research and development (R&D) programs and outcomes presented through the program, and which areas of R&D you believe are of importance for the industry moving forward.

This survey has been designed to benchmark and measure the current usage and adoption of R&D outcomes amongst Australian potato growers. Findings will be used to guide future R&D communication.

The survey should take no longer than 20 minutes to complete and all levy-payer respondents will go in the draw to win a \$200 RB Sellars gift voucher.





1. Plea	se indicate your state or territory
,	•
2 Wha	t is your postcode?
Z. Wild	ns your postcode:
* 3. Wha	t is your age?



5. Where is your pro	perty located (region)?
* 6. How many years	have you personally been involved in growing potatoes?
* 7. For how many ge	nerations has your family been growing potatoes?
* 8. How many acres	or hectares did you sow to potatoes in 2014/15?
Acres	
Hectares	
	es, were you involved in any other type of farming activity in 2014/15? E.g. an potatoes, grazing, cropping, etc.
+	
If yes, please specify	

cres					
ectares					
	Potato In Extensio	dustry n Progran	A	orticulture nnovation Australia USVEG	
	a sown, please ra	nk the type of p	otato productio	n you were invo	lved in
uring 2014/15.		nk the type of p	otato productio	n you were invo	lved in
uring 2014/15.		nk the type of p	otato production	n you were invo	lived in
uring 2014/15. = largest 4 = sn	nallest)				
uring 2014/15. I = largest 4 = sn Fresh	nallest)			4	
uring 2014/15. I = largest 4 = sn Fresh Chipping	nallest)		3	4	N/A
1. In terms of are luring 2014/15. 1 = largest 4 = sn Fresh Chipping Crisping Seed	nallest)		3	4 O	N/A

		Iorticulture Innovation Australia
		AUSVEG
	Potato Industry Extension Program	-FAA
How many acres	s or hectares did you sow with certified seed in	2014/15?
0001	s or hectares did you sow with certified seed in	2014/15?
4. How many acres	s or hectares did you sow with certified seed in	2014/15?
ectares	s or hectares did you sow with certified seed in	2014/15?
cres		2014/15?
cres lectares 5. What generation		2014/15?
ectares 5. What generation Minitubers (G0)		2014/15?
octares 5. What generation Minitubers (G0) G1		2014/15?
what generation Minitubers (G0) G1 G2		2014/15?
ictares i. What generation Minitubers (G0) G1 G2 G3		2014/15?

* 13. Did you use certified seed in 2014/15?

* 17.	When do you normally start working the field to prepare for potato cropping?
	less than one month before planting
	1 - 2 months before planting
\circ	3 - 5 months before planting
\bigcirc	6 or more months before planting
	What are your typical crop rotations? If this includes pasture please specify type e.g. common pasture, weedy pasture etc.
dor	3
dor	What is the primary method you use to irrigate your potato crops?
dor	What is the primary method you use to irrigate your potato crops?
dor	What is the primary method you use to irrigate your potato crops? Gun Centre pivot
dor	What is the primary method you use to irrigate your potato crops? Gun Centre pivot Lateral move
dor	What is the primary method you use to irrigate your potato crops? Gun Centre pivot Lateral move Drip

		Horticulture Innovation
		AUSVEG
	Potato Industry Extension Program	PPAA
22. Do you test	soil for nutrients?	
Yes		
No		
Don't know		
		Horticulture Innovation
		Innovation Australia
	Potato Industry Extension Program	Innovation
	Potato Industry Extension Program	AUSVEG
	Potato Industry Extension Program	AUSVEG
23. Do you base	Potato Industry Extension Program	AUSVEG
23. Do you base		AUSVEG
		AUSVEG

Man	
Yes	
No	
Don't know	
	Horticulture Innovation Australia AUSVEG
	Potato Industry Extension Program
5. Prior to prepar ased soil test?	ring a field for a potato crop have you ever undertaken a PreDicta PT DNA-
Yes	
No	
Don't know	
26. Using the Prosoil-borne potat	reDicta PT results, did you use a treatment or application to attempt to control to diseases?
	[발발] [설명] [H.] [H.] [H.] (H.) (
soil-borne potat	[발발] [설명] [H.] [H.] [H.] (H.) (
soil-borne potat	[발발] [설명] [H.] [H.] [H.] (H.) (
Yes No	Horticulture
Yes No	Horticulture Innovation Australia AUSVEG
Yes No	Horticulture
Yes No	Horticulture Innovation Australia AUSVEG
Yes No	Horticulture Innovation Australia AUSVEG
yes No Don't know	Horticulture Innovation Australia AUSVEG
yes No Don't know	Potato Industry Extension Program
Yes No Don't know	Potato Industry Extension Program

* 29.	Do any following diseases affect the yield of your potato crop?
	Powdery scab
	Common scab
	Rhizoctonia stem canker
	Early blight
	Late blight
	Black dot
	Silver scurf
	Verticillium
	Leaf roll virus
	Black scurf
	Eel worm
	Pink rot
	Tomato spotted wilt virus
	Sclerotinia
	Not applicable
	Other (please specify)
* 30.	Do you actively manage any of the following potato diseases?
* 30.	Do you actively manage any of the following potato diseases?
	Do you actively manage any of the following potato diseases? Powdery scab Common scab
	Powdery scab
	Powdery scab Common scab Rhizoctonia stem canker
	Powdery scab Common scab Rhizoctonia stem canker Early blight
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf Verticillium
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf Verticillium Leaf roll virus
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf Verticillium Leaf roll virus Black scurf
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf Verticillium Leaf roll virus Black scurf Eel worm
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf Verticillium Leaf roll virus Black scurf Eel worm Pink rot
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf Verticillium Leaf roll virus Black scurf Eel worm Pink rot Tomato spotted wilt virus Sclerotinia
	Powdery scab Common scab Rhizoctonia stem canker Early blight Late blight Black dot Silver scurf Verticillium Leaf roll virus Black scurf Eel worm Pink rot Tomato spotted wilt virus

* 31. What are ye	our current methods	for managing	the fol	lowing	potato d	iseases?
-------------------	---------------------	--------------	---------	--------	----------	----------

	Usir	ng certifie	d	Seed			ı	rigation			 ease is no esent on-
		seed		reatment	Soil	treatmen		nagement	Not	manage	farm
Powdery Scab											
Common scab											
Rhizoctonia stem canker											
Early blight											
Late blight											
Black dot											
Silver scurf											
Verticillium											
Lear roll virus											
Black sourf											
Eel worm											
Pink rot											
Tomato spotted wilt virus											
Sclerotinia											

* 32. What are your long-term management plans for the following potato diseases?

	Using certified seed	Increased rotations	Grow different rotation crops	Move potato growing to a new paddock	Change cultivar	Not managed	Disease not present on-
Powdery Scab							
Common scab							
Rhizoctonia stem canker							
Early blight							
Late blight							
Black dot							
Silver scurf							
Verticillium							
Lear roll virus							
Black sourf							
Eel worm							
Pink rot							
Tomato spotted wilt virus							
Sclerotinia							

*	33. Have you attended	any Potato Industry Exten	sion Program events?	
	Yes			
	○ No			
_				
	. Did you find the infor be relevant?	mation presented by resea	archers, agronomists an	d others at the events
	Yes			
Č	No			
Ifr	no, is there any R&D you wo	uld like to hear more about?		
Г				
35	. How valuable to you	were the Potato Industry E	_	
	ndustry R&D	Not at all valuable	Somewhat valuable	Very valuable
	vorkshops	0	0	0
	ield days and farm			0
٧	valks			
	36. How valuable to yo	u are the following method	ds of research and devel	opment (R&D)
	communication?			
	communication?	Not at all valuable	Somewhat valuable	Very valuable
	Online communication	Not at all valuable	Somewhat valuable	Very valuable
		Not at all valuable	Somewhat valuable	Very valuable
	Online communication including emails,	Not at all valuable	Somewhat valuable	Very valuable
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia	Not at all valuable	Somewhat valuable	Very valuable
	Online communication including emails, newsletters and the AUEVEC website	Not at all valuable	Somewhat valuable	Very valuable
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine	Not at all valuable	Somewhat valuable	0
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine	Not at all valuable	Somewhat valuable	Very valuable
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter	•	• • •	0 0 0
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter	Not at all valuable of the following levy fund Not at all aware	• • •	ograms?
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter	of the following levy fund	ed R&D projects and pro	0 0 0
	Online communication including emails, newsletters and the AUBVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato Certification Review	of the following levy fund	ed R&D projects and pro	ograms?
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato	of the following levy fund	ed R&D projects and pro	ograms?
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato Certification Review A review of knowledge gaps and compilation of R&D outputs from	of the following levy fund	ed R&D projects and pro	ograms?
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato Certification Review A review of knowledge gaps and compilation	of the following levy fund	ed R&D projects and pro	ograms? Very aware
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato Certification Review A review of knowledge gaps and compilation of R&D outputs from the Australian potato research programs Increasing the	of the following levy fund	ed R&D projects and pro	ograms? Very aware
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato Certification Review A review of knowledge gaps and compilation of R&D outputs from the Australian potato research programs Increasing the Adoption of IPM to Manage Insects in	of the following levy fund	ed R&D projects and pro	ograms? Very aware
	Online communication including emails, newsletters and the AUBVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato Certification Review A review of knowledge gaps and compilation of R&D outputs from the Australian potato research programs Increasing the Adoption of IPM to Manage Insects in Potato Crops	of the following levy fund	ed R&D projects and pro	ograms? Very aware
	Online communication including emails, newsletters and the AUEVEC website Potatoes Australia magazine Podcasts Social media e.g. Twitter 37. How aware are you Seed Potato Certification Review A review of knowledge gaps and compilation of R&D outputs from the Australian potato research programs Increasing the Adoption of IPM to Manage Insects in	of the following levy fund	ed R&D projects and pro	ograms? Very aware

38. Do you have sugg	gestions for future R&D projects? If so please specify below.	
39. Do you have any	suggestions for improving R&D communication? If so please specify below.	
40. Have you learnt a or are likely to imple	nything new through the Potato Industry Extension Program that you have ment?	
Yes		
○ No		
If yes, please specify.		
	vin the \$200 RB Sellars voucher, please enter your details below. The winner will notified by AUSVEG.	15
41. Please enter you	r details below.	
Name		
Company		
Email Address		
Phone Number		
	empleting the 2015 Potato Industry Extension Program Survey. If you have it this survey, please provide them below.	

Appendix 6 – March 2013 Media Release



Media Release

28 March 2013

For immediate release

Collaborative approach extending the reach of potato industry R&D

The Potato Industry Extension Program, managed by AUSVEG, has ramped up its engagement with agronomists around Australia, as part of ongoing efforts to ensure that research and development (R&D) outcomes are adopted by potato growers on-farm.

"The Potato Industry Extension Program recognises the critical role that agronomists play in helping growers to implement new practices and tools that will strengthen their operations," said AUSVEG Spokesperson Luke Raggatt.

"The program is working to build upon the rapport it has already established with the agronomy community, by further integrating agronomists into the program's activities. This is a logical step towards increasing potato growers' awareness and uptake of R&D outcomes." said Mr Raggatt.

AUSVEG is the National Peak Industry Body representing Australia's 2,000 potato growers.

This year, a number of leading agronomists have joined the R&D Field Days and workshops held by the program across the country to discuss a range of practical information relating to crop nutrition, field trials on new fertiliser applications, and novel ways to increase potato yields.

With the Australian potato industry continuing to invest heavily in a broad range of R&D projects, the Potato Industry Extension Program is encouraging agronomists to become familiar with these projects and to consider how their outcomes can be applied by the potato growers they work with.

"There is a strong need in our industry to increase the link between the R&D that is conducted, and its onfarm implementation. Agronomists are well-versed in many of the complex scientific areas of agriculture, but are also able to see these things from a practical viewpoint. This is a valuable combination of skills that can play a big role in facilitating this process." said Mr Raggatt.

The development of a DNA diagnostic testing service, which involves sampling for soil-borne pathogens that can lead to several major potato diseases, is one R&D project that is close to the implementation stage. Funded by the Australian processed potato sector, the development of the testing service is expected to deliver significant benefits to the industry, by helping growers make more informed decisions at the pre-planting phase.

"Agronomists will be pivotal to the actual roll-out of this testing service, which to deliver effectively, will require knowledge of soil sampling techniques, as well as how to interpret the results that the tests produce," said Mr Raggatt.

"By further collaborating with agronomists working in key potato growing regions of Australia, the Potato Industry Extension Program is helping to increase growers' and processors' access to beneficial information on innovative farm practices and technologies, as well as providing them with a clearer picture of how this information can be adopted practically."

"This is an important initiative being untaken by AUSVEG and is another example of the Potato Industry Extension Program steering the Australian potato industry towards a more sustainable and competitive future," said Mr Raggatt.

This communication has been funded by HAL using the National Potato Levy and matched funds from the Australian Government.

MEDIA CONTACT: Luke Raggatt, AUSVEG Spokesperson

Appendix 7 – July 2013 Media Release



Media Release

19 July 2013

For immediate release

DNA soil testing technology to reduce the impact of potato diseases

The work of a multi-year research project, undertaken for the Australian potato industry, will come to fruition this month, with the launch of the project's cutting-edge DNA soil testing service, which will help the industry to curb the impact of soil-borne diseases.

"The commercial roll-out of this much anticipated service will help growers to reduce the impact of soil-borne diseases - such as Powdery scab, Root knot nematode and Black dot - which up until now, have caused economic losses of up to \$50 million dollars annually to the processing potato sector in particular," said AUSVEG Spokesperson Luke Raggatt.

AUSVEG is Australia's leading horticulture body representing more than 2,000 potato growers.

"The soil testing service will enable growers to better identify areas in their fields that are at risk of specific diseases, and through this knowledge, make more informed planting and disease management decisions," said Mr Raggatt.

The DNA soil testing service was developed as part of a collaborative project led by the South Australian Research and Development Institute (SARDI), and has included research conducted at the Tasmanian Institute of Agriculture and the Victorian Department of Environment and Primary Industries. The tests involve extracting the DNA from soil samples, to assess the risk of disease based on pathogen levels in the sample.

As part of the launch of the service, SARDI will soon be holding a series of training workshops in key potato production regions of South Australia, Tasmania and Victoria, to instruct agronomists and growers on how to deliver the service and interpret the results generated. Attendees will be provided with an accompanying Advisor Manual, which includes key information on the pathogens tested.

"It is very exciting to see this research project reach a stage whereby potato levy payers can begin to implement its outcomes practically to the benefit of their own operations," said Mr Raggatt.

The Potato Industry Extension Program, managed by AUSVEG, is encouraging industry members to get involved with the soon to be available service, and has worked closely with SARDI to communicate to industry the expected benefits of using the service.

"This is exactly what industry R&D is all about: devising new practices and tools that, once adopted, will help growers to reduce their costs, maximise their yields and ultimately, achieve a more profitable business."

The project (PT09023) is part of the broader Australian Potato Research Program Phase 2 (APRP2), conducted for the Australian processing potato industry. The program is funded by Horticulture Australia Limited (HAL) using the National Processed Potato Levy, voluntary contributions from industry, and matched funds from the Australian Government.

This communication has been funded by HAL using the National Potato Levy and matched funds from the Australian Government.

MEDIA CONTACT: Luke Raggatt, AUSVEG



Media Release

17 July 2015

For immediate release

One third of Aussies can't name a spud!

It appears that many Australians don't know their King Edwards from their Kennebecs, with the latest wave of the *Potato Tracker* consumer research project indicating that some people can't name a single variety of potato, despite being the most commonly purchased vegetable commodity.

When quizzed on which potato varieties they typically purchase, 32 per cent were unable to recall any variety of potato at all when unprompted, while 15 per cent of respondents indicated that they don't know which potatoes they are buying when presented with different varieties.

"There is a vast section of Australians who seem to be unaware of the wide range of potato varieties that are available on the market," said AUSVEG spokesperson Alexander Miller.

"Given the unique cooking traits of different varieties of potatoes, it is important for consumers to have the information they need to buy the right kind of potato to satisfy their needs — and consumers can discover that there is a potato for every occasion."

AUSVEG is the leading horticultural body representing more than 2,000 Australian potato growers.

Results from Wave 8 of the *Potato Tracker* Project show that versatility is one of the largest triggers for purchase of potatoes, with consumers preparing them in multiple ways, including mashing (75 per cent of respondents), roasting (64 per cent) and baking (53 per cent).

"Not all potatoes are the same - different varieties of potato can be prepared in many different ways that best suit the taste and unique attributes of that particular variety," said Mr Miller.

"There are potato varieties that are better suited to different cooking techniques, from mashing to roasting, frying and baking, and this presents an opportunity for Australia's growers and retailers to better highlight the vast number of varieties being produced, as well as the different uses for each potato."

"Given that versatility is a key driver for potato purchase, educating consumers on the availability of different potato varieties and their unique cooking characteristics can be a way for the industry to increase sales and build its already strong consumer base."

"This is a great opportunity for potato growers and retailers to engage consumers and educate them on the wide array of possibilities that potatoes offer to increase sales and give consumers the many well-documented health benefits that come with eating spuds."

Consumer research agency, Colmar Brunton, is conducting *Potato Tracker* for the fresh potato industry, examining and analysing consumer attitudes and market trends in relation to potatoes.

This project has been funded by Horticulture Innovation Australia using the National Fresh Potato Levy and funds from the Australian Government.

ENDS

MEDIA CONTACT: Alexander Miller, AUSVEG Special Projects Coordinator

Appendix 9 – 2015 Media monitoring reports

Interview with Alexander Miller, Special Project Coordinator...



4BC, Brisbane hosted by Mark Braybrook Mornings - 3 mins 52 secs - ID: W00061127521 26 Mar 2015 10:48 AM



Interview with Alexander Miller, Special Project Coordinator, AUSVEG.

Miller discusses how AUSVEG is looking into the various ways Australians use potatoes in order to get a better understanding of the industry. Miller explains the potato industry in Australia, telling Miller that AUSVEG represents about 3,000 growers, and he describes Potato Tracker, which is

funded by the National Fresh Potato Levy.

Order presentation file or transcript

Keywords

Alexander Miller (1), growers (1), AUSVEG (3)

12,000 ALL 6,000 MALE 18+ 6,000 FEMALE 18+

Interviewees

Alexander Miller, Special Project Coordinator, AUSVEG

Also broadcast from the following 4 stations

Why we love our potatoes



Weekly Times (Vic), Melbourne by Alex Sampson

01 Apr 2015

General News - page 75 - 308 words Photo: No - Type: News Item - Size: 132 cm² - ID: 389308932



POTATOES continue to be seen as an important staple for Australians, according to the latest Potato Tracker project from consumer research agency Colmar Brunton. Survey respondents said they consumed potatoes an average of 14 times a month. They were also consistently among the top five most-purchased vegetables, and still regarded as good value for money. Peak vegetable body AusVeg spokesman Alexander Miller said "wave five" of the industryfunded, consumer research project had revealed Australian shoppers found potatoes

easy to prepare, able to be used in many different meals and had a great taste.

Read full text - Download print article

Keywords

AusVeg (1), Conference (1), Miller (1), vegetable (1), Convention (1), Alexander (1), potatoes (2), vegetables (1), POTATOES (1), Potato (1) ♣ 54,911 CIRCULATION

Aussies still love to eat the humble spud



Queensland Times (Ipswich), Ipswich QLD

27 Mar 2015

General News - page 4 - 109 words

Photo: No - Type: News Item - Size: 40 cm2 - ID: 387333609



IN BRIEF SPUDS continue to be an important staple for Australians with the Potato Tracker project indicating we eat them on average 14 times a month "The report suggests that consumers purchase potatoes for a variety of reasons. including their ease of preparation, ability to be incorporated into a number of different meals and great taste," Ausveg spokesman Alexander Miller said.

Read full text - Download print article

Keywords

Miller (1), potato (1), vegetable (1), Alexander (1), potatoes (1), Potato (1), Ausveg (1)

Growers' chips down



Cairns Post, Cairns QLD by Kimberley Vlasic

15 Apr 2015

General News - page 29 - 579 words Photo: Yes - Type: News Item - Size: 662 cm2 - ID: 394801587



NEW research shows consumers still find potatoes "a-peeling" but the supermarket duopoly is slowly chipping away at Far Northern growers' confidence. An online survey recently conducted as part of the industryfunded Potato Tracker project revealed Aussies are eating spuds 14 times per month on average.

Read full text - Download print article

Keywords

16,833 CIRCULATION

growers (3), potato (3), vegetable (1), potatoes (7), Potato (2), Growers (1), vegetables (1), Alexander (1), Vegetable (1), Potatoes (1), AUSVEG (1), Miller (1)

Regular Segment: Food with Wendy Hollick, food expert, Ian P...

ABC South East SA, Mt Gambier hosted by Stan

13 May 2015 9:34 AM



Limestone Coast Mornings - 21 mins 49 secs - ID: V00061696668



Regular Segment: Food with Wendy Hollick, food expert, lan Perry, cookery lecturer, TAFE SA and Alexander Miller, Special Projects Coordinator, AUSVEG.

Miller talks about their Potato Tracker project. He describes the research project as means to measure why consumers buy potatoes. Miller talks

about some reasons why potatoes are so popular. Panel talks about the versatility of the potato. Miller states the most popular way to cook potatoes is mashed, followed by boiled. Miller says the Potato Tracker project will inform growers on what consumers want. Thomson mentions curry made by Perry for the recent Generations in Jazz music festival. Perry discusses TAFE SA's upcoming local short courses for cooking macarons, sushi and curry. He adds that TAFE SA will also offer an early childhood cooking course. Panel talks about making curry.

Order presentation file or transcript

Keywords

Alexander Miller (1), growers (1), AUSVEG (1)

N/A ALL N/A MALE 16+ N/A FEMALE 16+

Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG lan Perry, cookery lecturer, TAFE SA Wendy Hollick, food expert

Humble spud still reigns over meals



Stock & Land (Vic), Melbourne

General News - page 17 - 138 words Photo: No - Type: News Item - Size: 69 cm2 - ID: 392529170 09 Apr 2015



POTATOES continue to be seen as an important staple for Australians according to the Potato Tracker project, with survey respondents indicating that they consume the commodity an average of 14 times per month. Additionally, potatoes also consistently feature in the top five most purchased vegetables among those surveyed, and are still regarded as good value for money.

Read full text - Download print article

Keywords

Miller (2), Alexander (1), potato (1), AUSVEG (1), potatoes (3), vegetables (1), POTATOES (1), Potato (1)



Interview with Alexander Miller, Special Projects Coordinato...

(1)

ABC Gippsland, Sale hosted by James Jooste Rural Report - 4 mins 07 secs - ID: V00061471933 24 Apr 2015 6:38 AM



Interview with Alexander Miller, Special Projects Coordinator, AUSVEG.

Jooste says the Victorian potato industry will have a new peak boy to give potato growers a heightened level of representation and adds that the committee will be made up of potato growers across the state and will work AUSVEG to focus R&D [research and development]. Miller says the Victorian

Potato Industry Advisory Committee will bring potato growers at par with other states. They talk about the form of representation the potato growers have at the moment, with Miller mentioning the Vegetable Growers' Association of Victoria [VGA]. Miller says the AUSVEG has set up AUSVEG SA in 2014.

Order presentation file or transcript

Keywords

Vegetable (1), Growers (1), AUSVEG (4), Alexander Miller (1), growers (4)



Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG [excerpt]

Interview with Alexander Miller, Special Projects Coordinato...



ABC South East NSW, Bega hosted by James Jooste Rural Report - 4 mins 07 secs - ID: V00061472773 24 Apr 2015 6:38 AM



Interview with Alexander Miller, Special Projects Coordinator, AUSVEG.

Jooste says the Victorian potato industry will have a new peak boy to give potato growers a heightened level of representation and adds that the committee will be made up of potato growers across the state and will work AUSVEG to focus R&D [research and development]. Miller says the Victorian

Potato Industry Advisory Committee will bring potato growers at par with other states. They talk about the form of representation the potato growers have at the moment, with Miller mentioning the Vegetable Growers' Association of Victoria [VGA]. Miller says the AUSVEG has set up AUSVEG SA in 2014.

Order presentation file or transcript

Keywords

Vegetable (1), Growers (1), AUSVEG (4), Alexander Miller (1), growers (4)



Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG [excerpt]

Versatile spuds have appeal



Tasmanian Country, Hobart

15 May 2015

General News - page 20 - 95 words

Photo: No - Type: News Item - Size: 39 cm2 - ID: 407611690



THE humble spud is striking a chord, with an increasing percentage of consumers saying they buy potatoes because they are versatile. Tasmania is one of the biggest potato production states and is considered backbone of the state's vegetable industry.

Read full text - Download print article

Keywords

AusVeg (1), potato (2), vegetable (2), Miller (1), Alexander (1), potatoes (3)

Photo: No - Type: News Item - Size: 48 cm2 - ID: 407393377



Popular potatoes



Burnie Advocate, Burnie TAS

14 May 2015 General News - page 33 - 120 words



BRIEFLY VERSATILITY for potatoes is one of the reason they're becoming an increasingly popular food source among Australians. AUSVEG's Alexander Miller said it was encouraging news for the nation's potato growers with the report from wave six of the Potato Tracker project revealing a 7 per cent increase in versatility as a trigger to purchase for potatoes, from 52 per cent to 59 per cent. The positive feedback doesn't stop there though, with an increasing percentage of consumers also indicating they buy potatoes because they taste great, go well

with other foods and are enjoyed by the whole family. The research has also found consumers did need encouragement to eat potatoes outside of dinner meals.

Read full text - Download print article

Keywords

Miller (1), potato (1), AUSVEG (1), potatoes (4), Potato (1), Alexander (1), growers (1)

17,130 CIRCULATION

DIARY



Burnie Advocate, Burnie TAS

14 May 2015

22 May 2015

General News - page 34 - 418 words

Photo: No - Type: News Item - Size: 152 cm2 - ID: 407393381



May 16 THE annual open day on the Jordan River School Farm will be held next Saturday, Students will show their skill in sheep and cattle handling, and there will be competitions, activities and displays, all highlighting the rural theme of the open day. Not only will the event be a fun, action-packed day for the family, but will raise much-needed funds for the school farm. The event will be held at 212 Brighton Road, Brighton from 10am to 3pm. There will be free entry and free parking. For more information, visit: http://www.ourbhs.com/farm. May 20 THERE

will be a field day on May 20 covering efficient livestock management and fodder crops. The field day will feature presentations and an afternoon farm walk. The presentations will include sources of greenhouse gas emissions on Tasmanian farms; efficient livestock, and reducing their emissions; and getting the balance right in protein and energy ratios in feed. The farm walk will cover the livestock, lucerne and fodder program at the Cranston farm, among other things. The field day will be held at 1128 Colebrook Road, Campania, next Wednesday from 10am to 3pm, with a barbecue lunch. For more information, or to register, contact Sophie Folder on 0439 247 172 or email: sophiefolder@internode.on.net.

Read full text - Download print article

Keywords

Alexander (2), ausveg (1), Jessica Lye (1), Miller (2), potato (2)



Bush Telegraph



Tasmanian Country, Hobart

General News - page 2 - 478 words

Photo: Yes - Type: News Item - Size: 318 cm2 - ID: 410548586



HERITAGE MONTH: The Deloraine Folk Museum is offering free entry in May to celebrate Tasmanian Heritage month. The memorial project of convict bonnets by Christina Henri in remembrance of female convicts transported to Australia will be on display. 100 Emu Bay Rd, Deloraine, 9am to 5pm daily. Details: 6362 5280.

Read full text - Download print article

Keywords

AusVeg (1), POTATO (1), ausveg (1), potato (1), Miller (1), Alexander (1)



17,889 CIRCULATION

Spud workshop

Burnie Advocate, Burnie TAS

22 May 2015

General News - page 16 - 55 words Photo: No - Type: News Item - Size: 29 cm² - ID: 410796803



BRIEFLY AUSVEG will hold a potato research and development workshop in Devonport next week.

Read full text - Download print article

Keywords

Alexander (1), AUSVEG (1), ausveg (1), Miller (1), potato (1)



Update for spud growers



Burnie Advocate, Burnie TAS

General News - page 10 - 283 words Photo: No - Type: News Item - Size: 199 cm2 - ID: 412575318 27 May 2015



Devonport workshop to look at latest R&D SEED potato quality and biosecurity will be a feature of a potato producers workshop in Devonport tonight. The workshop is being hosted by AUSVEG and will ensure potato growers on the North-West Coast are up to date with the latest research and development, including managing soil pathogens, pests and diseases.

Read full text - Download print article

Keywords

Miller (2), Jessica Lye (1), potato (10), AUSVEG (4), Alexander 17,130 CIRCULATION (1), potatoes (1), Potato (1), growers (5)

Consumer confusion



Shepparton News, Shepparton VIC

18 Jul 2015

General News - page 2 - 194 words Photo: Yes - Type: News Item - Size: 163 cm2 - ID: 436520278



A third of Australians can't pick a King Edward from a Kennebec or a Pontiac (not the car). If you're confused, that means you are part of the 32 per cent of Australians who can't name a single variety of potato.

Read full text - Download print article

Keywords

Miller (1), potato (5), vegetable (1), Potatoes (1), AUSVEG (2), potatoes (1), Alexander (1), Potato (1)



Pre-recorded interview with Alexander Miller, Special Projec...



ABC Gippsland, Sale hosted by Josh Becker Rural Report - 4 mins 15 secs - ID: V00062511528 20 Jul 2015 6:43 AM



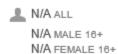
Pre-recorded interview with Alexander Miller, Special Projects Coordinator, AUSVEG to talk about the results of their research showing a third of people cannot name any varieties of potatoes. Becker plays an interview of Laura Poole asking people if they know any varieties of potato. Bob says he does not know any variety while Pam says she knows a lot of potato varieties

because she works for a seed **grower**. Leslie gives some varieties of potato like Sebago and Pontiac. Miller says their report found that 30% of people are not able to identify the potato they are buying. He says they want more people to know their varieties but he thinks this is an opportunity to highlight different varieties of potatoes available and their use. Rosa, a potato farmer says she is surprised that there are a lot of people who does not know even a single variety of potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), AUSVEG (1), grower (1)



Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG Vox Pop

Pre-recorded interview with Alexander Miller, Special Projec...



ABC South East NSW, Bega hosted by Josh Becker Rural Report - 4 mins 11 secs - ID: V00062512371 20 Jul 2015 6:43 AM



Pre-recorded interview with Alexander Miller, Special Projects Coordinator, AUSVEG to talk about the results of their research showing a third of people cannot name any varieties of potatoes. Becker plays an interview of Laura Poole asking people if they know any varieties of potato. Bob says he does not know any variety while Pam says she knows a lot of potato varieties

because she works for a seed **grower**. Leslie gives some varieties of potato like Sebago and Pontiac. Miller says their report found that 30% of people are not able to identify the potato they are buying. He says they want more people to know their varieties but he thinks this is an opportunity to highlight different varieties of potatoes available and their use. Rosa, a potato farmer says she is surprised that there are a lot of people who does not know even a single variety of potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), AUSVEG (1), grower (1)

N/A ALL N/A MALE 16+ N/A FEMALE 16+

Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG Vox Pop

New research from the Potato Tracker Project has found growe...



702 ABC Sydney, Sydney hosted by Newsreader 07:45 News (Weekend) - 0 min 34 secs - ID: W00062507242 19 Jul 2015 7:58 AM



New research from the Potato Tracker Project has found **growers** and sellers need to do more to help consumers learn about different varieties of potatoes.

Order presentation file or transcript

Keywords

growers (1)

Interviewees

Alexander Miller, AUSVEG

Also broadcast from the following 10 stations

115,800 ALL 58,900 MALE 16+ 54,400 FEMALE 16+

New research reveals few people know which potato they're pu...



720 ABC Perth, Perth hosted by Newsreader 07:45 News (Weekend) - 0 min 27 secs - ID: W00062507906 19 Jul 2015 7:54 AM

New research reveals few people know which potato they're putting on their plate. The Potato Tracker project has found **growers** and sellers need to do more to help consumers. Alexander Miller, AUSVEG, says there is a gap in knowledge about potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), growers (1), AUSVEG (1)

Interviewees

Alexander Miller, AUSVEG

Also broadcast from the following 6 stations

\$\textstyle 38,000 ALL \$\textstyle 16,000 MALE 18+ \$\textstyle 22,000 FEMALE 18+

New research has revealed that a third of Australians cannot...



936 ABC Hobart, Hobart hosted by Compere 07:45 News (Weekend) - 0 min 34 secs - ID: W00062508239 19 Jul 2015 7:54 AM



New research has revealed that a third of Australians cannot name a single variety of potato, despite its status as the second most popular vegetable.

Order presentation file or transcript

Keywords

vegetable (1)

Interviewees

Alexander Miller, AUSVEG



New research from the Potato Tracker Project shows about a t...



702 ABC Sydney, Sydney hosted by Newsreader 07:00 News (Weekend) - 0 min 37 secs - ID: W00062507131 19 Jul 2015 7:08 AM



New research from the Potato Tracker Project shows about a third of Australians can't name a variety of potato despite being the second most popular vegetable after carrots.

Order presentation file or transcript

Keywords

vegetable (1)

Interviewees

Alexander Miller, AUSVEG

Also broadcast from the following 12 stations

87,100 ALL 41,900 MALE 16+ 44,200 FEMALE 16+

New research from the Potato Tracker Project has found growe...



936 ABC Hobart, Hobart hosted by Newsreader 07:00 News (Weekend) - 0 min 29 secs - ID: W00062509097 19 Jul 2015 7:05 AM



New research from the Potato Tracker Project has found growers and sellers need to do more to help consumers learn about different varieties of potatoes.

Order presentation file or transcript

Keywords

growers (1)

Interviewees

Alexander Miller, AUSVEG

Also broadcast from the following 1 station



New research reveals that few Australians know which variety...



ABC, Canberra hosted by Siobhan Heanue ABC News (Weekend) - 1 min 46 secs - ID: M00062509982 19 Jul 2015 7:13 PM



New research reveals that few Australians know which variety of potato they are eating. The Potato Tracker project has found that growers and sellers need to do more to help consumers tell potato varieties apart. Alexander Miller, AUSVEG, says 32% of Australians are unable to name a variety of potato, and 15% don't know what they are buying when they purchase

potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), growers (1), AUSVEG (1)

Interviewees

Alexander Miller, AUSVEG

Vox Pops

Wendy Rattray, Potato Grower



New research reveals that few people know which potato they'...



ABC News 24, Sydney

ABC News - 11:00 (Weekend) - 1 min 44 secs - ID: M00062508918

19 Jul 2015 11:12 AM



New research reveals that few people know which potato they're eating. The Potato Tracker project has found that **growers** and sellers need to do more to help consumers tell them apart. **Alexander Miller**, **AUSVEG**, says 32% of

Australians are unable to name a variety of potato, and 15% don't know what they are buying when they purchase potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), growers (1), AUSVEG (1)

4,000 ALL 37,000 MALE 16+ 27,000 FEMALE 16+

Interviewees

Alexander Miller, AUSVEG

Vox Pops

Wendy Rattray, Potato Grower

Also broadcast from the following 9 stations

New research reveals that few people know which potato they'...



ABC News 24, Sydney hosted by Compere Weekend Breakfast - 1 min 47 secs - ID: M00062508492 19 Jul 2015 10:40 AM



New research reveals that few people know which potato they're eating. The Potato Tracker project has found that **growers** and sellers need to do more to help consumers tell them apart. Alexander Miller, AUSVEG, says 32% of

Australians are unable to name a variety of potato, and 15% don't know what they are buying when they purchase potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), growers (1), AUSVEG (1)

196,000 ALL 103,000 MALE 16+ 89.000 FEMALE 16+

Interviewees

Alexander Miller, AUSVEG

Vox Pops

Wendy Rattray, Potato Grower

Also broadcast from the following 21 stations

Research shows few Australians know what sort of potato they...

ď.

ABC News 24, Sydney hosted by Ben Worsley and Miriam Corowa

19 Jul 2015 8:52 AM

Weekend Breakfast - 1 min 00 sec - ID: M00062509365



Research shows few Australians know what sort of potato they're eating. Farmers and grocers are being encouraged to educate the public on different types of potato.

Order presentation file or transcript

Interviewees

Alexander Miller, AUSVEG Vox Pops Wendy Rattray, Potato Grower 100,000 ALL 52,000 MALE 16+ 44,000 FEMALE 16+

Also broadcast from the following 9 stations

Research shows few Australians know what sort of potato they...



ABC, Hobart hosted by Rebecca Hewett
ABC News (Weekend) - 1 min 48 secs - ID: M00062507926

18 Jul 2015 7:27 PM



Research shows few Australians know what sort of potato they're eating. Farmers and grocers are being encouraged to educate the public on different types of potato.

Order presentation file or transcript

Interviewees

Alexander Miller, AUSVEG Vox Pops Wendy Rattray, Potato Grower 42,000 ALL 16,000 MALE 18+ 25,000 FEMALE 18+

Research shows few Australians know what sort of potato they...



ABC, Adelaide hosted by Alina Eacott
ABC News (Weekend) - 1 min 43 secs - ID: M00062507651

18 Jul 2015 7:14 PM



Research shows few Australians know what sort of potato they're eating. Farmers and grocers are being encouraged to educate the public on different types of potato.

Order presentation file or transcript

Interviewees

Alexander Miller, AUSVEG Vox Pops Wendy Rattray, Potato Grower 28,000 ALL 28,000 MALE 16+ 49,000 FEMALE 16+

Sally Dakis Interview with Susie Daly, Daly's Potatoes, Boom...



936 ABC Hobart, Hobart hosted by Ryk Goddard Breakfast - 14 mins 19 secs - ID: V00062529846 21 Jul 2015 6:38 AM



Sally Dakis Interview with Susie Daly, Daly's Potatoes, Boomer Bay, on the latest AUSVEG consumer survey on potatoes which shows that only 30% of the average potato buyer can recall any variety of potatoes. Dakis plays an excerpt of Laura Poole, Rural Reporter, ABC Rural, interviewing people on potatoes at a weekend football match at Thorpdale. Pam, seed grower,

Thorpdale, says she thinks she can probably name a lot because of her work, but Leslie, Thorpdale, says she only knows a couple. Alexander Miller, Special Projects Coordinator, AUSVEG, talks about the survey and his favourite varieties. Raisa, Thorpdale, says her favourite variety is the sebago. Dan Hammond, Thorpdale, shares several potato varieties. Daly says the survey doesn't really surprise her as there are so many potato varieties out there. Daly says she thinks people need to learn what each variety is used for in order to make smart decisions.

Order presentation file or transcript

Kevwords

Alexander Miller (1), AUSVEG (2), grower (1)

N/A ALL N/A MALE 16+

N/A FEMALE 16+

Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG Dan Hammond, Thorpdale Laura Poole, Rural Reporter, ABC Rural Leslie, Thorpdale Pam, seed grower, Thorpdale Raisa, Thorpdale Sally Dakis, ABC Rural Susie Daly, Daly's Potatoes, Boomer Bay

Curnow talks about varieties of potatoes. Curnow says a rese...



612 ABC Brisbane, Brisbane hosted by David Curnow Evenings - 5 mins 09 secs - ID: V00062525715

20 Jul 2015 9:42 PM



Curnow talks about varieties of potatoes. Curnow says a research that has been funded by Horticulture Innovation Australia has found that about a third of people can actually name any varieties. Curnow plays a report by Laura Poole, ABC, about the potato varieties that people know. Resident Leslie says she knows Sebago and Pontiac. Alexander Miller, special projects coordinator, AUSVEG, says their report found that 30% of people are unable to recall a variety of potato, and that 15% of respondents indicate

that they do not know which variety they are buying. Miller says they want more people to know the varieties, but he thinks this is a great opportunity to highlight different varieties that are available and their uses. Rosa, potato farmer, says she is surprised that there are people who do not know a single variety of potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), Horticulture (1), AUSVEG (1)

13,900 ALL 6,600 MALE 16+ 7,300 FEMALE 16+

Interviewees

Alexander Miller, special projects coordinator, AUSVEG [excerpt]

Laura Poole, ABC [excerpt]

Also broadcast from the following 10 stations

Interview with Alexander Miller, AUSVEG. Miller says their r...



774 ABC Melbourne, Melbourne hosted by Richard Stubbs

20 Jul 2015 1:31 PM

Afternoons - 9 mins 08 secs - ID: V00062519750



Interview with Alexander Miller, AUSVEG. Miller says their research found that 15 per cent of Australians didn't know what potatoes they were buying. He says he thinks this is a good opportunity for growers and retailers to show Australians what they can do with potato varieties out there. He then shares some of his potato recipes.

Order presentation file or transcript

Keywords

Alexander Miller (1), growers (1), AUSVEG (1)

44,000 ALL 20,000 MALE 16+ 24,000 FEMALE 16+

Interviewees

Alexander Miller, AUSVEG

Also broadcast from the following 8 stations

Pre-recorded interview with Alexander Miller, Special Projec...



ABC Eyre Peninsula and West Coast, Port Lincoln hosted by Caroline Winter

20 Jul 2015 12:54 PM

SA Country Hour - 3 mins 10 secs - ID: V00062521332



Pre-recorded interview with Alexander Miller, Special Projects Coordinator, AUSVEG to talk about the results of their research showing a third of people cannot name any varieties of potatoes. Becker plays an interview of Laura Poole asking people if they know any varieties of potato. Bob says he does not know any variety while Pam says she knows a lot of potato varieties

because she works for a seed **grower**. Leslie gives some varieties of potato like Sebago and Pontiac. Miller says their report found that 30% of people are not able to identify the potato they are buying. He says they want more people to know their varieties but he thinks this is an opportunity to highlight different varieties of potatoes available and their use. Rosa, a potato farmer says she is surprised that there are a lot of people who does not know even a single variety of potatoes.

Order presentation file or transcript

Keywords

Alexander Miller (1), AUSVEG (1), grower (1)

N/A ALL N/A MALE 16+

N/A FEMALE 16+

Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG Vox Pop

Also broadcast from the following 4 stations

Laura Poole report. Beilharz says a research funded by Horti...



ABC Ballarat, Ballarat hosted by Nikolai Beilharz Vic Country Hour - 3 mins 47 secs - ID: V00062519948

20 Jul 2015 12:51 PM



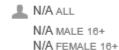
Laura Poole report. Beilharz says a research funded by Horticulture Innovation Australia [HIA] has found a third of people cannot name any potato variety. He plays an interview of Laura Poole asking people if they know any varieties of potato. Bob says he does not know any variety while Pam says she knows a lot of potato varieties because she works for a seed

grower. Leslie gives some varieties of potato like Sebago and Pontiac. Alexander Miller, Special Projects Coordinator, AUSVEG, says they are surveying 300 Australian every month on their potato purchasing habits. Rosa, a potato farmer says she is surprised that there are a lot of people who does not know even a single variety of potatoes. Dan Hammon names some variates of potatoes he know.

Order presentation file or transcript

Keywords

Alexander Miller (1), Horticulture (1), AUSVEG (1), grower (1)



Interviewees

Alexander Miller, Special Projects Coordinator, AUSVEG vox pops

Also broadcast from the following 7 stations

Potatoes are consistently Australia's most popular vegetable...



2NM, Muswellbrook hosted by Jenna Crowther National Rural News - 0 min 41 secs - ID: V00063731556

29 Oct 2015 12:08 PM

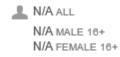


Potatoes are consistently Australia's most popular vegetable commodity. New research show consumers wants more information about potato varieties.

Order presentation file or transcript

Interviewees

Tom Cohen, AUSVEG Also broadcast from the following 19 stations



Research shows few Australians know what sort of potato they...



ABC News 24, Sydney hosted by Ben Worsley and Miriam Corowa

19 Jul 2015 8:52 AM

Weekend Breakfast - 1 min 00 sec - ID: M00062509365



Research shows few Australians know what sort of potato they're eating. Farmers and grocers are being encouraged to educate the public on different types of potato.

Order presentation file or transcript

Interviewees

Alexander Miller, AUSVEG
Vox Pops
Wendy Rattray, Potato Grower
Also broadcast from the following 9 stations

\$2,000 ALL 52,000 MALE 18+ 44,000 FEMALE 18+

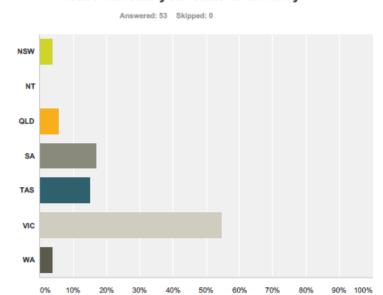
Appendix 10 – Summary of Pest and Disease Survey Questions

The 2015 Potato Industry Extension Program R&D Survey focused on the research ranging from areas and hectares sown to where your seed has come from, soil testing and pest and diseases in potato crops. These questions allowed the opportunity to understand where growers see potential problems and also what areas they are focusing on to eradicate these issues.

To view the survey questions for the 2015 survey please see below.

Question	AVERAGE ANSWER	NUMBER OF OBSERVATIONS
How many years have you personally been involved in growing potatoes?	28.69	36
For how many generations has your family been growing potatoes?	2.61	36
How many acres of hectares did you sow to potatoes in 2014/15?	304.35	20
How many acres or hectares did you sow with certified seed in 2014/15?	320.89	18
How many years do you typically rest a field between potato crops?	4.97	31

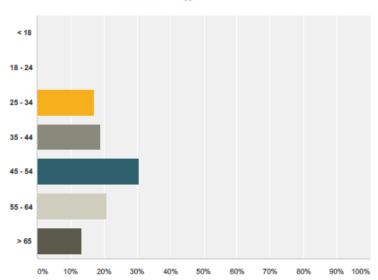
Please indicate your state or territory



Answer Choices	Responses	
NSW	3.77%	2
NT	0.00%	0
QLD	5.66%	3
SA	16.98%	9
TAS	15.09%	8
VIC	54.72%	29
WA	3.77%	2
Total		53

What is your age?

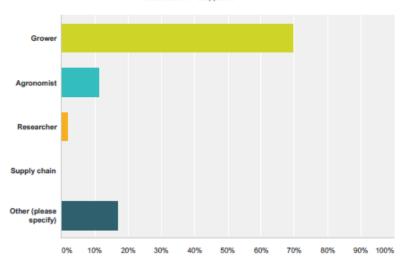
Answered: 53 Skipped: 0



Answer Choices	Responses	
< 18	0.00%	0
18 - 24	0.00%	0
25 - 34	16.98%	9
35 - 44	18.87%	10
45 - 54	30.19%	16
55 - 64	20.75%	11
> 65	13.21%	7
Total		53

What is your primary role within the potato industry?

Answered: 53 Skipped: 0

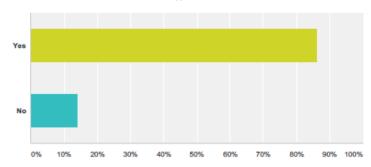


Answer Choices	Responses	
Grower	69.81%	37
Agronomist	11.32%	6
Researcher	1.89%	1
Supply chain	0.00%	0
Other (please specify)	16.98%	9
Total	5	53

#	Other (please specify)	Date
1	seed grower	12/10/2015 4:20 PM
2	retail	11/13/2015 2:18 PM
3	seed certification inspector	11/3/2015 8:31 PM
4	water authority	11/2/2015 9:37 PM
5	Customer Insights	10/21/2015 4:17 PM
6	seed	10/20/2015 5:18 PM
7	1	10/19/2015 4:29 PM
8	Potato processing	10/19/2015 2:58 PM
9	R&D	10/19/2015 2:55 PM

As well as potatoes, were you involved in any other type of farming activity in 2014/15? E.g. Vegetables other than potatoes, grazing, cropping, etc.





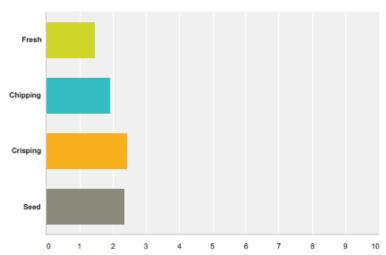
Answer Choices	Responses
Yes	86.11% 31
No	13.89% 5
Total	36

#	If yes, please specify	Date
1	123	12/15/2015 4:59 PM
2	carrots, onions, poppies, sheep cattle	12/14/2015 11:52 AM
3	grazing lambs, canola, wheat, hay	12/11/2015 1:12 PM
4	livestock	12/11/2015 1:11 PM
5	poppy wheat onions	12/11/2015 8:25 AM
6	Grazing	12/10/2015 9:23 PM
7	cropping grazing	12/10/2015 4:46 PM
8	Sheep cattle, wheat	12/10/2015 4:22 PM
9	broccoli beetroot and green beans	12/10/2015 3:33 PM
10	livestock, grain	12/10/2015 1:22 PM
11	onions, pumpkins, carrots	12/10/2015 11:46 AM
12	onions	12/9/2015 4:15 PM
13	onions and beef	12/9/2015 3:07 PM
14	grazing	12/8/2015 4:34 PM
15	Beef	11/5/2015 10:00 AM
16	beef cattle fat lambs	11/4/2015 5:25 PM
17	Cereals	11/3/2015 3:17 PM
18	Vegetables	11/3/2015 12:14 PM
19	Sugar cane , Canola , forage sorghum ,grain sorghum , triticale , maize	11/2/2015 8:13 PM
20	Grazing	11/2/2015 6:06 PM
21	livestock	11/2/2015 3:41 PM

22	Grazing and cropping	11/2/2015 3:21 PM
23	Beef cattle	10/28/2015 10:37 PM
24	grase cattle	10/21/2015 9:22 AM
25	broccoli cauliflowers sweet corn processing vegetables and potatoes	10/20/2015 10:48 AM
26	sugar	10/19/2015 9:42 PM
27	Biofumigation green manures Silage and hay	10/19/2015 9:25 PM
28	beef cattle and fat lambs	10/19/2015 9:25 PM
29	garlic, ryegrass seed, beef cattle, oat seed.	10/19/2015 9:08 PM
30	maize and wheat	10/19/2015 7:02 PM
31	onions	10/19/2015 3:22 PM

In terms of area sown, please rank the type of potato production you were involved in during 2014/15.(1 = largest 4 = smallest)

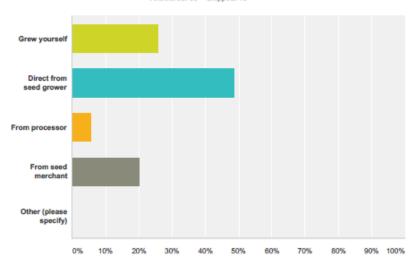




	1	2	3	4	N/A	Total	Weighted Average
Fresh	53.57%	0.00%	3.57%	7.14%	35.71%		
	15	0	1	2	10	28	1.44
Chipping	33.33%	4.76%	9.52%	9.52%	42.86%		
	7	1	2	2	9	21	1.92
Crisping	13.64%	0.00%	9.09%	9.09%	68.18%		
	3	0	2	2	15	22	2.43
Seed	24.00%	12.00%	4.00%	20.00%	40.00%		
	6	3	1	5	10	25	2.33

Where did your seed come from in 2014/15?

Answered: 35 Skipped: 18

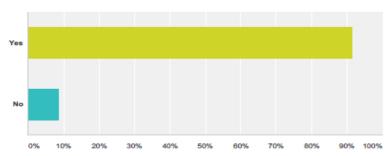


Answer Choices	Responses	
Grew yourself	25.71%	9
Direct from seed grower	48.57%	17
From processor	5.71%	2
From seed merchant	20.00%	7
Other (please specify)	0.00%	0
Total		35

#	Other (please specify)	Date
	There are no responses.	

Did you use certified seed in 2014/15?

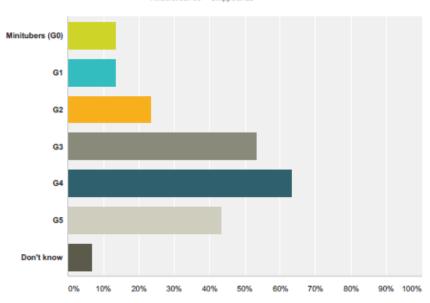
Answered: 35 Skipped: 18



Answer Choices	Responses	
Yes	91.43%	32
No	8.57%	3
Total		35

What generation of seed did you use in 2014/15?

Answered: 30 Skipped: 23



Answer Choices	Responses	
Minitubers (G0)	13.33%	4
G1	13.33%	4
G2	23.33%	7
G3	53.33%	16
G4	63.33%	19
G5	43.33%	13
Don't know	6.67%	2
Total Respondents: 30		

What commercial potato varieties did you grow in 2014/15?

Answered: 31 Skipped: 22

#	Responses	Date
1	raffet, burbank and ranger russets	12/14/2015 11:54 AM
2	Innvator snowden atlantic	12/11/2015 1:15 PM
3	innovator royal atlantic	12/11/2015 1:14 PM
4	Dauphinoise	12/11/2015 8:28 AM
5	Sebago	12/10/2015 9:25 PM
6	innovator, atlantic	12/10/2015 4:48 PM
7	Abalantic Snowden bliss	12/10/2015 4:24 PM
8	innovator, burbank	12/10/2015 3:36 PM
9	innovator	12/10/2015 1:25 PM
10	kestrel, desiree	12/10/2015 11:49 AM
11	westal, nardeen, estral, deseray	12/9/2015 4:18 PM
12	willwoosh, nicola	12/9/2015 3:09 PM
13	mozart , melody	12/9/2015 2:18 PM
14	Innovators, evels, 18 67, snowdens	12/8/2015 4:37 PM
15	Atlantic, pike, Snowden, catani	11/5/2015 10:06 AM
16	sebago crop 13,coliban,atlantic,melody,	11/4/2015 5:32 PM
17	ruby lou . desiree . snow gem.	11/4/2015 7:07 AM
18	Cream and Red Delight	11/3/2015 3:19 PM
19	Red and White	11/3/2015 12:19 PM
20	nicola,dutch cream,royal blue, wilwash,kipfler,king edward,innovator,jersey royal,	11/2/2015 6:09 PM
21	Crop 13,crop 17,Melody,Crop 30,crop 56.Jelly	11/2/2015 3:47 PM
22	Kestrel ruby lou cabaret	11/2/2015 3:25 PM
23	Innovator	10/28/2015 10:42 PM
24	russet burbank ranger bondi moonlight	10/20/2015 10:51 AM
25	atlantic pike simcoe catani snowden trent	10/20/2015 7:14 AM
26	FL 1867 FL 2215	10/19/2015 9:49 PM
27	none	10/19/2015 9:32 PM
28	Moonlight , bismark , Nicola ,cream delight	10/19/2015 9:30 PM
29	Innovator, sapo mira, lionhear	10/19/2015 9:11 PM
30	not your business	10/19/2015 3:24 PM
31	Nicola, Kennebec, Red Rascal	10/19/2015 3:21 PM

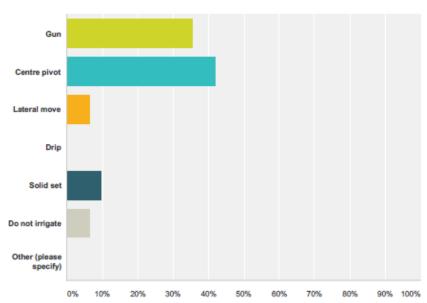
What are your typical crop rotations? If this includes pasture please specify type e.g. clover dominant pasture, weedy pasture etc.

Answered: 31 Skipped: 22

#	Responses	Date
1	poppies, poyrethrum, potatoes, onions, carrots, grass	12/14/2015 11:54 AM
2	cereal, canola and pastures	12/11/2015 1:15 PM
3	clover dominant	12/11/2015 1:14 PM
4	oats	12/11/2015 8:28 AM
5	Pasture rye clover	12/10/2015 9:25 PM
6	potatoes and wheat and grazing	12/10/2015 4:48 PM
7	wheat then land fodder, then back to pasture	12/10/2015 4:24 PM
8	wheat, poppy	12/10/2015 3:36 PM
9	wheat	12/10/2015 1:25 PM
10	weedy pasture	12/10/2015 11:49 AM
11	onion, weedy	12/9/2015 4:18 PM
12	3 in 3 out	12/9/2015 3:09 PM
13	not sure	12/9/2015 2:18 PM
14	potaotes, crop, mape, grass seed pasture	12/8/2015 4:37 PM
15	Pasture	11/5/2015 10:06 AM
16	clover pasture	11/4/2015 5:32 PM
17	pasture	11/4/2015 7:07 AM
18	Potatoes, Cereals, Fallow, Green Manure	11/3/2015 3:19 PM
19	Vegetable crops and cover cropping	11/3/2015 12:19 PM
20	ryegrass&clover pasture	11/2/2015 6:09 PM
21	2 in.3 out,oats and improved pasture	11/2/2015 3:47 PM
22	Weedy pasture but monitor varieties	11/2/2015 3:25 PM
23	Ryegrass and clovers. Oats. Winfred fodder rape	10/28/2015 10:42 PM
24	various vegetable poppies grass	10/20/2015 10:51 AN
25	maize and green manure crops	10/20/2015 7:14 AM
26	triticale, sugar cane, forage sorghum, canola	10/19/2015 9:49 PM
27	clover and rye	10/19/2015 9:32 PM
28	Pasture , bio fumigant , potato	10/19/2015 9:30 PM
29	cereal, ryegrass seed, pasture 3yrs (clover dominant if it grows)	10/19/2015 9:11 PM
30	not your business	10/19/2015 3:24 PM
31	pasture, biofumigate	10/19/2015 3:21 PM

What is the primary method you use to irrigate your potato crops?





Answer Choices	Responses
Gun	35.48% 11
Centre pivot	41.94% 13
Lateral move	6.45% 2
Drip	0.00%
Solid set	9.68% 3
Do not irrigate	6.45% 2
Other (please specify)	0.00%
Total	31

#	Other (please specify)	Date
	There are no responses.	

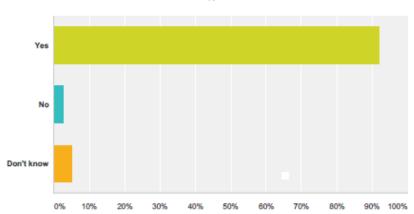
How regularly do you irrigate your potato crops?

Answered: 29 Skipped: 24

#	Responses	Date
1	weekly	12/14/2015 11:54 AM
2	4days	12/11/2015 1:15 PM
3	once a week	12/11/2015 1:14 PM
4	8	12/11/2015 8:28 AM
5	Weekly	12/10/2015 9:25 PM
6	weekly, twice weekly	12/10/2015 4:49 PM
7	weekly	12/10/2015 4:25 PM
8	5	12/10/2015 3:37 PM
9	4 days	12/10/2015 1:25 PM
10	according to soil moisture	12/10/2015 11:50 AM
11	2 days	12/9/2015 4:19 PM
12	depends on the weather	12/9/2015 3:10 PM
13	very regularly	12/9/2015 2:18 PM
14	weekly	12/8/2015 4:37 PM
15	Weekly	11/5/2015 10:06 AM
16	10 days	11/4/2015 5:33 PM
17	Every day	11/3/2015 3:19 PM
18	when required every 5 days typically	11/3/2015 12:19 PM
19	3 week intervals	11/2/2015 6:09 PM
20	5 days,as required	11/2/2015 3:47 PM
21	Every day on needs basis	11/2/2015 3:25 PM
22	4 days	10/28/2015 10:43 PM
23	as required	10/20/2015 10:51 AM
24	3 to 4 days	10/20/2015 7:14 AM
25	when the crop needs it	10/19/2015 9:50 PM
26	7 to 10 days	10/19/2015 9:30 PM
27	3-4 days	10/19/2015 9:11 PM
28	every day	10/19/2015 3:25 PM
29	as required	10/19/2015 3:21 PM

Do you test soil for nutrients?

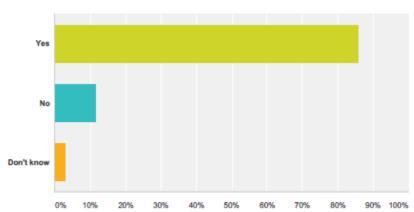




Answer Choices	Responses
Yes	92.11% 35
No	2.63% 1
Don't know	5.26% 2
Total	38

Do you base fertiliser application on the results from these soil tests?

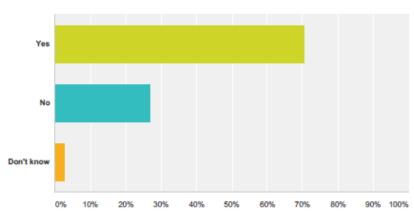
Answered: 35 Skipped: 18



Answer Choices	Responses	
Yes	85.71%	30
No	11.43%	4
Don't know	2.86%	1
Total		35

Prior to preparing a field for a potato crop do you address the risk of potential soil-borne pathogens?

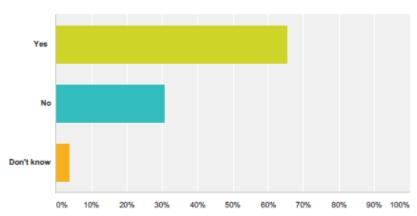
Answered: 37 Skipped: 16



Answer Choices	Responses
Yes	70.27% 26
No	27.03% 10
Don't know	2.70%
Total	37

Prior to preparing a field for a potato crop have you ever undertaken a PreDicta PT DNA-based soil test?

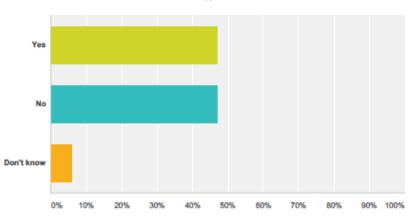
Answered: 26 Skipped: 27



Answer Choices	Responses	
Yes	65.38%	17
No	30.77%	8
Don't know	3.85%	1
Total		26

Using the PreDicta PT results, did you use a treatment or application to attempt to control soil-borne potato diseases?





Answer Choices	Responses
Yes	47.06%
No	47.06% 8
Don't know	5.88%
Total	17

Which potato diseases were you attempting to control?

Answered: 8 Skipped: 45

#	Responses	Date
1	common scab and pink rot	12/10/2015 4:50 PM
2	Powdery scab	12/10/2015 4:26 PM
3	powerdy scam, resitiona	12/9/2015 4:21 PM
4	powdery scab	12/9/2015 2:20 PM
5	Scab	11/3/2015 3:20 PM
6	Powdery Scab, Common scab, Pink Rot and rhizoctonia	10/20/2015 8:20 AM
7	Powdery scab	10/19/2015 9:33 PM
8	Powdery scab	10/19/2015 3:09 PM

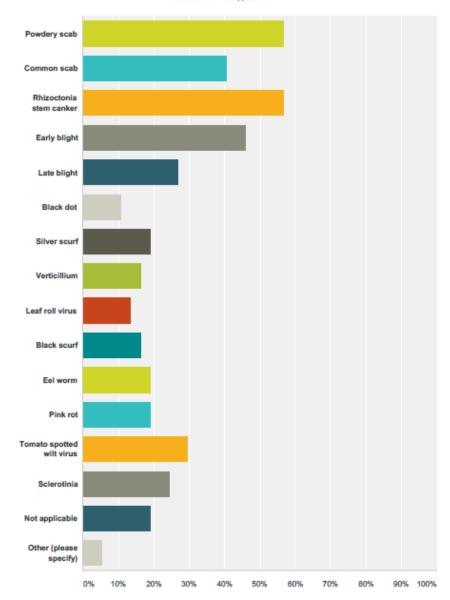
Please list the treatments or applications you used to control these soilborne diseases. Please list the disease you were attempting to control with the treatment.

Answered: 8 Skipped: 45

#	Responses	Date
1	skipped	12/10/2015 4:50 PM
2	Powdery scab - grate to furnigate the ground, emblem chemical.	12/10/2015 4:26 PM
3	varises	12/9/2015 4:21 PM
4	fumigation, methane	12/9/2015 2:20 PM
5	Fumigation - Scab	11/3/2015 3:20 PM
6	Fluazinam - powdery, Mancozeb - Common Scab, Amistar - Rhizoctonia	10/20/2015 8:20 AM
7	Biofumigation , soil health, irrigation monitoring to control powdery scab	10/19/2015 9:33 PM
8	Swapped varieties	10/19/2015 3:09 PM

Do any following diseases affect the yield of your potato crop?

Answered: 37 Skipped: 16



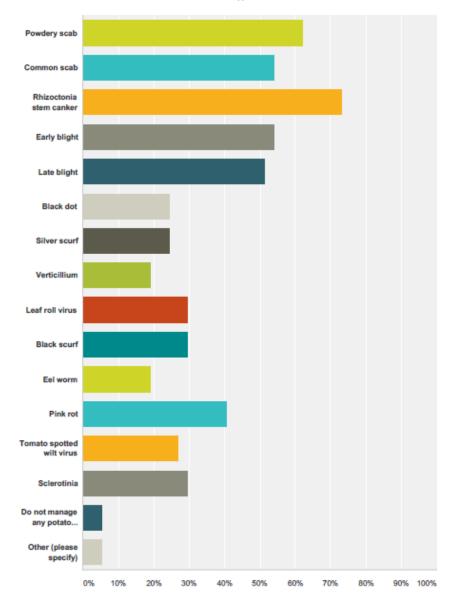
Answer Choices	Responses	
Powdery scab	56.76% 21	
Common scab	40.54% 15	
Rhizoctonia stem canker	56.76% 21	
Early blight	45.95% 17	

Late blight	27.03%	10
Black dot	10.81%	4
Silver scurf	18.92%	7
Verticillium	16.22%	6
Leaf roll virus	13.51%	5
Black scurf	16.22%	6
Eel worm	18.92%	7
Pink rot	18.92%	7
Tomato spotted wilt virus	29.73%	11
Scierotinia	24.32%	9
Not applicable	18.92%	7
Other (please specify)	5.41%	2
Total Respondents: 37		

#	Other (please specify)	Date
1	pvy	11/2/2015 6:11 PM
2	Pink Rot, all the viruses PVY, PVX, PVS	10/20/2015 8:22 AM

Do you actively manage any of the following potato diseases?

Answered: 37 Skipped: 16



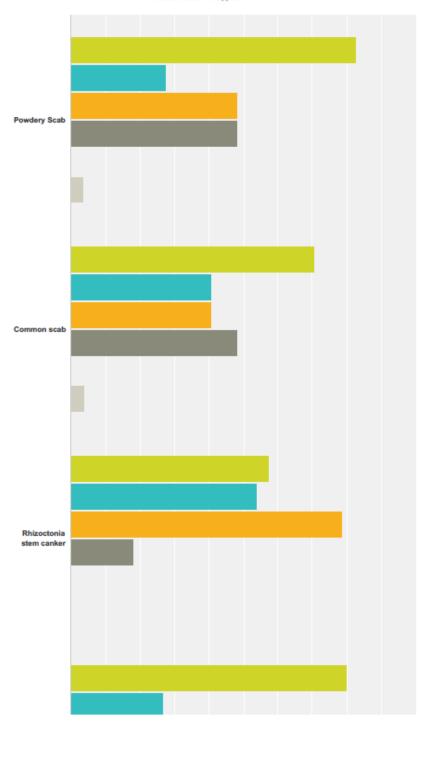
Answer Choices	Responses	
Powdery scab	62.16%	23
Common scab	54.05%	20
Rhizoctonia stem canker	72.97%	27
Early blight	54.05%	20

Late blight	51.35%	19
Black dot	24.32%	9
Silver sourf	24.32%	9
Verticillium	18.92%	7
Leaf roll virus	29.73%	11
Black sourf	29.73%	11
Eel worm	18.92%	7
Pink rot	40.54%	15
Tomato spotted wilt virus	27.03%	10
Scierotinia	29.73%	11
Do not manage any potato diseases	5.41%	2
Other (please specify)	5.41%	2
Total Respondents: 37		

#	Other (please specify)	Date
1	Y Virus	11/5/2015 10:09 AM
2	PVY, PVS and PVX	10/20/2015 8:22 AM

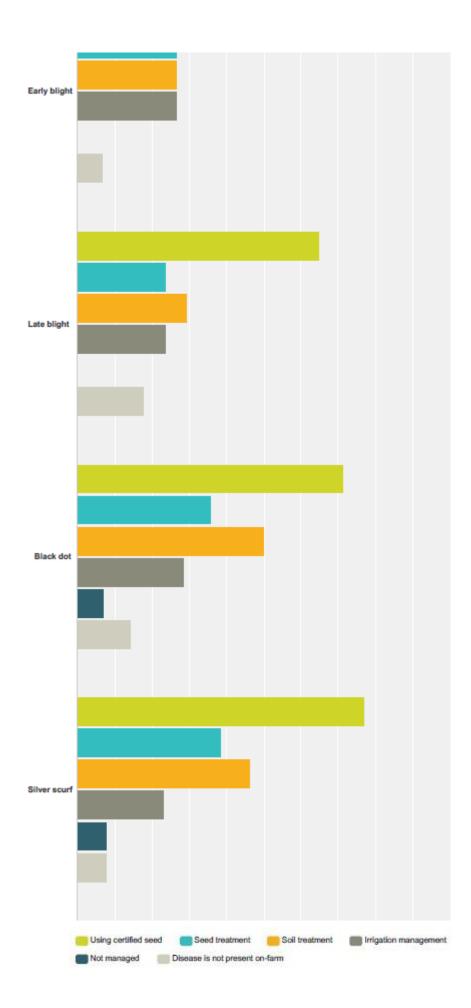
What are your current methods for managing the following potato diseases?

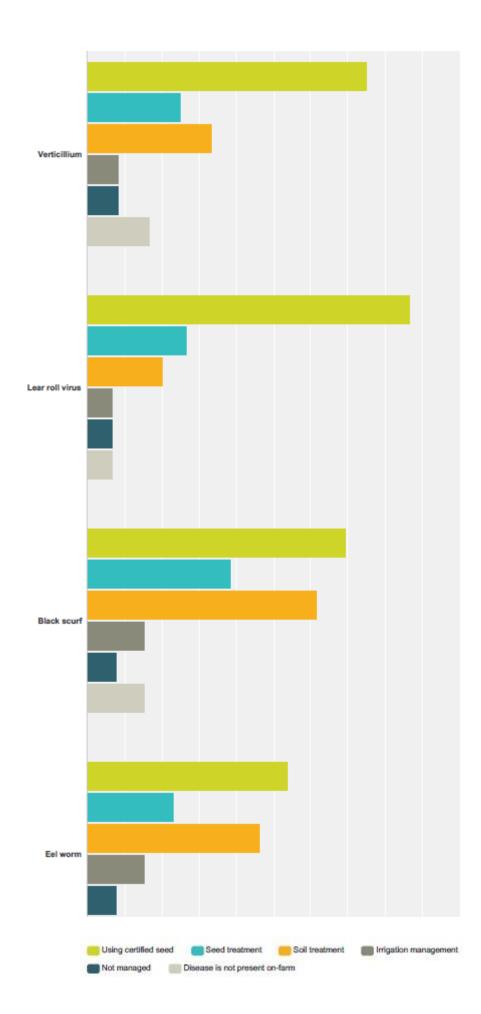




Using certified seed Seed treatment Soil treatment Implication management

Not managed Disease is not present on-farm

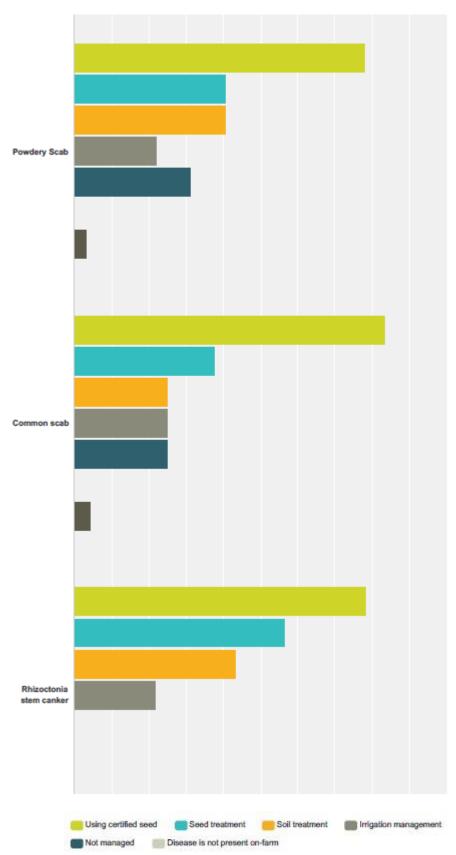


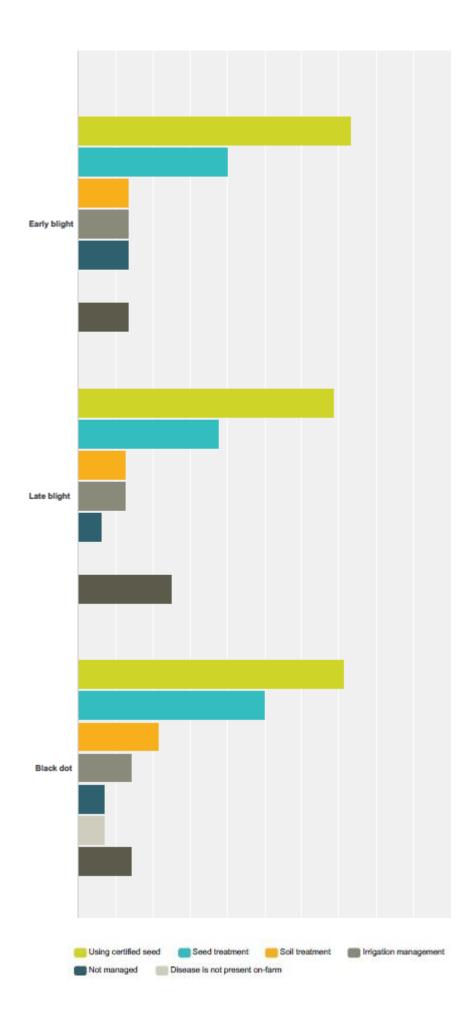


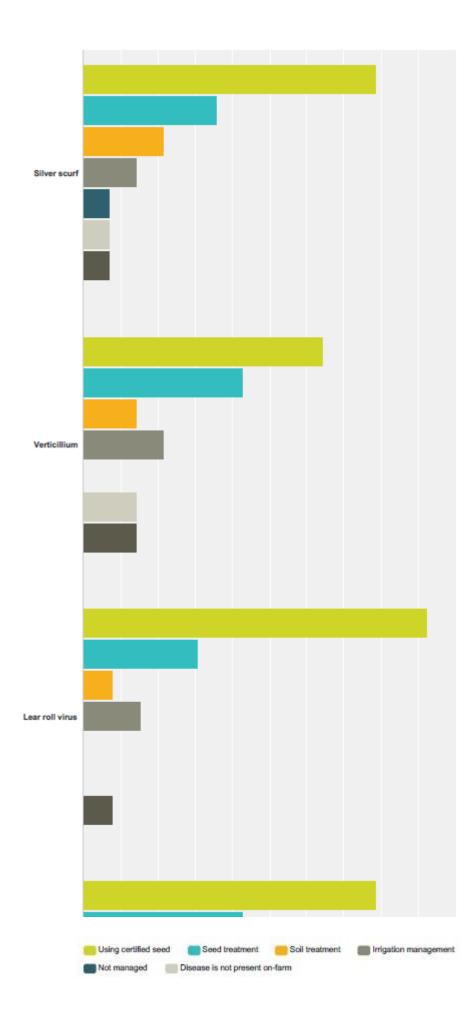
	Using certified seed	Seed treatment	Soil treatment	Irrigation management	Not managed	Disease is not present on-farm	Total Respondent
Powdery Scab	82.76%	27.59%	48.28%	48.28%	0.00%	3.45%	
	24	8	14	14	0	1	
Common scab	70.37%	40.74%	40.74%	48.15%	0.00%	3.70%	
	19	11	11	13	0	1	
Rhizoctonia stem	57.14%	53.57%	78.57%	17.86%	0.00%	0.00%	
canker	16	15	22	5	0	0	
Early blight	80.00%	26.67%	26.67%	26.67%	0.00%	6.67%	
	12	4	4	4	0	1	
Late blight	64.71%	23.53%	29.41%	23.53%	0.00%	17.65%	
	11	4	5	4	0	3	
Black dot	71.43%	35.71%	50.00%	28.57%	7.14%	14.29%	
	10	5	7	4	1	2	
Silver scurf	76.92%	38.46%	46.15%	23.08%	7.69%	7.69%	
	10	5	6	3	1	1	
Verticillium	75.00%	25.00%	33.33%	8.33%	8.33%	16.67%	
	9	3	4	1	1	2	
Lear roll virus	86.67%	26.67%	20.00%	6.67%	6.67%	6.67%	
	13	4	3	1	1	1	
Black scurf	69.23%	38.46%	61.54%	15.38%	7.69%	15.38%	
	9	5	8	2	1	2	
Eel worm	53.85%	23.08%	46.15%	15.38%	7.69%	15.38%	
	7	3	6	2	1	2	
Pink rot	50.00%	37.50%	75.00%	25.00%	0.00%	18.75%	
	8	6	12	4	0	3	
Tomato spotted	73.33%	20.00%	26.67%	6.67%	6.67%	13.33%	
wilt virus	11	3	4	1	1	2	
Scierotinia	57.14%	28.57%	42.86%	21.43%	14.29%	21.43%	
	8	4	6	3	2	3	

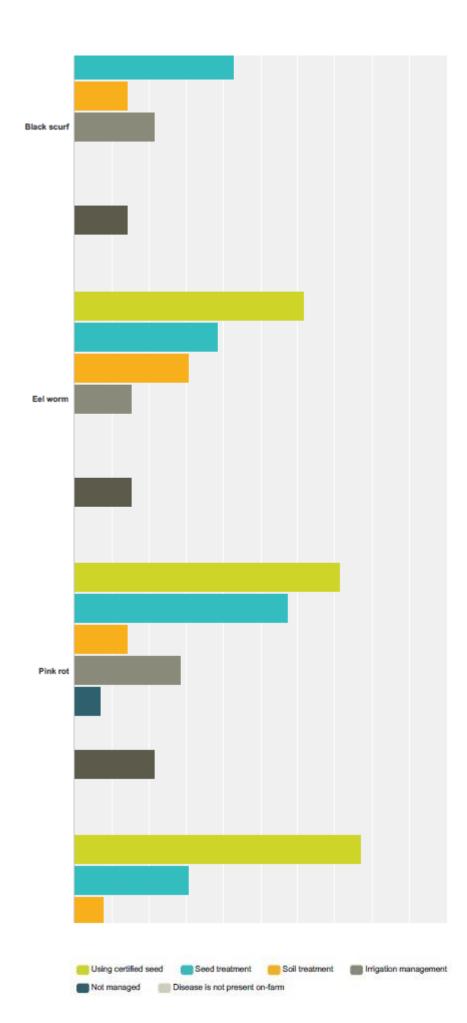
What are your long-term management plans for the following potato diseases?

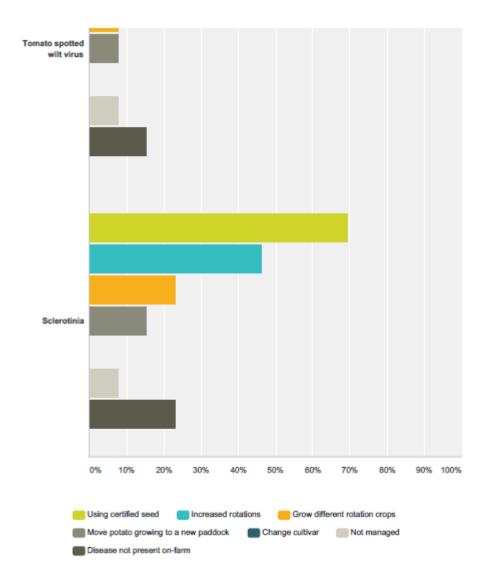
Answered: 35 Skipped: 18











	Using certified seed	Increased rotations	Grow different rotation crops	Move potato growing to a new paddock	Change cultivar	Not managed	Disease not present on- farm	Total Respondents
Powdery Scab	78.13% 25	40.63% 13	40.63% 13	21.88% 7	31.25% 10	0.00% 0	3.13% 1	32
Common scab	83.33% 20	37.50% 9	25.00% 6	25.00% 6	25.00% 6	0.00% 0	4.17%	24
Rhizoctonia stem canker	78.26% 18	56.52% 13	43.48% 10	21.74% 5	0.00% O	0.00% 0	0.00% 0	25
Early blight	73.33% 11	40.00% 6	13.33% 2	13.33% 2	13.33% 2	0.00% 0	13.33% 2	15
Late blight	68.75% 11	37.50% 6	12.50% 2	12.50% 2	6.25% 1	0.00% 0	25.00% 4	16
Black dot	71.43% 10	50.00% 7	21.43% 3	14.29% 2	7.14% 1	7.14%	14.29% 2	14
Silver sourf	78.57% 11	35.71% 5	21.43% 3	14.29% 2	7.14% 1	7.14%	7.14%	14
Verticillium	64.29 % 9	42.86% 6	14.29% 2	21.43% 3	0.00% 0	14.29% 2	14.29% 2	14
Lear roll virus	92.31% 12	30.77% 4	7.69%	15.38% 2	0.00% 0	0.00% O	7.69%	1:
Black scurf	78.57% 11	42.86% 6	14.29% 2	21.43% 3	0.00% 0	0.00% 0	14.29% 2	14
Eel worm	61.54% 8	38.46% 5	30.77% 4	15.38% 2	0.00% 0	0.00% 0	15.38% 2	1:
Pink rot	71.43% 10	57.14% 8	14.29% 2	28.57% 4	7.14%	0.00% 0	21.43% 3	14
Tomato spotted wilt virus	76.92% 10	30.77% 4	7.69% 1	7.69% 1	0.00%	7.69%	15.38% 2	1
Sclerotinia	69.23% 9	46.15% 6	23.08% 3	15.38%	0.00% 0	7.69%	23.08% 3	1