# Horticulture Innovation Australia

## **Final Report**

Potato Industry Communications Strategy Management and Implementation

Richard Mulcahy

**AUSVEG Ltd** 

Project Number: PT12004

### PT12004

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### **Summary**

Since their establishment, the National Potato Levies, with contributions from the Australian Government, have funded vital research and development (R&D) to help improve the productivity and profitability of Australian potato growing operations.

The purpose of the Horticulture Innovation Australia Limited (HIA) funded PT12004 National Potato Industry Communication Strategy: Management and Implementation (PICS) project is to effectively communicate the findings of levy-funded R&D projects to growers and industry, and ensure that all potato levy payers throughout Australia are aware of the outcomes from the investment of their levies.

The PICS project commenced in November 2012 under the management of AUSVEG, and was undertaken to ensure that potato levy payers and other key industry stakeholders were provided with information regarding the outcomes of all relevant research and development projects and other relevant industry news, issues and data.

The PICS project heralded the arrival of an exciting period for the industry, with the combination of emerging and traditional media and communication methods, ranging from printed booklets and brochures to email and emerging online, social media and mobile technologies, set to better inform and involve all sectors of the potato growing community, resulting in better transfer of R&D outcomes and industry information to Australian growers. As well as this, the PICS project provided levy payers with a sense of ownership over their industry communications through greater interaction with other sectors of the industry.

Throughout the project's three-year lifespan, AUSVEG has used an extensive range of both traditional and contemporary communication tools to ensure that the communication strategy devised was implemented effectively and was utilised to maximum potential to guarantee all information reached the widest possible audience. Communication activities have been expressed through the use of the following:

- Publication of the weekly e-newsletter Weekly Update.
- Publication of annual Grower Success Stories.
- Media relations for R&D-related news, including media releases, Twitter and contributions to publications.
- Publication of brochures on the National Potato Levy.
- Stakeholder Relations and additional industry communications.
- Grower Consultations, including hosting successful Annual Levy Payers' Meetings.
- Establishment and maintenance of an industry R&D database and photographic library.

Key outcomes of the PICS project include:

- The continuation of a strong media presence in both metropolitan and regional/rural Australia, which has resulted in the ability for widespread penetration and awareness of key issues and outcomes relating to the Australian potato industry, which has been essential to ensuring cost-effective coverage of R&D related news.
- High level of grower participation in potato industry workshops, seminars and forums.
- Increasingly positive feedback of the weekly e-newsletter, the *Weekly Update*, which regularly features important news and information for members of the potato industry and is now distributed to more than 3,500 growers and relevant stakeholders.
- Positive feedback from growers and industry for the annual Grower Success Stories publications and Potato Levy brochures.
- Positive results from the independent review of the communications program undertaken in 2015.

These outcomes demonstrate that PICS has consistently and effectively fulfilled its purpose, providing payers of the National Potato Levy with a broad range of information in an accessible manner.

To carry on the success of this project, it is recommended that the PICS project is consolidated into a broader Potato Communications Program that includes *Potatoes Australia*. It is also recommended to redesign the *Weekly Update* to enhance readability and cease production of USBs with industry-funded R&D. In addition, it is recommended that future PICS projects increase social media presence and maintain an aggressive media strategy.

## Keywords

Communications; potato; social media; research and development (R&D); media; AUSVEG; Horticulture Innovation Australia

### **Introduction**

Delivering R&D outcomes to potato growers in a concise, efficient and easy to understand manner forms a vital part of the PICS project. As these projects are funded by levies paid by growers, it is essential that growers can access the outcomes of these levy-funded projects. As we know that different people have different preferences with regards to accessing information, R&D outcomes need to be accessible to growers across a wide variety of distribution channels.

The ultimate aim of the PICS project is to communicate the outcomes of industry-funded R&D to growers and industry members. Potato levy-funded research includes R&D outcomes that can be used by growers on farm to improve their productivity, as well as information that growers can use in their businesses, including consumer research.

AUSVEG used the following methods to communicate levy-funded research to growers: e-newsletter; media releases; brochures; social media; annual *Grower Success Stories* publications; USB sticks preloaded with levy-funded content; as well as attendance at industry events and other communications materials as required.

Maintaining an aggressive media campaign for the industry has been vital to communicating R&D to growers and the wider potato industry. By highlighting the benefits of industry R&D through the media and the success stories that are generated within it, the industry can maintain a positive, professional and progressive image.

Industry surveys have indicated that the most popular form of receiving information on industry R&D is through hard copy magazines. Given the average age of growers in the potato industry is over 50, ensuring growers can access information in a hard copy format, including magazines, brochures and booklets, is vital to ensure they are able to be updated on the latest R&D outcomes. Regular updates through the *Weekly Update* e-newsletter were also highlighted as a popular form of receiving information on R&D and industry events.

While older growers outnumber younger growers in our industry, providing communication material to the younger generation is important for the development of the industry. Surveys have indicated that younger growers are more likely to receive information on R&D and industry events through social media and online forms of communication. Investing in increased online communications has resulted in a twofold effect – it ensured a wider grower audience can receive information on the latest industry R&D and rejuvenates the image of the industry as modern and tech savvy, which will help in attracting young people into the industry and help retain those already in it. The benefits of this investment can be seen through the increasing popularity and prominence of the AUSVEG Twitter channel, which was established during this project, as well as the popularity of the AUSVEG website.

Providing growers and industry members with the outcomes of industry-funded R&D in an easy to understand format was also a vital component of the program. Giving growers access to scientific reports that they cannot understand will not give them the information they need to improve their businesses. The ability for AUSVEG staff to promote levy-funded R&D in non-scientific language has

been essential in increasing the potential for readers without a scientific background (including those in the media) to comprehend R&D outcomes and therefore increase their adoption by levy payers.

Highlighting the benefits for growers being involved in industry-funded R&D programs was also a key focus of the PICS project. The *Grower Success Stories* publication was a popular communications tool among growers and was important in showcasing the benefits that being involved in levy-funded activities had for growers and their businesses. This publication was received very well by growers through industry surveys, and continuing this booklet is an important step to continue to highlight the benefits of the National Potato Levies.

Through the successful establishment and execution of these communications activities, the PICS project played a decisive role in increasing Australian potato growers' understanding of the National Potato Levies and awareness and adoption of resulting R&D outcomes from levy-funded activities.

### Methodology

AUSVEG utilised a wide variety of channels to communicate information to potato levy payers, including the AUSVEG website, existing print and email-based publications and engaging with levy payers through metropolitan and rural media. Over the life of the PICS project, AUSVEG staff also attended field days, seminars, workshops and industry events to communicate widely with levy payers and industry members.

A cornerstone of the PICS project is the continued publication of the AUSVEG *Weekly Update* enewsletter, providing a weekly rundown of news and current events relevant to potato levy payers. This e-newsletter, distributed to approximately 3,500 readers every week, has been vital in communicating R&D results, industry developments and other news and information of concern to potato levy payers.

As specified in the original project proposal, AUSVEG has created and developed a Twitter presence to publish ("tweet") R&D information to followers of its account, including growers, members of the supply chain, the research community and journalists. This Twitter presence has also been used to promote AUSVEG media releases and link to further information on the AUSVEG website, integrating AUSVEG's online presence to maximize the information delivery potential of the PICS program. The account has already attracted over 1,700 "followers", and AUSVEG expects this number to continue to increase as the platform increases in use within the potato industry.

During its delivery of the PICS program, AUSVEG also exercised its ability to proactively develop original media stories by issuing media releases on R&D results and other news of interest to the industry. This generated media attention and increased the profile of the Australian potato industry as a whole. These media releases were distributed through the AAP Medianet service, reaching around 700 journalists, and directly through AUSVEG's media database of approximately 400 journalists. AUSVEG's also responded publicly to industry issues by responding to media requests, with AUSVEG staff undergoing media training to ensure their work in the media is of the highest standard.

To track the performance of the media work performed by the PICS project, AUSVEG used the media tracking service iSentia to ensure rural and metropolitan news outlets were targeted and to measure media activity that was generated. By taking this information and tailoring media outputs accordingly, the PICS project was able to allow for a broader dissemination of industry R&D.

Significantly, the PICS project was active in promoting cases where R&D has been translated into improved on-farm practices and operations. Through the *Potato Grower Success Stories* publication, AUSVEG produced annual snapshots of how levy-funded R&D has been used for practical, on-farm changes which have delivered benefits to potato growing operations. These annual booklets were produced through research and communication with levy paying growers, and made use of dedicated photography sessions coordinated by AUSVEG to visually capture the story and provide an appealing backdrop to the textual information in the booklets.

During the PICS project, AUSVEG also created a USB stick containing the latest levy-funded R&D

which was distributed to growers to ensure that they could access the results of their levy investment both online (through the InfoVeg database) and offline. This USB used an Excel database to categorise and present R&D reports, as well as other information and publications relevant to levy payers, in an easy-to-understand and accessible layout. The information on (and presentation of) the USB were developed through work by PICS staff in coordination with HIA and the use of an external resource for the manufacture of the USB. The availability of the USB was promoted through the *Weekly Update* e-newsletter, and copies of the USB were distributed at the 2015 National Horticulture Convention.

AUSVEG has continued to maintain and improve its Potato Industry Contact Database over the course of the PICS project. The database has been modernised to function as a system capable of managing large numbers of growers and industry contacts, with AUSVEG now employing the Salesforce online platform to manage its contacts. This database has been used to promote levy payer meetings, field days, information sessions and seminars.

Over the life of the project, the AUSVEG photo library has been updated with new images and photographs as required, both through subscriptions to stock photo services and through the services of photographers commissioned through AUSVEG to take original photographs for use in PICS publications. These photos add visual appeal to PICS outputs, increasing growers' engagement with the included content and improving their effectiveness as R&D extension tools.

To monitor the ongoing effectiveness of the PICS program, and to gauge the potential for improvements or refinements to its outputs, AUSVEG conducted three annual surveys using the SurveyMonkey online platform. These surveys provided valuable guidance to the direction of the PICS program.

### **Outputs**

The following compilation of outputs has been accumulated over the life of the project and adheres to the PICS project requirements.

#### **Media Relations**

Dissemination of R&D related news through Media Wire distribution service to between 900-1200 journalists, yearly subscription to media distribution services:

Throughout the life of the project, AUSVEG has utilised regular distribution methods in dispatching media releases to journalists. Through subscribed media services (namely, medianet.com), AUSVEG reaches an average of over **700** journalists per R&D related release. The AUSVEG direct media distribution list has grown to close to **400** contacts. In total, AUSVEG R&D related media releases reach about **1,100** journalists via email. Media releases are also disseminated via the @AUSVEG Twitter account. This account has grown to attract over **1,700** followers since its creation in August 2012.

Detail of the level of penetration of R&D related media, presented through graphs showing approximately 300 - 400 AUSVEG media mentions per month. Twelve graphs are produced each year to assess the readership and ongoing success of the initiative:

Obtained through monthly media coverage reports from the iSentia media monitoring service, the average number of stories per month featuring AUSVEG during the period 1 November 2012 through to 31 January 2016 is around **430.** These figures easily exceed the target AUSVEG media mentions.

### Develop an archiving system containing AUSVEG R&D related print and broadcasts:

An electronic archive has been established and contains all media alerts received from iSentia. These alerts are summaries of AUSVEG's media impact, R&D hits and audience reach (where applicable).

Media releases on all potato R&D final reports and milestones deemed newsworthy and for growers' immediate attention to approximately 900 journalists. Four per year:

Since the inception of the PICS project, **24** media releases have been produced and distributed regarding potato R&D final reports, milestones and international research of interest to the Australian potato industry. These releases have been distributed via email to about **1,100** journalists (approximately **700** subscribed through the medianet service, and about **400** through direct distribution from AUSVEG). Media releases have also been further disseminated via the @AUSVEG Twitter account, which currently has over **1,700** followers.

The list of potato R&D-related media releases published during the project period is included as an appendix (see Appendix 1).

48 Weekly Update e-newsletters distributed to growers, supply chain and industry stakeholders informing them on AUSVEG news, consultation dates and upcoming R&D events:

The *Weekly Update* was consistently distributed to growers and industry members, with 50 editions distributed per year. During the project period, there have been **154** *Weekly Update* editions distributed to approximately **3,500** recipients per edition.

# Section of the *Weekly Update* e-newsletter dedicated to the notification of all new R&D final reports and milestones as reports are received by AUSVEG:

Over the life of the PICS project there were **50** *Weekly Update* articles notifying levy payers of R&D final and/or milestone reports. These articles were concentrated from November 2012 – November 2014, as the former Horticulture Australia Limited online portal which provided notifications regarding levy-funded R&D reports was taken offline in late 2014.

# A developed network of rural, regional and urban R&D stakeholders via social media site *Twitter*, through which an awareness of R&D outcomes can be generated:

AUSVEG has developed an extensive online network through social media network Twitter. During the project period, AUSVEG has accumulated over **1,700** Twitter followers. Approximately half of the @AUSVEG account's followers are journalists, editors and bloggers from the Australian media industry. The remaining half consists of government bodies, politicians and industry/supply chain members, as well as growers and members of the general public.

# Extensive network of relationships developed with rural, regional and metro media organisations to provide R&D outcomes deemed newsworthy:

AUSVEG has continued to maintain and update its existing media contact distribution list, through which all R&D-related media releases are sent directly to about **400** contacts. A series of meetings with key journalists has also been undertaken throughout the project, which is an ongoing component of establishing relationships with key industry journalists.

# Monthly submissions to industry publications providing relevant R&D outcomes deemed newsworthy. Two publication columns per month:

Monthly and periodic columns from the AUSVEG CEO and Chairman, as well as other contributions, have been included in several industry publications. These publications included *Good Fruit and Vegetables, Vegetables Australia* magazine, *Rural Business* magazine, *SA Grower* and *HAL/HIA Hortlink*.

## Media skills training course for four staff to present and articulate R&D in broadcast mediums:

AUSVEG staff have undergone formal media skills training throughout the life of the PICS project to ensure they are confident and capable when dealing with the media. This has been essential to ensure a professional outward image of the industry.

#### Stakeholder relations and additional industry communications

Membership to and participation in industry related R&D working and non-political government advisory groups and steering committees, with six to eight meetings per year. Results of meetings are published in the AUSVEG *Weekly Update*. Examples include yearly ABARES conference and Attorney General Chemical Security Forums.

During the project period, AUSVEG participated in **48** meetings related to R&D and non-political advisory groups and steering committees. A list of these meetings is provided as an appendix to this document (see Appendix 2).

### Provision of adequate food and beverage to attend these meetings:

Objective for this requirement was met during the project period.

Facilitation of 15 industry meetings within AUSVEG headquarters, inclusive of food and beverages; held as required throughout the life of the project, i.e.; food requirements for meetings with HIA (formerly HAL) levy payers and R&D groups:

Since the beginning of the project, AUSVEG has hosted **17 meetings** with HIA, levy payers and other R&D groups/service providers regarding levy funded projects and matters. A list of these meetings is provided as an appendix to this document (see Appendix 2).

AUSVEG staff facilitating annual Levy Payer Meetings to report on levy collection for financial year to large gathering of growers. One major meeting per year.

During the project period, AUSVEG hosted **23** major and regional Levy Payers' Meetings across Australia. A list of these meetings is included as an appendix to this document (see Appendix 2).

Given HIA's ongoing transformation to grower ownership, and changes to the previous Horticulture Australia Limited Statutory Funding Agreement, AUSVEG has been informed that Annual Levy Payers' Meetings will no longer be proceeding in the format under which they were previously held. AUSVEG staff have however been involved in both promotion of, and attendance at, HIA's Between the Rows consultation sessions with growers. AUSVEG has **attended 5 Between the Rows meetings hosted by HIA**. These are included as an appendix to this document (see Appendix 2).

### **Photography**

The development of a comprehensive photo library of high quality images to be used in the production of various communications materials:

AUSVEG has developed and maintained a stock photo library over the past 10 years that now consists of approximately **96,365** industry related photos, at a total data size of **806 Gigabytes**. Photos relevant to the potato industry are also purchased on an as-needed basis to ensure communications material remains current.

Appealing photos for use in potato communication announcements, i.e.; Levy Payers' Meeting flyers, Strategic Investment Plan flyers etc. Approximately six flyers per year:

During the project period, **66** flyers were produced for communications activities utilising the AUSVEG stock library. These flyers were produced for potato industry meetings, including Levy Payers' Meetings, as well as study tours, brochures and other potato industry-related communications.

Freelance photographer engaged and utilised on an as needed basis, for current and upto-date images. Approximately four photo shoots per year:

This budget has been allocated to commission professional freelance photographers for the production of the annual potato industry *Grower Success Stories* publications.

#### **Administration**

Provision of reasonable administrative facilities and utilities to house relevant staff within the Peak Industry Body headquarters:

Objective was met for the project period.

Provision of reasonable travel and accommodation to consult with levy payers and HIA (previously HAL) on an as needs basis:

Objective was met for the project period.

Provision of insurance cover for office and assets, provision of public liability insurance:

Objective was met for the project period.

Provision of Annual Audit on AUSVEG accounts and a final report on status of company:

Objective was met for the project period.

Fully serviced accounting and administrative requirements in order to correctly manage and account for the project:

Objective was met for the project period.

#### **National potato industry database**

Provision of a National Central database for communication between the Peak Industry Body and levy payers:

An online database has been set up to better facilitate communication with growers. All relevant existing data has been collated into this database, which is fully operational. It is updated and maintained as required.

The management and storage of data on the location and contact details of potato levy payers:

AUSVEG continues to manage and store the location and contact details of levy payers, consistently updating information as required.

Segmentation of the vegetable and potato industry sectors in order to provide targeted R&D extension materials:

R&D extension materials continue to be separated according to the two publications *Vegetables Australia* and *Potatoes Australia*, as well as by states. Further segmentation according to industry role and commodities grown is ongoing.

### <u>Website – Grower portal</u>

Development and management of a dedicated website for growers to access and search for R&D reports information:

In addition to the Knowledge Management System, the InfoVeg service is now fully operational.

InfoVeg is a dedicated R&D database that is easily used on tablets and smartphones. This enables potato levy payers to easily search for the information they need. InfoVeg is regularly updated with new information as it becomes available.

A feedback form for growers to rate usefulness of R&D projects via AUSVEG website or by hard copy submission. A "was this R&D useful to you" rating from 1-5 will be asked on the R&D summary page. The usefulness rating will be shown on the search results as a number of highlighted stars:

The ability to rate projects as they appear on the R&D database has been considered, with ongoing assessment being carried out as to whether a star rating system could be implemented within the current website infrastructure. Following feedback from users, the proposed star rating system was replaced with a feedback submission mechanism for users to provide feedback on research projects.

As a re-design of the AUSVEG website is ongoing, the rating system for R&D projects will be undergoing development.

# The processing of new members (20-40 per month) through the provision of R&D material and requests for information from the website:

Since the inception of the project in November 2012, an average of **45** membership requests were processed per month.

#### **Update new information and content for the AUSVEG website:**

New information and content is being updated on the AUSVEG website as an ongoing process.

# Archiving of all R&D media releases and publications accessible online (approx. four per month):

During the life of the project, **434 media releases** have been published online under the 'Media Releases' page, an average of **12** per month. Bimonthly publications, such as *Potatoes Australia* are accessible via the Resources tab on the homepage and by logging into the Knowledge Management System.

## Growth in number of total industry members registered for use of R&D website month by month:

There were **4,272** members registered with the AUSVEG website as of December 2015. This represents a significant month-by-month increase on the **2,650** registered with the AUSVEG website as of November 2012, at the commencement of the PICS project.

\* AUSVEG has recently identified a number of fake ("spam") accounts and ensured they are not included in calculations of registered members.

# Provision of 100+ dedicated web pages to communicate R&D and industry statistics to levy payers, researchers and industry related journalists:

Over **1,600** pages dedicated to levy-funded R&D projects are hosted on the AUSVEG website.

Provision of an online industry events calendar detailing levy payers' meetings and future R&D related activities:

Ongoing through the AUSVEG *Weekly Update* and various other AUSVEG newsletter publications. Events are also listed at <a href="http://ausveg.com.au/events/general.htm">http://ausveg.com.au/events/general.htm</a>.

### **Communications strategy/evaluation**

## Independent evaluation of current program performance to direct and recommend future communications activities:

An independent evaluation of the AUSVEG Vegetable and Potato Communications programs was conducted in the final year of the project by Tom O'Meara. A more detailed overview of the review can be found in the Evaluation and Discussion section of this document.

### Delivery of a final report showing grower feedback on communication effectiveness:

An online survey calling for grower feedback into the Vegetable and Potato Communications programs was published during the final year of the program. A more detailed overview of the review can be found in the Evaluation and Discussion section of this document.

# A SWOT analysis conducted internally identifying areas of weaknesses and opportunities within AUSVEG's current performance suggesting areas for improvement:

A SWOT analysis of the Vegetable and Potato Communications programs was produced by the AUSVEG Communications team during the final year of the program. A more detailed overview of the analysis can be found in the Evaluation and Discussion section of this document.

## Provision of detailed breakdown and analysis of current trends within AUSVEG's framework on R&D services:

An evaluation of the current trends in the AUSVEG Vegetable and Potato Communications programs was completed as part of the independent review conducted in the final year of the project by Tom O'Meara. A more detailed overview of the evaluation can be found in the Evaluation and Discussion section of this document.

### **Production of detailed evaluation report on communication performance:**

An evaluation of the AUSVEG Vegetable and Potato Communications programs was produced as part of the independent review conducted in the final year of the project by Tom O'Meara. A more detailed overview of the evaluation can be found in the Evaluation and Discussion section of this document.

### **IT and telecommunications**

# Establish and maintain a contact list of mobile phone numbers in order to notify growers on critical R&D or regulatory updates via SMS when required:

AUSVEG has established and maintained a list of mobile phone numbers for this purpose, and has now collated **3,019** phone numbers.

### IT logistics and support for the life of the project:

Ongoing as required.

### Telephone and fax access for the life of the project.

Ongoing.

# Provision of R&D updates annually to growers and the agronomy community containing R&D final reports and milestone library. Two thousand [USBs] per year:

The distribution of R&D content via USB flash drive was produced by the AUSVEG communications team and distributed at industry events, including the 2015 National Horticulture Convention as well as other industry workshops. These USBs contained final R&D reports published during the project period, as well as levy-funded consumer research reports, industry publications, annual reports, Strategic Investment Plans and Biosecurity Plans. It was decided that content that was relevant to both vegetable and potato growers would be included to avoid duplication.

#### **Grower Success Stories**

Development and provision of six case studies annually regarding growers implementing R&D changes on farm. Output will be an eight page A4 glossy colour magazine. Provision of on-farm application of R&D findings to levy payers. 2,300 per year. Writing, production, printing, labour and distribution:

The annual *Grower Success Stories* publications have proven to be a hugely popular addition to the potato industry communications program. They were produced in 2013, 2014 and 2015 and were distributed with *Potatoes Australia* magazine. Each edition of *Grower Success Stories* is included as an appendix to this document (see Appendix 3).

### **Potato Levy Brochure**

Production of an annual informative hardcopy brochure presenting up-to-date information outlining the structure of the potato levy system. Approx. four full colour glossy A4 pages of R&D. Distributed to 2,400 recipients per year. Design, print and labour costs:

During the project period, there have been two brochures that contained information outlining the National Potato Levy that have been produced. These brochures were:

There is no such thing as an AUSVEG levy: This brochure outlined the structure of the National Potato Levy, with the aim of dispelling the popular myth that AUSVEG was the company that collected the levy and allocated levy expenditure.

Levy Investment under Horticulture Innovation Australia: This brochure outlined the changes to the structure of levy investment following the transition of HAL to HIA.

With the uncertainty of how the levy system would operate during the HIA transition, prematurely predicting how the levy system would look or producing a brochure that would be out of date very quickly was considered a waste of time and money. These brochures are also hosted on the AUSVEG website.

Distribution of the brochure to levy-paying potato growers within Australia as insert with *Potatoes Australia* magazine:

These brochures were produced and distributed as an insert with *Potatoes Australia* magazine.

Development and refinement of electronic version of brochure on the AUSVEG web

### portal. Brochure to be hosted on <a href="www.ausveg.com.au/rnd">www.ausveg.com.au/rnd</a>:

The brochures have been uploaded online and made available on the AUSVEG web portal.

### **Outcomes**

Over the life of the project, the PICS program was able to showcase the value provided by the investment of the National Potato Levies across a range of outputs and media formats. In doing so, it promoted the outcomes of levy-funded projects to growers, members of the supply chain and participants in the broader potato industry, as well as to researchers and journalists (and consequently the general public).

Importantly, the PICS project achieved its goal of showcasing the benefits of levy-funded R&D and encouraging on-farm uptake of the results of levy-funded projects. Through the *Potato Grower Success Stories*, the PICS project was able to demonstrate the valuable applications that these projects can have for potato growing operations, and the practical changes that growers can make on-farm to capitalise on this research. With the adoption of levy-funded R&D by industry members being the crucial next step in the levy investment process, this was an invaluable outcome of the PICS project.

The PICS project was also successful in its aim of promoting the results of R&D projects, as well as disseminating news and other information of concern to the potato industry, through the *Weekly Update* e-newsletter. With this weekly publication delivered to over 3,500 recipients, the PICS project reaches a wide audience and ensures that all industry members are kept up-to-date about the returns on their levy investment and other news of importance to the industry.

Through a media strategy that communicated information about levy-funded projects on a broad scale, the PICS project generated a significant amount of media attention for R&D and industry news related to the potato industry. The R&D covered by PICS media activities spanned a wide range of topics, from the consumer research conducted by the Potato Tracker project to soil health testing and biosecurity concerns. Media releases also promoted levy payer meetings, HIA *Between the Rows* events and potato industry workshops.

This media strategy resulted in AUSVEG exceeding the ambitious target of 300-400 AUSVEG media hits per month required by the project. In doing so, the PICS was not only able to raise the profile of the Australian potato industry and highlight the contributions of R&D to the industry, but it was also able to communicate issues of concern to industry members and ensure that these concerns reached the attention of the broader Australian public.

AUSVEG's work in maintaining and improving the Potato Industry Contact Database during the PICS project has been a vital aspect of ensuring the effectiveness of PICS outputs. By modernising the way in which the database in maintained, AUSVEG has also been able to make better use of its wide range of industry contacts and ensure that communications outputs reach the widest audience possible.

Improving the database was particularly valuable in AUSVEG's work in promoting and facilitating levy payer and industry meetings as part of the PICS program. In particular, prior to HAL's transition to the grower-owned corporation HIA, AUSVEG's industry contact database was of enormous value in ensuring that local industry members were aware of levy payer meetings being held in their area,

and it has continued to prove useful in promoting HIA's Between the Rows levy-payer events.

Overall, the PICS project delivered on its goal of promoting the awareness and adoption of positive R&D outcomes and other new technologies that assist growers' production and improve the yield, profit and long-term viability of their operations.

### **Evaluation and Discussion**

### **Independent Review**

As a requirement of the project, an independent review of the AUSVEG Vegetable and Potato Communications programs was completed by Tom O'Meara. This review examined the performance and achievements of the project and provided recommendations on future communications activities. The review was conducted for both the vegetable and potato industry communications programs; however, this document will only focus on the review of the potato-related communications program.

The review was complimentary of the AUSVEG Potato Communications program, with the reviewer commenting that, "The three-year project has provided a wealth of information including valuable new production practices, new technology, the good news stories about innovative growers and their successes around the nation and evolving industry issues."

The existing network of journalists utilised by AUSVEG for media dissemination, namely Australian Associated Press (Medianet), was labelled as "one of the most efficient and effective" ways to distribute R&D and media. The review commented that this method of media dissemination was effective in increasing reach for media activities.

The review highlighted the popularity of the *Grower Success Stories* publication, which was described to "certainly resonate with growers for a variety of reasons". The review noted that these publications aided in lifting the confidence of growers in the industry that has resulted from their successful peers sharing their achievements with the wider industry.

The review also stated that the weekly e-newsletter, the *Weekly Update*, was a highly valued component of the PICS project. The review highlighted: "Unanimous response from growers interviewed that this is a must read newsletter for R&D updates and relevant industry news." The review also reinforced its importance in informing the industry on the latest R&D information.

The importance and increasing prevalence of online and social media was also a positive indicator of the program's success as noted by the reviewer, particularly for use during the National Horticulture Convention.

The review provided the following recommendations for future communications activities.

 The Weekly Update e-newsletter has certainly taken over as the must read column. It's more than just providing the information it has become a personal connection between AUSVEG and its clients, the levy payers. Changes will evolve but don't make changes just for the sake of it.

While the *Weekly Update* may be redesigned in future to enhance readability, the core content of the e-newsletter will remain unchanged.

2. The industry would welcome Grower Success Stories publications twice a year. A

#### business case would show it is good value for money.

While this recommendation does not take into account the logistics of producing the grower case studies, the recognition of celebrating successful growers in the industry is expressed by growers and industry members alike.

Great step forward with stakeholder relations and additional communication with industry meetings at AUSVEG and membership participation in the R&D and advisory groups. Look for expansive opportunities.

Further opportunities in stakeholder relations will be considered.

4. Continue the policy of staff training, particularly the very specific off-site program developing media skills. The training concentrates on advancing skills in the presentation and articulation of R&D projects and industry issues in all broadcast mediums. As hard as it may sound, this is front line exposure for AUSVEG and the industry and requires nothing less than a professional approach. The AUSVEG team certainly meets and exceeds its targets in the area.

Providing a unified and professional image of the industry is important to ensure growers have the most effective representation in the media. This is vital in ensuring their needs and interests are taken seriously by the public and at all levels of government.

#### **Grower Feedback survey**

During the final year of the project, AUSVEG conducted an online survey for growers and industry members to evaluate the different components of the AUSVEG Vegetable and Potato Communications programs. Feedback from 91 growers and industry members was recently collected through this survey to provide feedback on the key findings of the Vegetable and Potato Communications Program. The survey was conducted for both the vegetable and potato industry communications programs.

Results from the entire survey sample of 91 indicated:

- 73.63 per cent 'agreed' or 'strongly agreed' that the *Weekly Update* kept them informed of current events and R&D projects (19.78 per cent somewhat agreed).
- 66.67 per cent 'agreed' or 'strongly agreed' that the *Grower Success Stories* publication was entertaining and informative (26.67 per cent somewhat agreed).
- 60.67 per cent 'agreed' or 'strongly agreed' that AUSVEG information (including flyers and brochures) were useful (25.84 per cent somewhat agreed).
- 62.50 per cent believed AUSVEG's media and communications activities were 'good' or 'very good' (27.27 per cent indicated they were adequate).
  - Of those active in social media, 62.16 per cent believed AUSVEG's social media presence was 'adequate'.

Feedback for the survey was provided by 35 vegetable and potato growers. Results from grower respondents indicated that the preferred method of R&D information delivery were email, magazine publication and website, while the least preferred was social media, USB and text. This may be due

to a low recognition of these services, as there was a high number of respondents who did not select any of these methods.

Further feedback from growers also indicated that:

- 65.72 per cent of growers either 'agree' or 'strongly agree' that the *Weekly Update* kept them informed of current events and R&D information (25.71 per cent somewhat agreed).
- 54.29 per cent 'agree' or 'strongly agree' that information on the AUSVEG website is easy to navigate (40 per cent somewhat agreed).
- 65.72 per cent 'agree' or 'strongly agree' that *Grower Success Stories* is entertaining and informative (28.57 per cent somewhat agreed).
- 54.29 per cent believe AUSVEG brochures and flyers keep them informed about R&D activities. (31.49 per cent somewhat agreed).
- 34.29 per cent believed AUSVEG's social media presence was 'adequate' or 'fairly strong', but 62.86 per cent were not active on social media.

Overall, 65.71 per cent of growers rate AUSVEG Communications performance as 'good' or 'very good'; 17.14 per cent indicated it was adequate and only 14.29 per cent rated it negatively.

### **Internal SWOT Analysis**

As a requirement for the PICS project, an internal SWOT analysis was conducted by AUSVEG staff regarding the strengths, weaknesses, opportunities and threats of the PICS project. This analysis was compiled using information derived from external reviews of the PICS project as well as internal analysis of the program's success in communicating industry-funded R&D to growers. The information presented in the table below is applicable to both the VICS and PICS projects, as well as the *Vegetables Australia*, *Potatoes Australia* and *Vegenotes* publications, as external reviews and surveys distributed by AUSVEG combined the two reviews.

Strengths	Weaknesses
<ul> <li>Multi-channel communication program that informs growers across multiple media.</li> <li>Professional, high quality communication products.</li> <li>Program has strong support from growers.</li> </ul>	<ul> <li>Multi-programs/projects could be streamlined to enhance efficiency.</li> <li>Communication layout could be improved for a time poor audience, particularly for rural industry members with poor internet connections.</li> </ul>
Good use of profiling growers that have been involved with industry R&D and benefited	<ul> <li>National Potato Levy continues to be misunderstood despite communication efforts – this is an ongoing issue since the HAL/HIA</li> </ul>

<ul> <li>from their experience.</li> <li>AUSVEG Communications team that is committed, highly qualified and act as a good service for growers.</li> </ul>	<ul> <li>transition.</li> <li>USBs were poorly received by growers and difficult to organise.</li> </ul>
Opportunities	Threats
<ul> <li>Layout changes to improve readability of weekly e- newsletter for time poor audience.</li> </ul>	Potential loss of quality staff within AUSVEG and HIA.
<ul> <li>Combination of communication programs to gain greater efficiencies.</li> </ul>	
<ul> <li>Upgrade of AUSVEG website/R&amp;D database to improve user experience.</li> </ul>	
<ul> <li>Streamline the different forms of communication to minimise the number of products a grower must read.</li> </ul>	
Increase engagement from trusted advisors like consultants and agronomists.	

### Recommendations

Based on the feedback from both internal and external reviews into the PICS project, as well as observations from the AUSVEG Communications team, the following recommendations should be taken into account for future Communications projects:

## Recommendation 1 – Potato Communications program should include PICS and *Potatoes Australia*

There are currently three industry-funded projects that relate to communications in the potato industry: PICS and *Potatoes Australia*. Each of these has separate reporting requirements despite being conducted by the same team and having similar aims. These three projects should be combined into one Potato Communications Program to streamline reporting requirements and increase the efficiency of communications to the potato industry.

### Recommendation 2 - Weekly Update should be re-designed to enhance readability

While the *Weekly Update* continues to be a popular communication produced by AUSVEG, there have been concerns raised about the size of the e-newsletter and the amount of time it can take to download for some growers without reliable internet. The *Weekly Update* should be re-designed to enhance the readability for its viewers, as well as making it easier to download for those in regional areas.

## Recommendation 3 – Production of USBs with industry-funded R&D should not be continued

Production of a USB for growers so they have the ability to access industry-funded R&D without being connected to the internet has not been sufficient in increasing R&D uptake, as they were poorly received by growers. As such, it is recommended that production of a USB should not continue in the new project.

### Recommendation 4 – Social media presence and output should be increased

Information is disseminated through multiple platforms, and as such it is vital to ensure that the potato industry has a presence in all media. Given the successful incorporation of social media into the potato communications program, it is recommended that social media continue to be a focus through the next stages of the project, including encouraging the involvement of more growers. It is also recommended that more social media platforms be investigated to increase uptake of industry R&D.

### Recommendation 5 – AUSVEG should continue aggressive media strategy

AUSVEG has been able to communicate effectively with potato levy payers through its extensive media coverage. Therefore, it is recommended that AUSVEG continues to utilise its communications network to pursue a proactive, aggressive media campaign promoting R&D outcomes to the Australian potato industry.

### **Scientific Refereed Publications**

None to report.

# **Intellectual Property/Commercialisation**

No commercial IP generated.

### **Acknowledgements**

AUSVEG wishes to acknowledge and thank the following individuals and organisations for their contribution, service or assistance in what has been the highly successful implementation of the National Potato Industry Communication Strategy: Management and Implementation project:

- Horticulture Innovation Australia Limited.
- Members of the former Fresh Potato Industry Advisory Committee (IAC).
- Members of the former Processed Potato Industry Advisory Committee (IAC).
- Potato R&D researchers, consultants and others belonging to institutions, universities and any other relevant bodies.
- iSentia Media.
- Contributors and advertisers for the Weekly Update.
- Commissioned freelance photographers.

### **Appendices**

### **APPENDIX 1: Media Releases - Vegetables**

- 19 June 2013 Crop management and potato R&D to be discussed at South Australian industry workshop
- 19 July 2013 DNA soil testing technology to reduce the impact of potato diseases
- 12 August 2013 Artificial intelligence weeds out dodgy spuds
- 16 October 2013 Spuds most sustainable crop: UK study
- 15 April 2014 Defying gravity: Potato growers embrace aeroponic cultivation
- 16 April 2014 Treasure Island of biosecurity
- 27 May 2014 Biosecurity protection a primary focus of QLD potato forum
- 15 August 2014 Australian potato growers feeling the pinch
- 14 September 2014 Industry development to take root at regional potato meeting in Devonport
- 15 September 2014 Regional potato meeting to provide a-peeling insight into consumers' minds
- 16 September 2014 Growers to have input during Regional Potato Levy Payers' Meeting
- 17 September 2014 Levy payer engagement is key focus of South Australian industry meeting
- 10 October 2014 Taste and convenience emerge as key factors to increase spud consumption
- 10 November 2014 Spuddy Marvelous! Young people want to buy more potatoes
- 3 December 2014 Mashed potato king of the home-cooked potato pile
- 29 January 2015 Potatoes fuelling Aussie families
- 14 April 2015 Aussie spuds on South Korean menus
- 17 April 2015 Growers head to Bundaberg for HIA roadshow
- 28 July 2015 Australian industry represented during International Potato Group meeting in China
- 30 July 2015 Australian potato industry researcher honoured at World Potato Congress
- 1 September 2015 Purple potatoes may help in the fight against bowel cancer
- 18 September 2015 World-renowned Potato virus Y expert to enlighten WA growers
- 15 October 2015 Biosecurity champions deliver success for potato industry

16 December 2015 – All Aussies want for Christmas are carrots and spuds

### **APPENDIX 2: Stakeholder Engagement meetings**

# Industry related R&D working and non-political government advisory groups and steering committees

Thursday 24 January 2013 - AUSVEG meets with Doris Blaesing at AUSVEG office

Tuesday 5 February 2013 – AUSVEG participates in teleconference for PIEP advisory committee

Tuesday 9 April 2013 – AUSVEG attends Seed Potatoes Victoria meeting at Toolangi

Thursday 11 April 2013 – AUSVEG attends Levy System Workshop in Sydney

Thursday 18 April 2013 – AUSVEG attends industry workshop in Melbourne

Thursday 16 May 2013 – AUSVEG meeting with HAL in Canberra

Monday 20 May 2013 - AUSVEG attends meeting with HAL and ABARES in Canberra

Thursday 20 June 2013 - AUSVEG Attends potato industry workshop in Tullamarine

Friday 21 June 2013 - AUSVEG attends food security forum at the University of Melbourne

Thursday 12 September 2013 - AUSVEG meeting with Doris Blaesing at AUSVEG office

Thursday 19 September 2013 – AUSVEG attends Potato Industry Event in Tullamarine

Monday 11 November 2013 – AUSVEG participates in teleconference for PIEP advisory committee meeting

Tuesday 10 December 2013 - AUSVEG attends Seed Potatoes Victoria meeting in Ballarat

Friday 24 January 2014 – Meeting with Pat Abraham & Peter O'Brien to discuss Potato Research Program at the AUSVEG offices in Melbourne

Friday 21 February 2014 – Meeting with Major Peak Industry Bodies at Cotton Australia

Tuesday 25 February 2014 – Meeting with David Isted from the Department of Agriculture (Levies) Commodity Liaison Program at AUSVEG offices.

Monday 3 March 2014 – Participation in a Plant Health Australia MoU Program Steering committee meeting at the AUSVEG offices in Melbourne.

Monday 24 March 2014 - Potato research meeting at Simplot in Devonport.

Wednesday 26 March 2014 – Attendance at the Global Food Forum in Sydney.

Friday 4 April 2014 – Meeting to brainstorm outcomes from Devonport meeting at AUSVEG offices in Melbourne.

Friday 11 April 2014 - Meeting with Brad Mills regarding potato IAC action and decisions at AUSVEG offices in Melbourne.

Wednesday 21 May 2014 – Meeting with Hudson Howells regarding the Potato Industry Export Plan

at AUSVEG offices in Melbourne.

Wednesday 28 May 2014 - AUSVEG CEO attendance at the HAL Review Forum in Melbourne.

Friday 18 July 2014 – Attendance at the PHA MoU Program Management Committee meeting

Thursday 7 August 2014 – Meeting with Dr Doris Blaesing discussing the Seed Certification Review at AUSVEG offices in Melbourne.

Monday 18 – Friday 22 August 2014 – Attendance at the 29th International Horticultural Congress in Brisbane.

Thursday 28 August 2014 – Attendance at the Roberts Rural Supplies Potato Industry Trade Show and Forum in Tasmania.

Thursday 4 September 2014 – Presentation to the Growing Leaders Program in Canberra.

Monday 15 September 2014 – Meeting with representatives from the Tasmanian Institute of Agriculture in Devonport to discuss potato industry training and research.

Wednesday 16 September 2014 – Attendance at the Attorney General Department's Chemical Security meeting in Hobart.

Thursday 2 October 2014 – Attendance to the DAFF Emerging Markets Workshop in Brisbane.

Thursday 9 October 2014 – Attendance at a CSIRO workshop in Adelaide.

Tuesday 13 January 2015 – Meeting with Phil Haines – AUSVEG offices

Friday 7 November 2014 – Seed Potato Certification teleconference

Tuesday 11 November 2014 – Teleconference with Colmar Brunton on Potato Tracker consumer research to be presented at Warragul PIEP meeting

Tuesday 25 November 2014 – Food Incidents Workshop – NSW Trade and Investment Centre, Sydney

Wednesday 14 January 2015 – Victorian Potato Industry Strategic Planning Forum – Centre for Agribioscience, Victoria

Friday 20 February 2015 – Victorian Potato Industry Working Group, Strategic Plan meeting – Centre for Agribioscience, Victoria

Wednesday 25 February 2015 – Meeting with Australia's Chief Scientist on key priorities for food security

Tuesday 3 - Wednesday 4 March 2015 - ABARES Conference

Thursday 5 March 2015 - Biosecurity Roundtable

Wednesday 11 March 2015 - Interview with researchers from Bond University in AUSVEG offices

Thursday 19 March 2015 - Horticulture Industry Forum at Parliament House, Canberra

Wednesday 1 April 2015 - Country of Origin Ministerial Roundtable in Sydney, NSW

Friday 24 April 2015 - Turning Food Loss into Profit Workshop in Canberra

Wednesday 10 June 2015 - ABARES Regional Outlook Conference in Strathalbyn, South Australia

Monday 7 September 2015 – Precision Agriculture Symposium in Wagga, NSW

Thursday 15 October 2015 – AUSVEG attends Victorian Potato Strategic Plan R&D meeting in Bundoora, Victoria

### **Industry meetings within AUSVEG headquarters**

Friday 1 March 2013 – AUSVEG meeting with HAL at AUSVEG offices in Melbourne

Thursday 4 April 2013 – AUSVEG meeting with HAL at AUSVEG offices in Melbourne

Tuesday 26 November 2013 - AUSVEG meeting with HAL at AUSVEG offices in Melbourne

Wednesday 26 February 2014 - Fresh Potato IAC meeting at AUSVEG offices in Melbourne

Thursday 27 February 2014 – Processed Potato IAC meeting at AUSVEG offices in Melbourne

Friday 11 April 2014 – Meeting with Brad Mills regarding Fresh & Processed Potato IAC action and decisions at AUSVEG offices in Melbourne

Thursday 19 June - Fresh Potato IAC meeting at AUSVEG National Convention in Cairns

Thursday 19 June - Processed Potato IAC meeting at AUSVEG National Convention in Cairns

Friday 18 August 2014 – Meeting with Dr Kevin Clayton-Greene to discuss APRP 1 & 2 projects review at AUSVEG offices in Melbourne

Monday 18 August 2014 – Meeting with HAL to discuss potential Levy Payer Meetings at AUSVEG offices in Melbourne

Wednesday 10 September 2014 – Meeting with Colmar Brunton to discuss the Potato Tracker project at the AUSVEG offices in Melbourne

Tuesday 26 September 2014 - Meeting with Seed Potatoes Victoria at AUSVEG offices in Melbourne

Friday 28 November 2014 – Meeting with HIA to discuss the R&D consultation process

Tuesday 13 January 2015 – Meeting with DEPI Victoria to discuss Victorian Potato Industry Strategic Planning Forum

Tuesday 27 January 2015 – Meeting with HIA to discuss the R&D consultation process

Wednesday 4 March 2015 – Meeting with HIA Vegetable Program Implementation Manager and Potato Industry Services Manager to discuss the R&D consultation process

Tuesday 16 June 2015 - AUSVEG meets with Doris Blaesing and HIA at AUSVEG office

### Levy Payers' Meetings and Between the Rows workshops

Monday 4 March 2013 – Bowen Levy Payers' Meeting, Bowen DPI Facility

Tuesday 5 March 2013 – Stanthorpe Levy Payers' Meeting, Stanthorpe RSL

Wednesday 6 March 2013 – Gatton Levy Payers' Meeting, Gatton Research Station

Thursday 7 March 2013 – Darwin Levy Payers' Meeting, Berrimah Farm

Friday 8 March 2013 – Katherine Levy Payers' Meeting, Knotts Crossing Resort

Wednesday 20 March 2013 – Tasmanian Levy Payers' Meeting, Gateway Hotel

Monday 25 March 2013 – Western Australian Levy Payers' Meeting, Joondalup Resort Country Club

Tuesday 26 March 2013 – South Australian Levy Payers' Meeting, GrowSA Headquarters

Wednesday 27 March 2013 – Victorian Levy Payers' Meeting, Italian Sports Club Werribee

Thursday 28 March 2013 – Victorian Levy Payer's Meeting, Cranbourne Golf Club

Saturday 21 June 2014 - Annual Potato Levy Payers' Meeting in Cairns, Queensland

Monday 15 September 2014 – Regional Potato Levy Payer's Meeting in Devonport, Tasmania

Tuesday 16 September 2014 – Regional Potato Levy Payer's Meeting in Ballarat, Victoria

Wednesday 17 September 2014 – Regional Potato Levy Payer's Meeting in Mt Gambier, South Australia

Thursday 18 September 2014 – Regional Potato Levy Payer's Meeting in Hahndorf, South Australia

Tuesday 24 March 2015 – Between the Rows in Grove, Tasmania

Wednesday 25 March 2015 - Between the Rows in Latrobe, Tasmania

Monday 20 April 2015 – Between the Rows in Bundaberg, Queensland

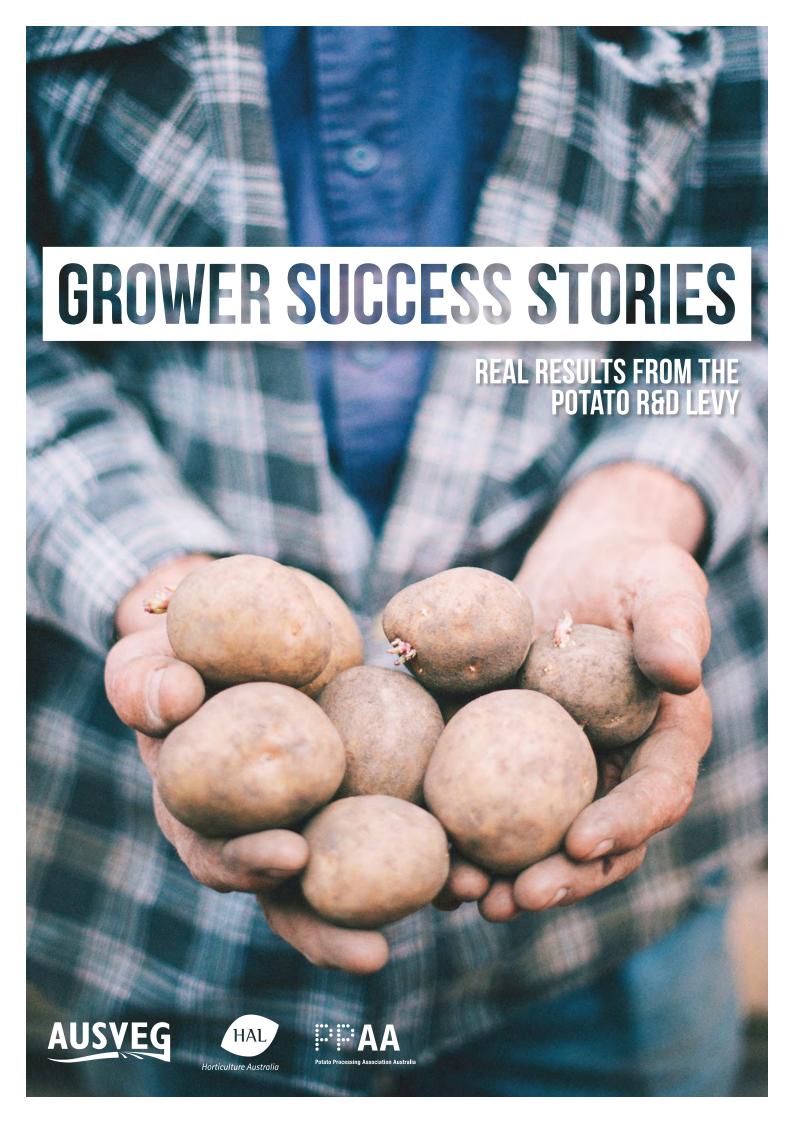
Thursday 7 May 2015 – Between the Rows in Gatton, Queensland

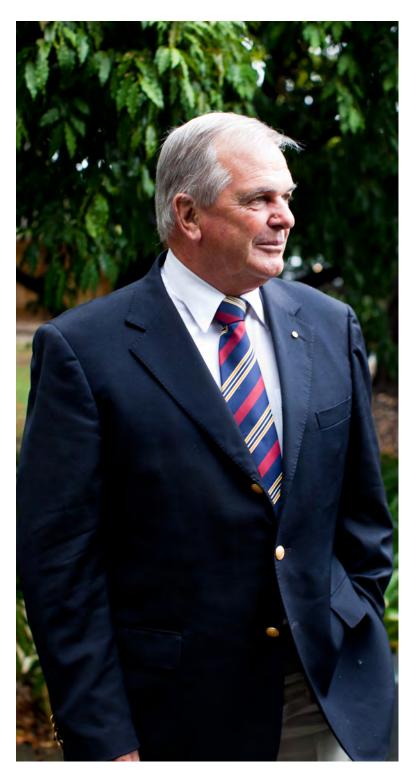
### **APPENDIX 3:** *Grower Success Stories*

2013 Potato Grower Success Stories

2014 Potato Grower Success Stories

2015 Potato Grower Success Stories





The Oxford English Dictionary defines success as "the accomplishment of an aim or purpose". I can say with certainty that Australian potato growers are amongst some of the most accomplished growers on earth. This is not solely due to the rich, fertile soils that we are lucky to have in areas of Australia, or the remarkable farming skills passed on between generations of potato-growing families. The National Potato Levy serves one purpose – to profit all Australian potato growers through the investment of funds into industry research and development (R&D). The existence of this Levy is also one of the reasons why many Australian potato growers are at the forefront of global production.

The Department of Agriculture Levies Revenue Service (LRS) collects the National Potato Levy at the first point of sale, at the rate of 50 cents per tonne. The Australian Government then matches this money dollar for dollar. These funds are passed on to Horticulture Australia Limited (HAL), an industry-owned corporation, to coordinate their investment.

I am the Chair of the Fresh Potato and Processed Potato Industry Advisory Committees (IACs). My colleagues and I on the two Potato IACs all want a bright future for our industry and ensure that all projects put forward are scrutinised to the finest detail, to provide the best return on investment for all levy payers.

This booklet has been produced to demonstrate that the investment of the National Potato Levy is indeed fulfilling its purpose – to benefit levy payers. *Grower Success Stories* provides an account of six Australian potato growers that have used specific R&D outcomes to modify existing on-farm practices, or trialled new ways of growing their businesses. You of course, can become involved in this process by attending the regular workshops facilitated by the Potato Industry Extension Program and hearing from some of the leading Australian and international researchers within horticulture.

Furthermore, AUSVEG, in conjunction with HAL, holds a Potato Levy Payers' Meeting annually to provide growers and processors with the opportunity to suggest potential areas for research and provide feedback on a range of R&D-related issues. Naturally, all ideas are welcome – no matter how adventurous or small they may be. This is your chance to make your mark.

I hope that you find value in this brochure, and it encourages you to become involved with the R&D that will continue to drive our industry's improvement.

Yours sincerely, **The Hon. Paul Calvert AO**Chair of the Potato IACs









It was over a decade ago when Kon Peos of Southern Packers Ltd first began exporting seed potatoes from the Manjimup district, about 300 kilometres south of Perth. Initially, he was sending a few tonnes of seed to buyers in Mauritius, and later, Vietnam.

Today, Mr Peos has contracts to supply more than 1,000 tonnes annually to seed buyers in Mauritius and between 500 and 600 tonnes a year to buyers in Vietnam, Thailand and Indonesia. He recently negotiated to fill new orders in Sri Lanka and the United Arab Emirates and believes he could obtain orders for many more tonnes if he had the seed to fill them.

Mr Peos says the growth of his seed potato business wouldn't have been possible without the assistance of the Department of Agriculture and Food Western Australia (DAFWA) research team that has been involved in a series of National Potato Levyfunded seed potato projects over the years.

"The information members of the team who have supplied information and research outputs concerning overseas disease, storage facilities and other requirements have been a crucial factor in the success of my ongoing negotiations with buyers," he said.

Mr Peos was involved in HAL project PT09038, which aimed to increase the competitiveness of exports of seed potatoes from Australia to Mauritius through reduced seed costs and better adapted varieties.

# 44 Anyone entering the field needs to be prepared to work hard and be patient for results. 77

Equipped with this valuable knowledge, Mr Peos now makes regular trips to Mauritius, Thailand and Indonesia to meet buyers and growers to learn more about their seed requirements and problems.

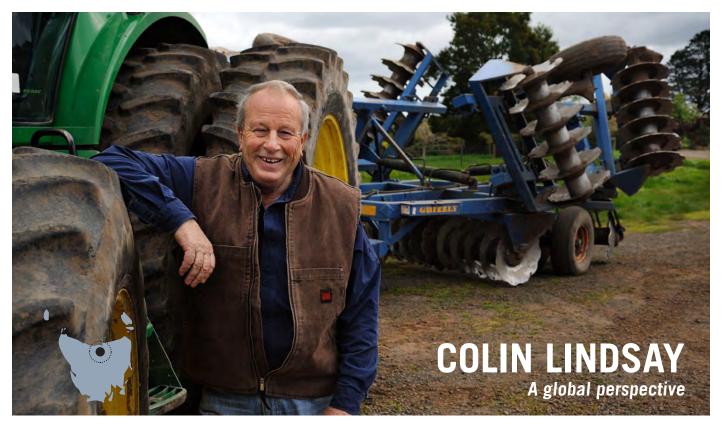
He said there were still many difficulties for anyone exporting seed to Asian destinations – many of which were related to disease and lack of storage facilities.

"Anyone entering the field needs to be prepared to work hard and be patient for results," he said. But Mr Peos believes there are good opportunities for new market players. "Most of the orders I get are for more seed than I can supply at short notice."

Mr Peos operates on about 1,500 acres of land in the Manjimup area where he grows seed on rotation and he organises other growers to supply him with seed under contract. He plans to expand this business further through more contracts with outside growers.



- The National Potato Levy has funded several projects to improve export opportunities for Australian seed potato growers.
- PT09038 aimed to increase the competitiveness of exports of seed potatoes from Australia to Mauritius.
- The R&D information provided by the project research team has proven vital to the success of growers' ongoing negotiations with seed buvers.



A Potato Growers' Study Tour to farms in the US and Canada gave Tasmanian grower Colin Lindsay great insight into future industry trends, as well as ideas for improving his own on-farm management.

The nine-day tour in July 2013 visited farms through the US, New Brunswick in Canada, and finished with a conference in Québec City.

"We need to monitor what's happening overseas and see first-hand the changes farmers are making. That's why I took the trip," explains Mr Lindsay.

He, together with wife Glenda and son Tom, grow 75 hectares of potatoes on their mixed dairy, peas and poppy farm at Longford in Tasmania. Mr Lindsay looks after innovation and infrastructure, while other farm management roles are split between Glenda and Tom.

"We found that American and Canadian farmers have consolidated how they grow and handle potatoes. They have looked at what works well in terms of growing, harvesting and storing their crops. If ground spraying works, then they stick with that. They are not trying to be innovative and reinvent the wheel every year," he says.

"The farmers we visited took a professional approach to their work. They are meticulous in growing their crops and carefully plan all stages of the crop cycle. One of the biggest lessons I brought home is how vital it is to plan."

"There was also great emphasis on ensuring accurate costing of both the growing and handling of crops. Nothing was left to chance, or relying on that extra good crop to bail you out."

While Mr Lindsay already runs his "small business" along similar lines, seeing other growers in action helped reinforce what was happening on his own farm. What was also

noticeable overseas was that all the farmers were happy growing potatoes and excited about the future of the industry.

"There were plenty of modern factories and new potato stores being built. The industry in both the US and Canada hit a peak and has now plateaued to a sustainable level," says Mr Lindsay.

He was also impressed with the large scale of many of the farms and the equipment used. "While many of the US farming practices would not work here, investing in 4-6 row planters rather than the smaller 2-3 row planters could be worthwhile," he says.

The study tour also provided an opportunity to see first-hand the devastation caused by the Zebra Chip disease complex and its associated vector, the Tomato-potato psyllid (TPP). "We all know what the disease looks like in the green crop, but I had never seen its effect on seed tubers."

## We need to monitor what's happening overseas and see first-hand the changes farmers are making.

"These grow little wormy-like sprouts, which when planted, never really amount to much," he says.

For Mr Lindsay, the tour not only provided an opportunity to network, chat and brainstorm with other like-minded growers, but helped to fire his passion for doing what he loves – farming.

"I love being a farmer and I love going out and meeting other people and seeing other farms," he says.



### **Summary:**

Joining an industry study tour has many benefits, including:

- Exposure to international producers, new farming techniques and emerging technologies.
- The opportunity to develop new business and supplier relationships
   both domestic and international.
- An insight into the research and development (R&D) activities being conducted outside of Australia.

HAL project PT12704 was funded by the National Potato Levy, voluntary contributions from industry and matched funds from the Australian Government.





The newly developed PreDicta Pt soil testing technology is a useful management tool that has the potential to decrease crop loss and increase profit margins, according to agronomist and certified seed grower, Andrew Powell.

The innovative DNA technology allows potato growers to test for soil-borne pathogens that cause Powdery scab, Black dot and root knot nematodes.

"If the tests can give us an idea of what's in the soil before we start planting the crops that information could be quite beneficial to growers in the future," explains Mr Powell.

Mr Powell grows about 16 hectares of certified seed in Victoria's central highlands, just north of Ballarat. While his father has grown potatoes for more than 40 years, this is his second year in the business.

He used the PreDicta Pt technology last season and was "quite lucky", but this year the farm has one paddock with a high Powdery scab reading. "If we know there is going to be a particular problem in the soil, then we can treat it accordingly prior to the crop going in the ground," he says.

"We will choose a resistant variety to plant into that paddock. We will also treat the soil pre-planting with a chemical. Hopefully, we will get a positive result and decrease the amount of Powdery scab in the crop for the coming year."

As a certified seed grower, Mr Powell says that potato skin diseases, such as Powdery

scab, are the biggest problem.

"To ensure our seed passes certification we are only allowed one per cent tolerance. If we can decrease the pathogen before the crop is grown or during the growing of the crop, then we can increase our profitability," he explains.

At the moment, he believes Powdery scab is the only pathogen that is worth testing for on his property, but he is keen for more tests to be developed. "I understand the South Australian Research and Development Institute (SARDI) is working on developing another test for pink rot and Common scab, both of which will also be helpful," Mr Powell says

## These R&D projects are really important for the industry and the future of potato growing in this country.

As an agronomist, he recommends that other seed growers use the PreDicta Pt tests, particularly if they have a history of Powdery scab in their paddocks. "It's definitely a worthwhile tool to have in the kit bag," he says.

The tests give growers an idea about whether they have a high, medium or low





risk category for disease. While the technology is only in its infancy in Australia, Mr Powell believes it certainly has the potential to save entire crops.

"It's only been launched this year, so it's too early to quantify the benefits of saving entire crops yet."

"As more tests for soil-borne pathogens come online this PreDicta Pt tool will become the ultimate test for the potato industry. These R&D projects are really important for the industry and the future of potato growing in this country."

- The innovative PreDicta Pt soil testing technology, developed under PT09023, is a useful management tool for potato

  growers.
- Pre-planting testing for soil-borne pathogens has the potential to decrease crop loss and increase profit margins.
- Understanding what's in the soil
   can save on-farm costs. If the
   PreDicta Pt test finds low risk of
   Powdery scab, then the grower
   can choose to plant a non-resistant
   variety and avoid preventative
   chemical at planting.



An opportunity to turn research into action on his north west Tasmanian farm has rewarded John McKenna with the commercial and environment benefits of Controlled Traffic Farming (CTF).

The grower, who was awarded the 2013 Netafim Environment Award at the AUSVEG National Awards for Excellence for his involvement in CTF, has been practising the system for a number of years alongside a team of agronomists.

During this time, Mr McKenna has managed to reduce the impact of his machinery on his now-improved soil while increasing the productivity of his potato, onion and carrot crops.

As well as cutting his tillage operations by up to 30 per cent in some areas, the CTF system has helped to improve water infiltration in the property's controlled traffic area, resulting in an enhanced soil structure.

# Minimising soil compaction and recompaction is not only great for promoting healthy soil condition, but has been a huge time saver for us. 77

"CTF keeps all paddocks in the same wheel tracks year after year, therefore permanently separating compacted traffic zones from soil used for growing crops," he said.

"In practice, this means that all implements have a particular span and all wheel tracks are confined to specific traffic lines."

"While this system can be a challenge in a diverse vegetable industry, the concept itself is simple - plants grow better in soft soil and wheels work better on roads."

Mr McKenna said sowing into old rows, where moisture infiltrated, produced early sowing with associated yield benefits.

"Across all three trial plots we found that



the crop roots were exposed to quicker water penetration and improved moisture holding capacity."

"The infiltration rate in the controlled area is about four times greater than in the conventional growing area, which definitely helps in preventing run-off and creates a huge potential for water irrigation savings down the track."

"In times of heavy rain, this drainage and holding capacity will be very useful for the dry season."

Mr McKenna said there was a reason that CTF was a proven method of preventing future occurrence of soil compaction after deep tillage.

"Minimising soil compaction and recompaction is not only great for promoting healthy soil condition, but has been a huge time saver for us," he said.

"Basically, the less trips you have to make up and down the paddock, the less hours - and energy - will be spent taking out the tracks again and again. In the long-term this will generate savings in energy and fuel consumption."

Today, Mr McKenna updates his farming equipment regularly and has a new potato planter, which has resulted in 50 per cent less wheel tracks in his paddock.





- Controlled Traffic Farming (CTF)
   keeps all paddocks in the same
   wheel tracks, thereby separating
   compacted traffic zones from soil
   used for growing crops.
- Benefits observed in research under HAL project MT09040 included reduced soil erosion, energy and fertiliser use, improved soil structure, organic matter, water use efficiency, and crop productivity and timeliness.
- Issues to be resolved for the successful adoption of CTF in the vegetable and potato industry include tracking stability on compacted wheel tracks, and working width compatibility for implements and harvesters.





Certified seed potato grower, Dean Bone, is a keen supporter of the Potato Industry Extension Program and believes the series of R&D 'road show' workshops, held in potatogrowing districts Australia-wide, have been beneficial to his operations.

Mr Bone grows 40 hectares of certified seed potatoes in the sandy loam country at Kennedys Creek, in the foothills of the Otway Ranges in south-west Victoria. "We are fairly isolated and located in an area that's mainly dairying country," he explains.

He likes that the workshops bring information "out to the farmer" and enjoyed attending a workshop held recently in Ballarat. As well as listening to the experts, what appealed to Mr Bone was meeting other growers and networking about what they were doing on their farms.

"The growers are in the one room, or paddock if it's a field day, and everyone gets talking and sharing information about planting, planters, fertilisers, and things like that. That can really help," he says.

"But I'm also aware of how important it is for us, as growers, to understand and learn about the latest research. For example, the big issue for us at the moment is Potato virus Y (PVY). It's particularly important for seed growers to understand about this problem because it can be passed onto successive crops in seed tubers."

"The workshops have been helpful in explaining what to look for in the crop, and

more importantly, some of the preventative techniques we can use on the farm," Mr Bone says.

"For example, planting whole seed instead of cut seed is one such preventative measure we've introduced. But we've found it best to combine this with other techniques such as planting border crops and using early generation certified seed. It's about introducing a series of actions to try and reduce the risk," he says.

Another beneficial workshop about Common scab and soil borne diseases, presented by Dr Tonya Wiechel, Victorian Department of Environment and Primary Industries (DEPI) researcher, also assisted Mr Bone's on-farm practices. "As a seed grower, one of main our issues is Common scab. But correcting the potassium and magnesium ratio in the soil helped better manage this problem."

Mr Bone explained that Dr Wiechel's work had also led to being able to test the soil to see if it contained Common scab. "This is helpful because it means you are more aware of what's in your soil and whether or not you need to use a seed treatment," he says.

While as yet there is no evidence in Australia of the tomato potato psyllid (TPP), an insect associated with Zebra Chip disease, it's been a nasty experience in New Zealand, where it has devastated the country's industry. Importantly, workshops have been held across Australia providing a description

of the pest and symptoms of what would happen in crops if it was found here.

"This information has been really helpful," explains Mr Bone. "We hope the disease doesn't arrive here, but we want to be prepared if it does. It would be disappointing if these workshops and R&D projects were put on hold. There's something new coming out all the time and we need to be on the front foot," Mr Bone says.

1'm aware of how important it is for us, as growers, to understand and learn about the latest research.

### **Summarv:**

- Potato Industry Extension Program (PT11004) R&D workshops are important for growers.
- The workshops take valuable information on diseases and crop improvement out to the farmer.
- They also allow growers to network, share information and compare production methods.



Photographs by Brandon Rooney.





Mingbool potato grower Terry Buckley describes soil health research as the "last big exciting frontier" in successful potato production.

"It's still the greatest unexplored territory that we have. [The industry] has done machinery, variety development and a lot of chemical and fertiliser work, but we really haven't concentrated as much as we should have on soil and soil health," he says.

Over the past 15 years in particular, Mr Buckley has been working on improving the soil on his family's property north-east of Mount Gambier, trialling a range of industry R&D initiatives. A decade ago, he took part in a HAL think-tank session in Melbourne that aimed to identify and develop new priorities for research within the Australian potato industry. The ideas generated at this session inevitably became the catalyst for a greater emphasis on soil health research in the Australian potato industry, which ultimately formed the APRP1 program.

"My belief then was that soils and soil health was the way to go, and that seems to have swayed a lot of potato research in that direction... I'm still absolutely of the belief that you've got to get [soil health] right or you're just not a sustainable industry for a start," he says.

He regards the new soil DNA test developed by scientists from the South Australian Research and Development Institute (SARDI), as "one of the most ground-breaking trials yet", due to its ability to give growers a snapshot of any common disease pathogens present in their soil prior to crop planting.

The trial work on Mr Buckley's property was carried out by SARDI over several years, and this year, researchers focused on two paddocks measuring 26 and 35 hectares.

Testing assessed the risk of diseases that reduce yield and tuber quality, such as Powdery scab, root knot nematode, Rhizoctonia and Common scab, and helped to summarise relationships between pathogen DNA and yield loss.

Projects investigating soil health within the industry - some of which Mr Buckley has also reaped the benefits of - include research into the importance of tuber-borne inoculums on seed potato health, soil health and disease mitigation, soil amendments, ameliorants and nutrient manipulation, endophytes and their potential for disease suppression, and several others

# of the belief that you've got to get soil health right or you're just not a sustainable industry. 77

Mr Buckley believes his commitment to adopting soil health research findings has paid dividends. He continues to fine tune his own practices in this area and says that he is now "getting a bit of a gain" on his yields every season as a result.

"We keep pretty good records of what we've done all the time and then often we'll look at what our yields and things have turned out like, and anything that stands out tends to be the basis of the next projects. So apart from adopting the industry-funded research, we really do quite a lot of it ourselves here," says Mr Buckley.

- There is a need for horticultural research to focus on soil and soil health to ensure that the Australian potato industry remains sustainable.
- PT09026 aims to develop integrated disease control strategies for soil-borne diseases.
- Potato levy payers have found the outputs of soil health research useful and have applied technology developed by the program on farm.

### GROWER SUCCESS STORIES

REAL RESULTS FROM THE POTATO R&D LEVIES



Horticulture Innovation Australia





The Australian potato industry continues to enhance its reputation as a global leader, thanks in no small part to the innovative practices embraced by its growers. The high quality of produce being grown has been made possible by ongoing investment in new research and development (R&D), which has put Australian growers at the forefront of cutting-edge potato production.

Every year Horticulture Innovation Australia Limited (HIA, formerly HAL), using the National Fresh and Processed Potato Levies, and funds from the Federal Government, has invested vital funding in grower-driven R&D projects, which have delivered real results for potato producers.

In the pages ahead, you will find examples of growers from around the country who have enjoyed business success as a result of taking on initiatives connected to R&D projects funded by the Fresh and Processed Potato Levies.

The Potato Industry Extension Program (PIEP) has continued to shine, as it disseminates results from industry R&D programs to Australia's potato growers and processors. Key areas of research covered by the program include developments relating to potato viruses and diseases such as Pink rot and Potato virus Y, as well as research findings regarding some of the major global potato pests and diseases. Through this project Australian potato levy payers, such as Darren Long and David Nix, who both feature in this publication, have been able to stay up-to-date with the latest potato industry R&D, and incorporate efficiencies into their operations.

Elsewhere we see Australian growers being given opportunities to learn about production and technical innovations from their international counterparts, and make valuable networking connections as a result of participation in levy-funded industry missions. In recent years, Australian potato levy payers have been given comprehensive insights into the methods and practices utilised by the United States and Canadian potato industries, and invaluable opportunities to observe R&D and business initiatives undertaken in these two countries.

Investment in innovative soil management systems has resulted in real on-farm change and has contributed to more consistent and healthier crops. Victorian grower Greg Murphy, who has been heavily involved with pre-plant DNA soil testing, using PreDicta Pt-brand diagnostic test, is testament to this.

I look forward to seeing many more exciting innovations and developments that will continue to help drive the Australian potato industry forward in the years ahead. I would encourage all potato growers to keep informed of the latest industry R&D, which could bring real benefits to their businesses.

Yours sincerely, **The Hon. Paul Calvert AO**Former Chair of the Potato IACs





Industry R&D is helping one South Australian grower develop simple strategies to minimise the risk of an aphid-borne virus that has the potential to hit potato growers in the hip pocket.

Jason Daniell is implementing the latest R&D findings into Potato virus Y (PVY), to help his business' bottom line.

### **Benefitting business**

"Depending on the symptoms it shows, it can affect anywhere from zero to 100 per cent of your crop yield so if your cost to grow is \$3,000-\$4,000 per acre, it can really add up," Jason said.

"Keeping up to date with the latest R&D can only make our business better. The strategies that help reduce PVY are the same that can help reduce other diseases so any improvements in the way we manage our crops will be of benefit."

Jason started farming a 1,000 acre property close to Murray Bridge - about an hour east of Adelaide - in 2005, having been involved in horticulture for 20 years. Half of his product is sold to fresh markets and the other half is designated for the certified seed market.

Early in 2014 he took part in a Potato Industry Extension Program Workshop (PT11004), which aimed to highlight R&D activities to potato growers and processors, during an ongoing series of seminars around the country.

In the lead up to the workshops he received an on-farm visit from Department of Agriculture and Food Western Australia plant virologist, Brenda Coutts, who has

conducted extensive research into PVY, including a scoping study (PT13006). Jason said the visit allowed him to better understand PVY and develop a risk minimisation strategy.

"That was a great experience to talk one-on-one and for the scientist to see how you do things on your farm - because sometimes it can be hard to visualise and everyone has different soils, climates and temperatures," Jason explained.

PVY is an aphid-borne disease that causes yield losses and tuber quality defects in commercial potato crops.

Some varieties of potatoes are more susceptible to the disease than others.

### Minimising risk

Until PVY can be eradicated, Jason says the key to minimising risk is being proactive and always using certified seed.

"Controlling your volunteer potatoes is a big thing we need to do, because they can carry the disease and then it continues to spread," he said.

"We are trying to push our rotation out a bit further between crops.

"We're also planting barrier crops so the aphids can feed on the way through and clean their beak so they don't spread the virus. We've planted a 10m strip of Triticale at the edge of the pivot - it grows up higher than the potatoes and the hope is that the bugs feed on that instead."

Jason says R&D results suggest there will be clear financial and productivity benefits after making the simple changes.





- The Potato Industry Extension Program (HIA Project PT11004) aims to highlight industry R&D news and activities.
- By participating in a recent workshop, South Australian grower Jason Daniell was able to meet with plant virologist Brenda Coutts and develop risk minimisation strategies for Potato virus Y.
- Simple strategies such as correct rotation, controlling volunteer growth, always using certified seed and planting barrier crops can help prevent disease such as PVY.
- Utilising correct procedures could save thousands of dollars in lost production.



A focus on reducing labour costs and using more efficient irrigation technology are the key outcomes of one Victorian grower's overseas study mission.

Daniel Maher visited the United States and Canada in 2013 on a 10-day industry mission (PT12704) and says that he has started implementing new R&D on-farm as a result of what he learned overseas.

Mr Maher, 32, farms at Dean, near Ballarat, on leased farmland, including property owned by his father Brian, who previously took over from Daniel's grandfather, Basil.

He grows 100ha of Innovator and Atlantic potatoes for the processing market, also farming canola, wheat, barley and sheep.

### **Global perspectives**

Mr Maher said there are big differences between Australian growers and their US counterparts.

"When you look at it, Australia's production and consumption of potatoes is minimal compared to the USA," he said.

"US consumers are happy to eat their processing varieties so their main table spud is Russet Burbank, which means farmers there can get rid of their excess.

"I think we need to promote the benefits of Australian grown produce here more, label the packaging better and build new markets."

Cheaper input costs, such as electricity, diesel and labour, also make the US industry considerably more profitable, according to Mr Maher.

While growers have no control over the Australian dollar or oil prices, he says something needs to be done about the financial expenses associated with labour at both farm level and through the production process.

According to Mr Maher, scale is also another factor the Americans have on their side, and farm efficiency has become a big focus since his return from North America.

things on my farm since the trip. I've gone from gun irrigation into some centre pivots which is less labour intensive and will hopefully improve productivity 77

"They don't mess around when it's time to plant and harvest over there," he said.

"Spuds go in six rows at a time and we didn't see any single row harvesters - it's six, ten or twelve rows at a time when they are harvesting.

"Up until last year we were only doing single row, but we are now going to two rows to give us a bit more capacity and to allow us to work on our efficiency."

### **Business investment**

Mr Maher said he was most interested in the irrigation technology being used on farms the grower mission visited.

"We didn't see any old travelling guns like we have. It was all pivots, pivoting laterals or solid set," he said.

"As a result, I have changed a few things on my farm since the trip. I've gone from gun irrigation into some centre pivots which is less labour intensive and will hopefully improve productivity.

"I intend to get more pivot irrigation with better GPS technology as we can afford it."

As for R&D study missions, Mr Maher says he is a big supporter of them and encourages other farmers to get involved in a bid to learn about new technologies and improve their own on-farm structures.





- HIA Project PT12704 aimed to give growers insight into the methods and practices used by potato industries overseas.
- Mr Maher said there are big differences between Australian growers and their US counterparts, including higher consumption in the US and cheaper running costs.
- Mr Maher was very interested in the irrigation technology being used on farms that the study mission visited and, as a result, is moving from using gun irrigation into using some centre pivots.



Darren Long's commitment to on-farm innovation has been pivotal in steering his business, MG Produce, in a profitable direction.

With a working philosophy of "farming for the future", the Tasmanian-based potato grower has successfully implemented biofumigation systems within his operations to manage some of the most troublesome diseases in potato crops.

### Innovative practice

Though the benefits of biofumigation, and its suitability for all growing operations remains the subject of some debate in the industry, Mr Long has found the set-up works for him.

"Using biofumigation as an integrated method has changed our entire approach to potato growing," Mr Long said.

"After 10 to 15 years of research - and a lot of trial and error - we have been able to establish biofumigation on our property at Sheffield (in the state's north west) as an effective disease control measure."

### **Environmental benefits**

Biofumigation is an environmentallyfriendly approach to crop protection in which plant chemicals are used to fight soil-borne diseases.

It works by harnessing the natural chemical agents of a plant to supress

Biofumigation really comes down to soil health and soil conditioning

weed, fungal pathogens and nematodes.

Mr Long uses a variety of brassica called "caliente" - a mustard green "with the highest glucosinolate release currently tested."

"Biofumigation really comes down to soil health and soil conditioning," he said.

"There are no real pests associated with it and it has provided us with a safer growing environment that is suited to what we are doing."

Using the system on his farm has seen Mr Long markedly reduce his crop rotations.

"Ten years ago we had one crop of potatoes in a seven-year rotation," he said.

"Today, we have brought that back to one in three which has helped to increase our crop yield to 24 - 25 tonnes per acre on a pack-out once-a-year."

As he continues to reap the benefits of his labour, Mr Long said he was committed to sharing his progress and knowledge with the wider growing community.

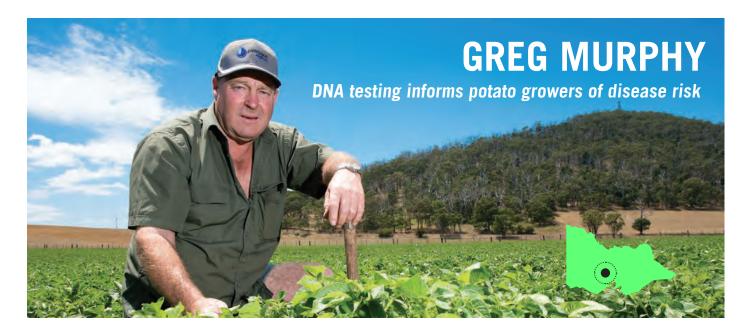
"I have been fortunate to participate in the Potato Industry Extension Program (PT11004) which has allowed me to discuss ideas, meet industry representatives and stay up-to-date with the latest developments in the Australian potato industry," he said.

"Talking to other growers during these workshops has helped to open up links to valuable people in the industry, including processors, agronomists, researchers and supply chain representatives.

"Another great outcome has been sharing our growing practices and management techniques which we hope other local producers can use to benefit their own operations in the long-run."



- For more than a decade, Darren Long's fresh market enterprise, MG Produce, has trialled a range of farming methods and tools to boost crop yields, reduce cropping rotations and produce the highest quality potatoes.
- In doing so, Mr Long has improved soil carbon levels and changed the suite of soil-borne pathogens present in his soil.
- Through his regular participation in the Potato Industry Extension Program, he has gained valuable insights into new industry R&D while also sharing his own knowledge with the Australian growing community.





Diagnostic tests for soil-borne pathogens are helping potato growers like Greg Murphy manage their potato crops for maximum profit.

PreDicta Pt (PT09023) is a soil DNA testing service developed by the South Australian Research and Development Institute (SARDI) that assesses the risk of common disease pathogens which can lead to reduced yield and tuber quality caused by powdery scab, root knot nematode, rhizoctonia and common scab.

The award-winning system developed as part of the Australian Potato Research Program - Phase 2 was launched commercially in August 2013.

Since its development, it has received widespread support from growers, processors and agronomists across Australia, and has been adopted on a number of farming properties, including four of Mr Murphy's paddocks in Dunnstown, in the Central Highlands of Victoria.

### **Effective control**

The third generation potato grower said the test was an efficient and cost-effective way to manage disease and make informed decisions before planting.

"The project gives Australian growers a 'snapshot' of the risks that pathogens harbouring in the soil pose to potato crops," he said.

"Soil-borne diseases in potatoes lead to poor-quality crops, reduced yield and wastage.

### Knowing each field's disease risks helps us to make educated decisions on what crop variety we should plant - and where

"Knowing each field's disease risks helps us to make educated decisions on what crop variety we should plant - and where."

### Making the right decision

Mr Murphy said the system was also useful for determining the various soil treatment and seed treatment options to be used.

"If there were high levels of disease found in one area, for instance, then we would treat the soil accordingly to reduce the incidence of disease prior to planting," he said.

"Something I found very interesting was that the testing did not only give us the disease level at harvest but calculated the impact of the disease in dollar value (percentage of yield loss delivered to the factory)."

The development of the testing service has involved linking pre-plant test results with disease levels measured in commercial crops to ensure that growers are able to integrate test results into their pre-planting decision-making process.

The service is accompanied by a training program and an advisor manual that provides key information on the diseases,

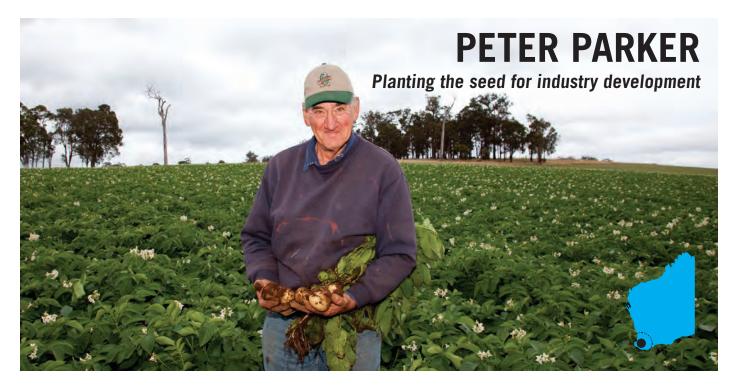


what the test results mean, and suggestions on strategies to consider before planting, particularly if the risk of disease is high.

Potato growers can access PreDicta Pt via agronomists accredited by SARDI to interpret the results and provide advice on management options to reduce the risk of losing crop to disease.

The service is likely to include testing for additional potato diseases in the future.

- PreDicta PT aims to use soil DNA diagnostics to provide an indication of disease risk.
- The South Australian Research and Development Institute (SARDI) has developed a unique method of determining the risks of crop diseases in fields (or part of fields) with the PreDicta Pt diagnostic test.
- Knowledge of each field's disease risk will help growers make informed decisions on planting plans and management practices to minimise the impact these diseases pose to yield and quality.
- Greg Murphy is one of the many Australian growers to benefit from this project through his liaison with agronomists and members of the Department of Environment and Primary Industries Victoria.



Peter Parker has been involved in the potato industry since he was a child. The 56-year-old grew up on the family farm, spent 28 years as a harvesting and planting contractor and has worked as a farm hand on his brother Alan's 65 hectare property at Manjimup for the past four years.

Forty per cent of the potatoes produced on the Parker's property are used for seed production, with the rest used for crisping and French fries.

### An international perspective

In 2014, Mr Parker embarked on an industry funded grower mission to the United States and Canada (PT13704) to gain insight into the methods and practices used by the potato industries overseas.

Mr Parker said the highlights included a visit to Idaho to explore Simplot growing operations, as well as a tour of seed production facilities on Prince Edward Island, Canada.

The mission enabled Mr Parker to gain a new understanding of the North American potato industry and develop his own skills.

"I would do it again and recommend this opportunity to any potato or vegetable growers," he said.

"I learnt so much about the US and Canadian farming system, but also learnt a great deal just from talking to the other growers from Australia on the trip."

### **Moving forward**

Mr Parker said that insights into the storage of fresh potatoes at North American supermarkets was a key piece of knowledge that he gained from his visit. He added he would like to see some American initiatives trialled within the Australian industry

"Even though I'm not in the fresh potato industry, I used to be a harvest contractor



so I am still interested in that part of the industry," he said.

"Instead of them selling their spuds in clear plastic bags where they can potentially sweat, the (North American) markets predominantly use brown paper bags with a mesh window to allow the customer to see the product.

"I've given a sample to my brother to pass on to the wash packers and I'm going to follow it up because I think it would be a good idea."

Another industry change that Mr Parker believed would help Australia remain competitive was better seed systems and more stringent biosecurity protocols.

"The hygiene and traceability I saw overseas was excellent - I was very impressed," he said.

"The chance of contaminated seed being sold and on grown is almost nil. The US and Canadian systems are incredibly thorough; right from the hot houses where they are growing the mini tubers to the truck drivers.

"We are lucky not to have many exotic diseases in Australia, but we can't become complacent.

"As far as I am concerned, the cleaner the seed, the better the crop. The better the crop, the more money you make!"



- Project PT13704 aimed to give growers insight into the methods and practices used by potato industries overseas.
- The mission enabled Western
   Australian grower Peter Parker to
   gain a new understanding of the
   North American potato growing
   industry and develop his own
   farming skills.
- Key findings from the mission included insights into storage and packaging of fresh potatoes at supermarkets and the need for Australia to remain competitive through strong seed and biosecurity systems.





North Queensland potato grower David Nix is turning heads in the industry for his role in developing an innovative bulk-bag-lifter paddock trailer.

The award winning technology has since been taken up by other growers who have adopted the initiative into their own production systems.

Along with his technological achievements, a major highlight of Mr Nix's past year was hosting growers, and attending the inaugural Potato Field Day, held in conjunction with the Potato Industry Extension Program (PT11004).

The special event brought together leading potato growers, processors and technical experts from across the nation for visits and informative presentations at three growing operations in the Atherton Tablelands region.

### Sharing knowledge

Mr Nix's property was one of the operations visited during the tour, which built upon the comprehensive work communicating valuable industry research and development (R&D) carried out within the Potato Industry Extension Program.

"The day was extremely well received among growers," he said.

"We all walked away with a great deal of knowledge - mostly gained through picking the brains of scientists and technical experts, who discussed research and agronomic issues like crop management and nutrition practices.

"It was also great to learn about the latest innovations and practices in the farming sector while networking and exchanging experiences with fellow members in the industry."

Mr Nix said growers were educated on developments relating to potato viruses and diseases such as Pink rot and Potato virus Y (PVY).

"We recently had a case of PVY that significantly affected a line of our potato crops," he said.

"But we've learned to identify and manage it through an integrated approach, which isn't solely reliant on insecticide use but looks at testing the seed, which is where the biggest problem lies."

### **R&D** findings

Attendees at the field day were also informed of research findings regarding some of the major global potato pests and diseases, including Late blight, Tomatopotato psyllid and Zebra chip.

"Another highlight was learning about fertiliser application practices to increase quality control and reduce application costs and wastage," Mr Nix said.

The Potato Industry Extension Program is a three-year initiative funded by the Australian potato industry through the National Potato Levies (fresh and processed).



- Leading Atherton Tablelands potato grower David Nix has been heavily involved in the potato growing community for many years as an active participant on committees, including the Fresh Potato IAC and Enviroveg.
- Through his participation in the Potato Industry Extension Program (PIEP) Mr Nix has been able to gain valuable insights into new industry research and development (R&D) while at the same time, sharing his knowledge and innovations with the wider growing community.
- As part of the program, he attended and hosted a potato R&D workshop and field day in Atherton, Queensland, which built upon the comprehensive work carried out by the PIEP communicating valuable industry R&D.

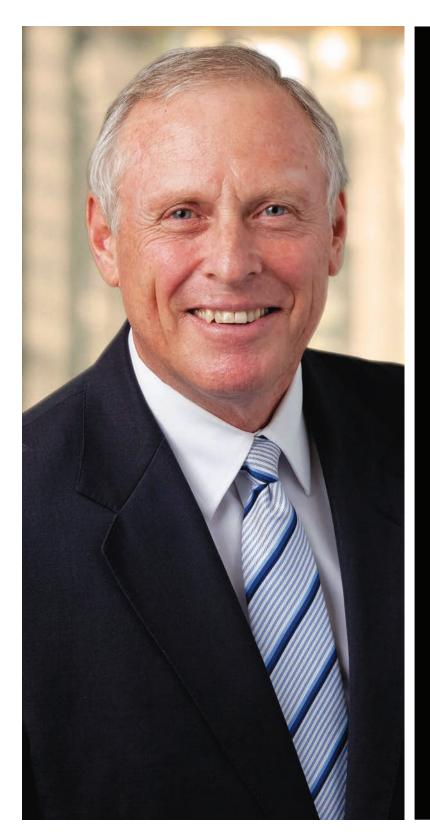


REAL RESULTS FROM THE POTATO R&D LEVY



Horticulture Innovation Australia





The Australian potato industry continues to enhance its reputation as a global powerhouse in innovative potato growing methods, with world-leading production procedures common-practice by local growers. The high quality of Australian potato produce is made possible by ongoing investment in research and development (R&D), which has put Australian growers at the forefront of cutting-edge potato production.

This was highlighted recently when a group of local potato growers, including Chris Waugh from South Australia, featured in the pages ahead, travelled to China for the 9th World Potato Congress to network with leading international potato growers and learn from the most accomplished and renowned industry researchers.

Every year Horticulture Innovation Australia Limited (HIA), using the National Potato Levies and funds from the Federal Government, has invested vital funding in grower-driven R&D projects, which have delivered real results for potato producers.

In the pages ahead, you will find examples of growers from around the country who have embraced industry R&D and brought their business success as a result of taking on levy-funded initiatives.

Biosecurity continues to be a real focus, with continued investment ensuring that the Australian potato industry is a world-leader in producing clean, green and safe potato produce. Two of the industry's biosecurity champions, Tasmanian grower Michael Radcliff and Crookwell grower Kim Weir, are featured in this publication.

Potato growers also increasingly have access to levy-funded consumer research to understand consumers' behaviours with potato purchases and tailor their products to meet their needs. Tasmanian grower Susie Daly has been able to effectively use the data from the industry-funded Potato Tracker project to develop new commercial avenues for her business.

Elsewhere, we see Australian growers take the opportunity to learn about production and technical innovations from their international counterparts, and make valuable networking connections as a result of participation in levy-funded industry missions.

Investment in innovative soil management systems has also resulted in real, on-farm development that has contributed to more consistent and healthier crops, with Victorian grower Scott Dimond's involvement with pre-plant DNA soil testing, using the PreDicta Pt-brand diagnostic test, a testament to this.

I look forward to seeing many more exciting innovations and developments that will continue to help drive the Australian potato industry forward in the years ahead.

Yours sincerely,
Selwyn Snell
Horticulture Innovation Australia Chairman





SUSIE Daly has her finger on the pulse when it comes to what is "trending" in the world of fresh potatoes.

"You don't need to be a rocket scientist to understand why things are happening in the consumer market, what's driving this change and what opportunities this can present for your business," the Tasmanian potato grower said.

"Market research tools, like the Potato Tracker project, are a valuable resource that potato growers can use to tailor their products to what consumers want simply by looking at how they buy their potatoes."

### **Understanding consumers**

The Potato Tracker project (PT13015), undertaken by leading market research agency Colmar Brunton, delivers monthly reports to the Australian potato industry that measure the size of the Australian fresh potato market, consumers' spend on potatoes, retail channels, as well as purchasing trends and consumption habits.

Ms Daly said while Australian consumers were still buying potatoes for their taste, convenience and value for money, there was a clear shift towards smaller-sized potatoes purchased in smaller volumes.

Market research tools, like the Potato Tracker project, are a valuable resource that potato growers can use to tailor their products to what consumers want simply by looking at how they buy their potatoes. 77

"The research shows that consumer trends have certainly changed over the past 10 years," Ms Daly said.

"As a reflection of today's increasingly busy and time-poor society, people are forgoing the big weekly shop and instead, are dropping into the supermarket several times a week to buy ingredients to use for dinner that night.

"Rather than investing in large bags of spuds that will last the distance, people are now choosing to buy smaller one and two-kilogram packs more frequently to avoid having to throw out spoiled potatoes.

"To respond to these trends, we have changed our pack sizes to contain no more than two kilograms of potatoes, which also provides scope to increase consumption among certain groups."

### **Business innovation**

Ms Daly is also in the process of growing smaller-sized potatoes and is working alongside some major supermarkets and forecasting specialists to assess the opportunities to introduce new, washed varieties onto the market to drive her business' growth.

"People no longer want overly large potatoes – they don't want to spend the time cutting them, and dirty potatoes are becoming less popular among younger generations who view them as inconvenient," she said.

"Smaller potatoes, on the other hand, are an attractive option because of the health benefits they deliver for people who are conscious of portion sizes."

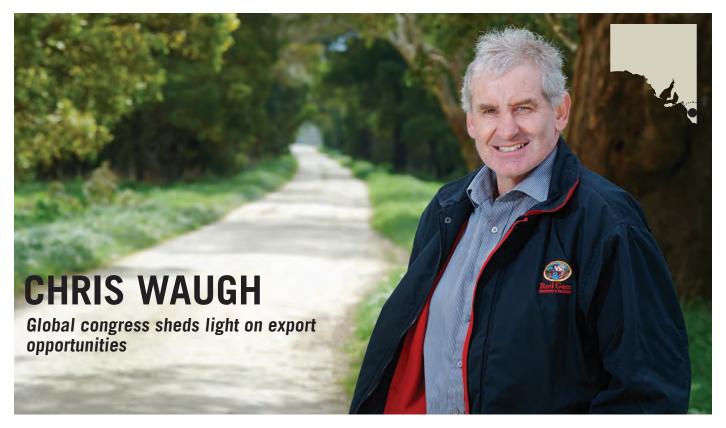
With Australian families driving demand for potatoes, Ms Daly said that it was important for growers to "take note and listen".

"While the research has confirmed what we already know, it's reassuring to know that we are on the right track," she said.





- The main focus of Potato Tracker (PT13015) is to track consumer purchasing habits of potatoes, with the aim of giving potato growers the tools to tailor their products to meet consumer demands and transfer.
- These reports are released on a monthly basis and provide information on how often consumers purchase potatoes and how they want to buy them.
- Susie Daly is a potato grower in Tasmania who has developed new potato products with her secondgrade potatoes.
- Ms Daly has used the results from the Potato Tracker project to strengthen her business development by tailoring her produce to what consumers want.
- PT13015 was funded by Horticulture Innovation Australia using the National Fresh Potato Levy and funds from the Australian Government.



THERE is a real opportunity for Australia to export its potatoes to China, but only through a unified approach and hard work, says South Australian potato grower Chris Waugh.

"China is one of Australia's top agricultural export markets," he said.

"With all the skills and resources at our disposal, and taking our investment in research and development into account, we should be getting behind any chance to gain export access into China and expand Australia's potato industry in the Chinese market."

### International perspective

Mr Waugh was confronted with the reality of China's food security concerns and economic challenges on a recent trip to Beijing where he attended the 2015 World Potato Congress as part of project PT14701.

Congress made it clear that Australia is in a good position to contribute to the long-term sustainability of the agricultural sector in China and help stimulate job growth.

The seed manager for Red Gem Growers and Packers in Mount Gambier said he was interested in attending the event to find out about the latest developments in the global potato industry after participating in a number

of hands-on industry field days in Europe.

"There is a huge push by the Chinese government to phase out rice, wheat and corn and make potatoes a main dietary staple in the population," Mr Waugh said.

"Although China is the biggest producer of potatoes in the world, the problems the country is facing in crop rotations, water pollution, land degradation and skills shortages are making it increasingly difficult for it to produce any substantial gains.

"The problem is that in order to increase their potato yield, Chinese growers will need to enhance quality of the crop, but this relies on them improving their growing practices.

"Speakers at the Congress made it clear that Australia is in a good position to contribute to the long-term sustainability of the agricultural sector in China and help stimulate job growth.

"Potatoes are our highest value horticultural crop that we produce; they are cheap and we have a huge volume of them."

### **Potential opportunities**

Mr Waugh said he agreed that there was enormous potential for increasing Australian exports to China, but the initiative would require a collaborative effort across the entire sector.

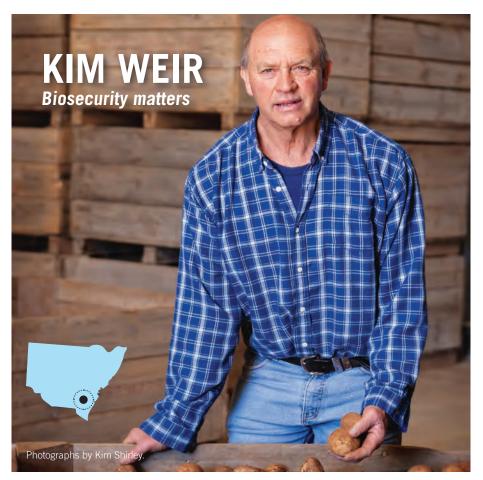
"The frozen spud is a key market commodity and we should be capitalising on this," he said.

"Fresh potatoes, on the other hand, are a bit more difficult to export as they are highly susceptible to physical damage, such as cuts and bruising."

Mr Waugh, who grows approximately 80 hectares of fresh market potatoes on his farming operations, said he was recently asked to provide his services and expertise to help McCain China with its harvesting requirements.



- PT14701 gave nine Australian potato growers the opportunity to attend the 2015 World Potato Congress in Beijing, China.
- Delegates representing industry sectors in both developed and developing countries also toured key growing and producing facilities in the region.
- The group witnessed the latest trends in global horticulture, formed business networks and discovered new and innovative ideas to further develop the Australian potato industry.
- Participating grower Chris Waugh was able to assess Australia's international standing in the potato research and development field, and received an insight into existing export opportunities in China
- The project was funded by Horticulture Innovation Australia using the National Potato Levies, funds from the Australian Government and contributions from Australian potato growing businesses.



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CROOKWELL is known for its disease-free certified seed potatoes and that's the way grower, Kim Weir, wants it to stay.

He is vigilant about maintaining strict biosecurity practices on his farm and ensures anyone who comes onto his property adheres to these measures.

### **Biosecurity preparedness**

Kim, together with his son James, has a 400 hectare mixed grazing farm. As well as a Dorset sheep stud, they produce prime lambs, beef and grow up to 20 hectares of certified Sebago and Almera seed potatoes annually.

Crookwell has few of the major pests, diseases and viruses found elsewhere in certified seed potato crops. These include Powdery scab, Potato cyst nematode, Bacterial wilt, Potato virus Y and Potato leafroll virus.

"These can be transmitted by soil, vehicles or even people being in close proximity to the crop during the growing period," Mr Weir explained.

Currently the four certified seed potato growers in Crookwell produce about 2,500 tonnes of seed. According to Mr Weir's estimates, this sows close to 2,000 hectares (about 5,000 acres) of potatoes. These crops then produce about 75,000 tonnes of produce for Australian markets. Any disease or virus threat in Crookwell will have a devastating flow-on effect.

The Weirs are particularly vigilant about what happens on-farm. During the growing period, the crop is treated as an isolation area. Only those with specific tasks are allowed to enter and they follow strict protocols.

For example, the potato inspector comes early in the morning, when he has clean clothes. Before entering the paddock, he dips his boots in a disinfectant footbath and does the same as he leaves.

"Our motto, as with most certified seed growing areas, is to come clean and leave clean," Mr Weir said.

## 44We haven't got a problem at the moment and we will make every effort to keep the area clean.77

Each year during the potato growing cycle, leaf samples taken throughout the crop are sent off for virus testing.

"We have not had positive tests of any of the major virus diseases to date," Mr Weir explained.

### On the front foot

Biosecurity awareness signs are in place and Mr Weir is trying to educate others of the importance of keeping Crookwell disease-free

"We haven't got a problem at the moment and we will make every effort to keep the area clean," says Mr Weir. But he believes people don't understand biosecurity.

"They think we are just being difficult. They don't understand the position we are in and the risks we are up against if we get pests and diseases in our certified seed potato crops," he said.

- It's important to practice on-farm biosecurity protocols to help minimise the threat of pests and diseases in certified seed potato crops.
- Wearing clean clothes before entering the crop and having at-gate disinfectant footbaths can help.
- Education about the impact of pests and diseases on certified seed potato crops is also vital.
- Biosecurity activities in the potato industry are funded using the National Potato Levies and managed by AUSVEG and Plant Health Australia.



A SOIL DNA test is giving Australian potato growers the ability to tackle the scourge of common disease pathogens in their soil samples before they plant their crops.

### **Testing for disease**

Developed by the South Australian Research and Development Institute (SARDI) as part of project PT09023, the testing service, called PreDicta PT, can assess the risk of diseases that reduce yield and tuber quality caused by Root knot nematode and soil-borne fungi that contribute to Powdery scab and Black dot.

Scott Dimond, a potato grower from Ballarat, Victoria, is one of a number of local farmers who have put their hands up recently to host trials of the DNA testing service on their properties.

### 44 Going forward, this information can be used to guide farm management processes and cropping decisions. 77

Mr Dimond said rhizoctonia had been a significant issue on a large part of his farm for quite some time.

"Rhizoctonia is one of the diseases that can be assessed using the PreDicta testing tool," Mr Dimond said.

"Due to its unpredictable nature, it's a tricky disease to control, but I was intrigued to learn what levels were in my soil and whether it was going to pose any significant threats.

"Root damage and yield loss from common pathogens are two scenarios that potato

growers would probably prefer to avoid, therefore, being able to produce a healthy, quality crop – minus the use of unnecessary chemicals – sounded like a brilliant idea."

### **Next steps**

Upon receiving the test results, Mr Dimond worked closely with members of the Victorian Department of Economic Development, Jobs, Transport and Resources (who were working in collaboration with SARDI) to identify where disease management practices could be altered to more effectively minimise the potential impact of rhizoctonia, and other soil-borne diseases, on his potato yield and quality.

"Going forward, this information can be used to guide farm management processes and cropping decisions – it will affect the variety of crops that growers use, how they prepare the paddock for planting and whether chemicals are needed," he said.

"However, because we mainly grow one variety of potato, if a high level of disease is detected in the soil, we know we have the opportunity to do things differently."

Since reaching the pre-commercial phase in August 2013, PreDicta PT is fast becoming an important pre-planting disease management tool available to Australian potato growers.

Mr Dimond said the research was especially critical for seed and fresh market growers where quality and appearance of the potato were imperative to producing a marketable crop.

"Being able to run some tests before planting the seeds will be highly beneficial to them in the long run," he said.



- PT09023 aims to use DNA soil diagnostics to provide an indication of disease risk.
- SARDI has developed a unique method of determining the risk of crop diseases with the PreDicta Pt-brand diagnostic test.
- Pre-plant DNA soil testing enables growers to identify fields (or part of fields) that are at risk of specific diseases.
- Knowledge of each field's disease risk will help growers to make informed decisions on planting plans and management practices to minimise the impact these diseases pose to yield and quality.
- PT09023 was funded by Horticulture Innovation Australia using the National Potato Levies and funds from the Australian Government.



KAIN Richardson took a 10-day Potato Industry Leadership and Development Mission to the US and Canada in 2013, as part of project PT12704, and can't speak highly enough of the experience.

"I learnt so much," the 35-year-old potato grower from Newlyn in west-central Victoria said.

"At the age of 21, I never thought I would leave the country. So for me, this is a fantastic industry initiative," he said.

### Brave new world

The mission involved visiting potato farms throughout the US, including a stop-off in Idaho, before visiting Canada, Prince Edward Island and then the 2013 Potato Association of America (PAA) Conference in Quebec City.

Mr Richardson and his parents run a 220 hectare property and grow Bliss and Atlantic potatoes for the processing industry. Comparing their operation with the scale of the overseas farms was an eye-opener for Mr Richardson.

The irrigation systems were advanced and the machinery was capable of handling large capacities. "I was amazed they could shift that many spuds in that period of time," Mr Richardson said.

Other areas of difference included cheaper operating costs, such as electricity, machinery and labour in both the US and Canada. The farmers also receive taxpayer support.

"Subsidies are common over there

and provide a significant advantage," he explained.

Mr Richardson also noticed differences regarding biosecurity and maintaining clean seed varieties. For example, everything entering or leaving Prince Edward Island was monitored and checked to make sure there were no diseases.

### **New reflections**

Considering Australian farmers have no government assistance or subsidies, Mr Richardson believes local growers stack up pretty well.

"Our biggest issue is to keep the costs of production down," he said.

While Mr Richardson describes the PAA Conference in Quebec City as very "scientific", with a focus on diseases and control mechanisms, he admits it was a fantastic opportunity to see how that side of the industry operates.

"It was a great two days to wander around and listen to talks on things of interest."

Presentations of interest included learning more about Zebra chip disease and its associated psyllids, and bulk processing storage of potatoes, which allows them to be stored for up to 11 months, which is uncommon in Australia.

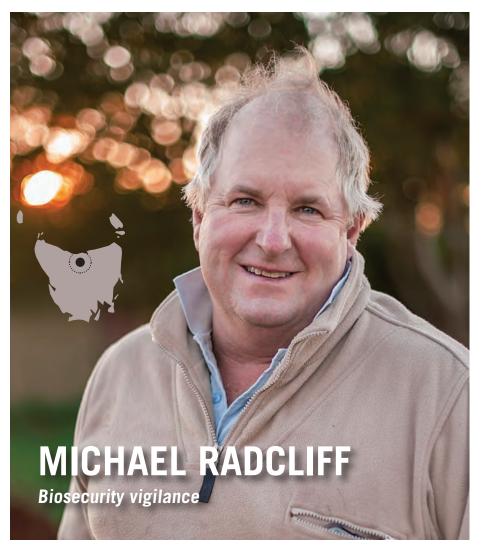
Another advantage of participating in a study mission with other like-minded potato growers is the networking opportunities. As well as developing a business relationship with a grower from Western Australia, who

has supplied the Richardsons with a new variety of seed potato, Mr Richardson met others from New South Wales, South Australia and Tasmania.

"It's a fantastic opportunity to discuss how things are done on individual farms," he said.

For Mr Richardson, it's all part of the value of taking an industry study tour. As well as meeting and talking with Australian farmers, you get to see what's going on in other parts of the world.

- Taking an overseas Potato
   Industry Leadership and
   Development Mission provides a great opportunity to learn about what's happening in the industry internationally.
- Farmers visit properties overseas and get ideas for what might work at home.
- The study missions also give growers a chance to network and form valuable business connections.
- PT12704 was funded by Horticulture Innovation Australia using the National Potato Levies, voluntary contributions from potato growing businesses and funds from the Australian Government.





WHEN it comes to biosecurity, Australia cannot afford to let its guard down. And in the opinion of Tasmanian farmers Michael and Heidi Radcliff, the issue must be tackled at the national, state and property level.

Putting their money where their mouths are, the couple is vigilant about strict biosecurity practices on their property in Tasmania's north. Michael and wife Heidi farm almost 404 hectares (1,000 acres) in Wesley Vale, 10km east of Devonport. As well as growing potatoes, broccoli, onions, carrots and pumpkins for the fresh market, they also grow processing potatoes, peas, beans, plant poppy crops and harvest pyrethrum.

### Clean and disease-free

Mr Radcliff is concerned that maintaining Australia's disease-free status will continue to be a problem, particularly with increasing economic pressures. He is particularly worried about the potential spread of potato Zebra chip disease in Australia, which has devastated the New Zealand potato industry.

Most concerning is the discovery on Norfolk Island of both the Tomato-potato psyllid (*Bactericera cockerelli*) as well as the Zebra chip-causing bacterium *Candidatus Liberibacter solanacearum* (*Lso*).

"This is a vivid reminder of the risks and the way this disease can spread," he said. Michael and Heidi maintain strict biosecurity practices on their farm. For example, they are particularly vigilant about removing dirt from farm machinery and equipment so that organisms are not transported from one paddock to another.

"For us it's about making sure we are looking after our farm to the best of our ability and ensuring there are no foreign diseases or anything like that coming onto the farm," Mr Radcliff said.

### **Biosecurity assessment**

The couple have completed the AUSVEG Biosecurity quiz, which Mr Radcliff believes is a valuable tool because it makes people more aware of what's happening on their farms.

The self-assessment quiz covers areas of business management including keeping records for chemical, fertiliser and irrigation use, as well as pest and disease management.

Questions include whether participants practice good hygiene to minimise the introduction and spread of pests and diseases and whether they recognise the major pests and diseases that affect their crops.

The couple scored more than 80 per cent on the quiz, demonstrating a strong knowledge of biosecurity protocols.

Mr Radcliff found that completing the quiz gave some important insight.

"It's about self-assessment so you have to be honest or there's no point doing it," Mr Radcliff said.

"It really does give a clearer picture of what's happening on-farm because you are looking into your own operation a bit closer."

Mr Radcliff agrees the quiz is helpful, and a good step to ensure there is vigilant biosecurity at both state and national level.

"We don't have a lot of pests and diseases down here and we want to keep it that way," he said.

- Biosecurity the management of pests and diseases entering Australia – is important at national, state and property level.
- Completing the AUSVEG biosecurity self-assessment quiz helps farmers understand more about what's happening on their property.
- The quiz encourages producers to be honest about practices such as pest and disease management and hygiene on their farm.
- Biosecurity activities in the potato industry are funded using the National Potato Levies and managed by AUSVEG and Plant Health Australia.