

potatoes

australia

June/July 2015

**Daniel
Kadwell**
Young grower

French fries
special
investigation

Big chains put
to the test

Crookwell's
eco-farm

Long-term
sustainability



Box clever.



The GoldStart in-furrow pack ticks all your potato boxes.

- The power of Amistar 250SC and Ridomil Gold 480SL in one convenient pack
- Robust control of Black Scurf and Pink Rot as well as suppression of Silver Scurf*
- Patented in-furrow nozzle combination for tailored application
- Cost effective, value added solution to protect your potato crop
- Exclusive to Syngenta Potato Partners

**Please refer to the label for rates and full details*

Talk to your local distributor today about Syngenta's potato solutions.

 **PotatoPartners**

 **GoldStart**

syngenta

For further information please call the Syngenta Technical Product Advice Line on 1800 067 108 or visit our website at www.syngenta.com.au.

The information contained in this document is believed to be accurate. No responsibility is accepted in respect of this information, save those non-excludable conditions implied by any Federal or State legislation or law of a Territory. © Registered trademark of a Syngenta Group Company. AD13/544 SYN0007/PA.

Contents

June/July 2015

Regulars

- 5 Chairman & CEO messages
- 7 Editorial

Features

- 8 Big brands tight-lipped about origins of processed potatoes
- 14 Les Horsfield: 86 years young and still growing strong
- 26 Q&A Young grower profile: Daniel Kadwell

Industry update

- 12 Ask the industry
- 20 Time for a CoOL change
- 32 New Aussie grown spuds on the way to market
- 34 Young Potato People

News

- 13 Convention 'appiness' is just a click away
- 33 Victorian Potato Industry Advisory Committee launched

R&D

- 10 PIEP hits the road to boost R&D knowledge
- 16 New potato varieties developed in the U.S.
- 18 Using ecological zones to combat potato pests
- 22 The Front Line: Zebra chip detected on Norfolk Island
- 24 The next generation of potato research
- 28 UK research: Improving potato cultivation practices
- 30 Potato Tracker: Two new waves of consumer insights released



Stop little suckers
from turning into
major pests



MOVENTO[®]

2XSYS

With its unique two-way activity, Movento can clean up emerging populations of sucking pests like aphids, thrips, whitefly and scale before they get out of hand.

**...and let beneficials
breed in peace**

www.bayercropscience.com.au

Bayer CropScience Pty Ltd, ABN 87 000 226 022,
391-393 Tooronga Road, Hawthorn East, Victoria 3123.
Technical Enquiries 1800 804 479. Movento[®] is a Registered Trademark of the Bayer Group.



Bayer CropScience

AUSVEG Chairman and CEO messages



Geoff Moar

AUSVEG Chairman

After many months of hard work and preparation, the National Horticulture Convention, Trade Show and Awards for Excellence incorporating AUSVEG and Apple and Pear Australia Limited (APAL) is now only days away. The joint event, held from 25-27 June at Jupiters Gold Coast, will attract an expected 1,400 delegates from across the country, cementing its position as Australia's leading horticulture event.

This year's partnership with APAL will allow delegates to network not only with their potato growing colleagues but also with representatives from a wide array of horticultural commodities, opening the door for further business discussions. This will be reflected in the engaging speaker sessions from industry experts across a range of sectors, as well as the largest Trade Show to date, where you can visit more than 90 booths from a variety of industry leaders.

The event will be capped off with the National Awards for Excellence, where we look back on the year that was and celebrate the achievements of some of our most successful growers, and other industry members. With the sunny Gold Coast as the perfect backdrop to the event, I am very confident that delegates will walk away from the 2015 Convention with extended knowledge and solid leads for the improvement of their businesses.

In addition to preparing for Australia's leading horticulture event, AUSVEG has been working hard to ensure Australia's Country of Origin Labelling (CoOL) laws remain a top priority in political discussions in the corridors of Canberra. You will find a detailed brochure outlining the current challenge and our proposed solutions with this edition of *Potatoes Australia*.

Australia's consumers and growers have suffered long enough from the ramifications of having a confusing and ambiguous labelling system. The shortcomings in the current system were writ large during two public health scares linked to imported frozen berries and tuna earlier this year. AUSVEG will not give up the fight until a clearer and more detailed labelling system is implemented. This will not only give consumers a clearer path to purchase Australian grown produce that adheres to strict quality assurance standards, but will also ensure our growers can compete on a level playing field.

Finally, I am pleased to formally announce the launch of the Victorian Potato Industry Advisory Committee (VPIAC), which consists of some of the leading minds from the fresh, seed and processed potato growing sectors of the state. The Committee's first meeting in May was chaired by respected Victorian grower and industry leader, Des Jennings, and discussed a range of topics including the future direction of the committee, membership, potato R&D initiatives and maintaining the longevity of the Victorian potato industry.

As the national representative for Australia's potato growers, AUSVEG will work closely with the VPIAC in coming months as the new committee takes shape and prepares to provide input on important issues facing Victoria's potato growers.

Geoff Moar
Chairman
AUSVEG



Richard Mulcahy

AUSVEG Chief Executive Officer

The recent change in pest status for Potato spindle tuber viroid (PSTVd) is obviously concerning for the Australian potato industry. As isolated regions of Western Australia and Queensland have cases of PSTVd that were deemed not technically feasible to eradicate, the end result is that Australia can no longer declare country freedom from the viroid.

Following this announcement, AUSVEG worked closely with the Federal Department of Agriculture to develop a strategic communications plan to ensure growers and relevant trading partners were given accurate information on the change of status. It was also essential to reassure trading partners of the high standards in place for scrutinising potato health in Australia.

Directly following notification to the International Plant Protection Convention (IPPC) and trading partners, the Department and AUSVEG worked together to make sure all stakeholders within Australia were aware of the situation. It has been suggested that the AUSVEG notification caused trading partners to 'slam their doors'. This is not the case – potato exports are proceeding as usual.

It is also disappointing that some stakeholders have suggested they should have been notified before trading partners. As with any major change, strict procedures must be adhered to when a change in pest status is declared in Australia. This edition of *Potatoes Australia* includes a leaflet that outlines the process and what it means for growers, including the method of notifying relevant parties.

Such an event reinforces the fact that biosecurity is highly important to the potato industry and is tightly linked to market access. Moving forward,

AUSVEG will continue to collaborate with the Department to ensure the interests of potato growers are represented and the impacts on trade are minimised.

Now that we are well into June, it also means the highly anticipated National Horticulture Convention is just around the corner – you might be reading your copy of *Potatoes Australia* at Jupiters Gold Coast at this very moment. There is plenty of information in store for potato growers; in particular, the keynote address from United States Potato Board President and CEO Blair Richardson on Friday 26 June is certainly not one to be missed.

This year's collaboration with Apple and Pear Australia Limited (APAL) will also provide plenty of networking opportunities with other horticulture growers at a range of social events. On Saturday 27 June, the ever-popular Women in Horticulture event will see Tasmanian potato grower Susie Daly and APAL Chair Dr Michele Allan lead the celebration of the important role that women play in Australia's horticulture industry.

Make sure you also take time to visit the Trade Show, which features a record number of industry booths this year. This includes the Potato Industry Extension Program (PIEP), where you can find out more about the program and perhaps show off your spud knowledge by picking the variety of cooked potatoes on offer. I look forward to seeing you on the Gold Coast.

Richard J Mulcahy
Chief Executive Officer
AUSVEG

AUSVEG Chairman

Geoff Moar

AUSVEG CEO

Richard J Mulcahy

Communications ManagerAndrew MacDonald
andrew.macdonald@ausveg.com.au**Senior Writer/Journalist**Dimi Kyriakou
dimi.kyriakou@ausveg.com.au**Graphic Design**Tamar Green
tamar.green@ausveg.com.au**Editorial Enquiries**AUSVEG
Ph: (03) 9882 0277
Fax: (03) 9882 6722
info@ausveg.com.au**Advertising**Marc W. Wilson
Gypsy Media
Ph: (03) 9580 4997
Fax: (03) 9523 2270
M: 0419 107 143
marc@gypsymedia.com.au**Print**

Manark Printing

Contributor

Stefania Cefola

Horticulture
Innovation
Australia

All research and development projects are facilitated by Horticulture Innovation Australia Limited in partnership with AUSVEG, and in relation to processed potatoes also the PPAA, and are funded by the National Potato Levy and/or voluntary contributions from the industry. The Australian Government provides matching funding for all HIA's R&D activities. For further information visit:

www.ausveg.com.autwitter.com/ausveg

Potatoes Australia is produced by AUSVEG and is free for all National Potato Levy payers.

Disclaimer: AUSVEG makes this magazine available on the understanding that users exercise their own skill and care with respect to its use. Before relying on or altering any business practices, users should carefully evaluate the accuracy, completeness and relevance of the information for their purpose and should obtain appropriate professional advice relevant to their particular circumstances. This magazine contains views and recommendations that do not necessarily reflect those views of AUSVEG.

Special care should be taken with agricultural chemicals which may have been used experimentally but are not yet registered for commercial use. Clarification should be sought from the researchers or chemical manufacturers. *Potatoes Australia* reserves the right to use imagery across the publication which does not directly correlate with information displayed on the same page. Images used may be from a stock photo library and not taken on-site.

© Copyright AUSVEG Ltd and Horticulture Innovation Australia Limited 2015

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior permission from AUSVEG. Requests and inquiries concerning reproduction and rights should be addressed to AUSVEG at:

PO Box 138, Camberwell, Vic, 3124

ISSN 1834-2493

**FRONT COVER:**

Daniel Kadwell

Photograph by Kim Shirley
Photography

The National Horticulture Convention, Trade Show and Awards for Excellence is finally upon us, where an expected 1,400 delegates will descend on Jupiters Gold Coast to learn about all things horticulture. There is plenty happening from 25-27 June and the Convention app is a handy way for delegates to navigate their way around the event (page 13).

Plenty of potato growers will be making their way to the Gold Coast this month, but in the meantime we have profiled two successful growers in this edition of *Potatoes Australia*. The first is Les Horsfield, a stalwart of the Victorian potato

industry who has been in the potato growing game for more than 60 years. He reflects on his time in the industry on page 14.

Our young grower in this edition is Daniel Kadwell from Crookwell, New South Wales, who has returned to the family farm after completing his apprenticeship as a plant mechanic (page 26). We also speak to his dad Garry Kadwell, who gives us a unique insight into the dedicated ecological zones he has introduced on his property and the role they play in attracting beneficial insects and natural wildlife (page 18).

There is plenty of R&D in store as well, with the regular

Potato Industry Extension Program (PIEP) column providing a wrap-up of the successful workshops held in May in South Australia and Tasmania, as well as key discussions from the Victorian Potato Strategic Plan regional forum (page 10). Meanwhile, the Front Line column on page 22 discusses the detection of *Candidatus Liberibacter solanacearum* and its insect vector, the Tomato-potato psyllid on Norfolk Island and explains why growers should remain vigilant about their biosecurity practices to keep Zebra chip at bay.

The future of potato R&D also



looks promising, as we speak to two PhD students from Tasmania and the United Kingdom on their research projects and what they mean for the potato industry (page 24). A potato research project on improving cultivation practices in the United Kingdom is also profiled on page 28, while we take a look at three new potato varieties that have been developed in the US potato mecca of Idaho (page 16).

In important industry news, we provide an update on AUSVEG's campaign for clearer Country of Origin Labelling laws and reiterate the importance of ensuring this remains a key priority in political discussions for the benefit of growers and consumers (page 20). In a similar vein, a special investigation into the origins of processed potatoes in some of Australia's most well-known food chains also delivers surprising results (page 8).



Vegetable Machinery

developed through experience,
..... built by craftsmen



Good topping for potatoes, onions, and winter carrots. Excellent up draught to lift up tops.



Front mounted full width in combination with planting machine.
Rear mounted to build up ridges.



Ideal ridge creation for potatoes even when the crop has emerged. Ideal crumbling of the soil.



VIN ROWE
FARM MACHINERY

Warragul Vic (03) 5623 1362. Contact Wayne Mills 0417 945584

Big brands tight-lipped about origins of processed potatoes

SOME OF THE BIGGEST NAMES IN FAST FOOD AND CASUAL DINING HAVE PROVEN RELUCTANT TO CONFIRM THE ORIGINS OF THE PROCESSED POTATOES USED FOR THEIR FRENCH FRIES AND CHIPS. WE EXAMINE THE FINDINGS FROM THIS SPECIAL INVESTIGATION AND HIGHLIGHT AN INTERNATIONAL EXAMPLE THAT SHOWS THE OPPORTUNITIES THAT CAN BE GAINED FROM TRANSPARENCY ON THIS ISSUE.

Where do my French fries and chips come from?

It's a simple question, but apparently quite difficult for some to answer.

In a special investigation for this edition of *Potatoes Australia*, we approached nine of the most well-known buyers of French fries and chips to find out the origins of their processed potatoes. However, from the nine companies that were contacted, only four provided feedback.

Representatives from KFC, Hungry Jacks, Lord of the Fries and Salsa's did not provide comment before the deadline, despite repeated requests. While a Red Rooster representative indicated in a statement earlier this year that the chain's fries were sourced from Simplot Australia and McCain Australia, both Red Rooster and its sister company Oporto did not respond to requests for further detail.

However, McDonald's, Grill'd and Nando's did provide information, which is outlined in this article.

The seeming reluctance on behalf of some to respond is somewhat surprising, as recent events have highlighted that Australian consumers want to know more about where their food is coming from (see page 20 for more information). This undoubtedly extends as far as the processed potatoes used for French fries and chips in some of Australia's most well-known food chains and restaurants.

As can be seen from the following international case study, transparency on this issue can not only contribute to the credibility of a brand and stronger relationships with suppliers and consumers, but

also open up new opportunities to clearly show support for locally grown produce.

Setting standards

Lamb Weston, a United States supplier of frozen potato products, recently launched the website TraceMyFries.com, which aims to provide consumers with a user-friendly tool that depicts exactly where the potatoes for their fries were grown. Using a 20-digit tracing code found on the company's branded French fries, customers can trace the fries back to one of five growing regions in the United States and Canada where Lamb Weston sources its processed potatoes.

These regions include Southern Alberta in Canada; Columbia River Basin in Washington and Oregon; Snake River Valley in Idaho; the Heartland in Minnesota and the Southern Mississippi River Basin. Users can click on each region to find out interesting facts about potato growing in the area and read a profile on a local grower.

The ability to customise merchandise at the point of sale is also an option that can be explored further on the website, which allows suppliers to join in the conversation of how a potato makes the journey from paddock to plate and effectively communicate this to consumers.

"We're helping our customers tell the story of their fries – and it all starts with the potato," Lamb Weston Director of Strategy for Agriculture Services, Ashley James, told PotatoPro.com.

"The farmers we work with take great pride in growing our high quality potatoes and we are excited to share their story with our customers."



Nando's Australia

According to Nando's Australia Commercial Director Lachlan Welsh, the company only uses Australian grown potatoes for the chips served in its 265 restaurants nationally. These are sourced from South Australia, Victoria and Tasmania.

Russet is the variety of choice, as its favourable qualities of high starch, low moisture, large size and white flesh make them suitable for the chips in Nando's restaurants.

"We're proud to be able to say 100 per cent of the potatoes used in our restaurants are Australian grown," Mr Welsh told *Potatoes Australia*.

He added that the company places a high importance on using Australian grown potatoes for its chips and this has helped to build committed partnerships with its food suppliers. In turn, the

suppliers understand and support Nando's desire to keep food miles to a minimum and support local farmers and producers.

"Our potato farmers are among the best in the world and it's wonderful to know we're supporting the Aussie market, along with current and future generations of Australian farmers. To know that we can also visit these farms at any time and talk to the growers is an added advantage," he said.

"Our decision to use 100 per cent Australian grown potatoes means we're also supporting Australian manufacturing and processing jobs. The food industry is a big contributor to the Australian economy and keeps many regional areas alive. It's great to know our business decisions are helping keep these people employed and ensure these towns remain key players in Australia's food manufacturing industry."



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

Grill'd Healthy Burgers

According to a Grill'd spokesperson, "All Grill'd potato chips are made from Australian potatoes."

The potato varieties used are predominately Russet Ranger and Russet Burbank, and the chips are manufactured at the company's potato manufacturing facility in Ulverstone, Tasmania.

The spokesperson said that purchasing Australian ingredients has been a long time priority for the company.

"The use of Australian grown ingredients across the entire Grill'd menu wherever possible is a priority for Grill'd ... we pride ourselves on transparent, accountable and proactive relationships with all of our suppliers."

McDonald's Australia

In recent years, global fast food giant McDonald's has promoted its desire to open up the lines of communication with its customers by encouraging them to send in questions about any aspect of the company, including the food, with the answers published on its website.

A McDonald's Australia spokesperson told *Potatoes Australia* that 100 per cent of potatoes for all of the company's national restaurants are grown in Australia. Its two suppliers, McCain and Simplot Australia, source potatoes from Tasmania, Victoria and South Australia, with Russet Burbank, Russet Ranger, Shepody and

Innovator the most common varieties used for their French fries.

"Our supply chain philosophy is 'buy local', however being an agricultural crop there have been times during bad weather or crop failure where we needed to source from New Zealand or the United States," the spokesperson said.

"Suppliers comply with our Supplier Quality Management System, which is third party audited annually.

"As part of our quality system, fries are sent regularly for sensory tastings to our regional quality centre in Hong Kong. This is to ensure consistency of quality and taste for our consumers."



AUSVEG National Manager – Scientific Affairs Dr Jessica Lye spoke about the importance of biosecurity at the Devonport workshop in Tasmania.

PIEP hits the road to boost R&D knowledge

COMMUNICATING THE LATEST DEVELOPMENTS IN R&D WAS A TOP PRIORITY FOR THE POTATO INDUSTRY EXTENSION PROGRAM IN MAY, AS TWO WORKSHOPS IN SOUTH AUSTRALIA AND TASMANIA ATTRACTED SCORES OF LOCAL POTATO GROWERS TO HEAR ABOUT PEST AND DISEASE MANAGEMENT. PIEP COORDINATOR ALEXANDER MILLER PROVIDES A WRAP-UP OF THE KEY DISCUSSION POINTS DURING THE TWO WORKSHOPS.

The Potato Industry Extension Program went on a mini roadshow last month, holding regional R&D workshops in Murray Bridge, South Australia and Devonport, Tasmania.

The first stop at the Murray Bridge Golf Club on 25 May was a well-attended workshop with a jam-packed agenda focusing largely on pest and disease management.

Dr Kathy Ophel-Keller from the South Australian Research and Development Institute (SARDI) presented the latest research on monitoring soil health and beneficial organisms, as well as information on the ground-breaking Australian Potato Research Program Phase 2 (APRP2) outcome, PreDicta Pt. SARDI's plans for future soil health research were well received, particularly given the great success of PreDicta Pt.

AUSVEG National Manager – Scientific Affairs Dr Jessica Lye provided further information on pests and diseases, with on-farm biosecurity practices for managing the threat of Tomato spotted wilt and Potato spindle tuber viroid (PSTVd) discussed.

The PSTVd update was timely, as there was a recent change in country freedom status in Australia. While the viroid has not been detected in potatoes, it is important that the industry remains vigilant to ensure this status does not change. As set out in the National Standards, certified seed potatoes must be free of PSTVd.

Crop nourishment was also a key topic during the workshop, with agronomy experts Rob Stanic of Oro Agri and Matt Wetherall of Campbell's Fertiliser covering surfactant efficacy and methods of improving nutrition

in potato crops.

The Murray Bridge workshop also provided growers with an opportunity to learn about a number of processes that can improve efficiency and productivity throughout the growing process, from pre-planting to crop maturation.

R&D visits the Apple Isle

Growers in the processing potato rich area of north-west Tasmania were next to be updated on the latest industry news and R&D, with a successful PIEP workshop held in Devonport on 26 May.

Filling in for Dr Calum Wilson from the Tasmanian Institute of Agriculture (TIA) was Dr Mark Boersma, Vegetable Centre Leader at the TIA. Dr Boersma provided an economic snapshot of the Tasmanian potato and

vegetable industry, as well as information on TIA's R&D services.

Plans for the future were also discussed, including Dr Boersma's vision for the TIA vegetable centre and Forth vegetable research facility. This facility is unique as it simultaneously operates as a commercial farm and a hub for horticulture research conducted by the TIA and the University of Tasmania.

Dr Lye also presented on PSTVd in Devonport, ensuring that the important biosecurity message is relayed across the industry. While Tasmania's isolation from the mainland and cool climate assists in managing pests and diseases, it is critical that on-farm biosecurity measures are always in place.

Crop management was also discussed, with Graham Nicol

Visit the PIEP booth at the 2015 National Horticulture Convention!

The Potato Industry Extension Program (PIEP) will again be showing off the latest industry R&D and potato news at this year's National Horticulture Convention Trade Show, which will be held at Jupiters Gold Coast from 25-27 June.

The booth will feature Jenny Witham and Fiona McKernan from Colmar Brunton, who will discuss the latest findings from industry-funded consumer research program, Potato Tracker, with growers, agronomists and industry representatives.

The PIEP booth will be the go-to point for potato

growers at the National Horticulture Convention, providing information on local potato R&D programs including Potato Tracker and APRP2 outcomes. Fact sheets and flyers will be on display, as well as editions of *Potatoes Australia*.

Test your spud knowledge

Booth visitors will also be challenged by a spud guessing game, with different varieties of hot potatoes available to taste test. Impart your tuber knowledge and correctly guess which varieties have been cooked to take home a prize.

i The Trade Show will be open on Thursday 25 June from 7.30pm, Friday 26 June from 1.00pm and Saturday 27 June from 8.30am. Colmar Brunton will be attending the booth on Friday afternoon.



The successful 2014 Trade Show in Cairns.



SARDI's Dr Kathy Ophel-Keller presented at the Murray Bridge workshop in South Australia.

from Bayer CropScience presenting on Emesto Prime in-furrow fungicide, one of the crop protection company's latest developments for the potato industry.

Constructive discussion

AUSVEG also provided an industry update at both events, with information on current research programs Potato Tracker (PT13015) and a scoping study of PVY in potatoes (PT13006) included, as well as the latest news affecting potato growers.

The workshops provided a great opportunity for growers and agronomists to hear about

the latest R&D and industry issues and also to voice their own ideas. Strong attendances at both workshops also showed their ability to bring the industry together and encourage constructive discussion among growers and key industry stakeholders.

Further workshops will be held around the country in the coming months, so keep a look out for an event in your area.

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

Victorian Potato Strategic Plan regional forums

Regional grower forums have recently been held to discuss the Victorian Potato Industry Strategic Plan. Meetings were held in Bungaree and Warragul, and growers from all sectors of the industry were invited to have their say.

The strategic plan is being developed by the Victorian Department of Economic Development, Jobs, Transport and Resources (DEDJTR), with the aim of ensuring the Victorian potato industry is a world-leading provider of nutritious food that exceeds consumer expectations.

To achieve this goal, a number of strategic imperatives have been set out. These include increasing productivity and greater access to new markets, building industry

cohesion and grower engagement.

The regional forums provided growers with the opportunity to give their input on the direction of the plan and how the key goals will be achieved.

Areas that growers believe should be targeted by the plan include the development of export opportunities, advancements in on-farm machinery, including precision agriculture and robotics, and improving the uptake of technology in the industry.

i For further information about the plan or to provide input, please contact Mark Hincksman at DEDJTR on (03) 5954 4004.

Controlling herbicide damage in potato crops: Part One

IN THE FIRST OF A THREE-PART SERIES, SYNGENTA TECHNICAL SERVICES LEAD SCOTT MATHEW EXPLAINS THE POSSIBLE ISSUES THAT CAN OCCUR WHEN USING HERBICIDES ON POTATO CROPS, WITH A PARTICULAR FOCUS ON GROUP C HERBICIDES.



with Scott Mathew

I have had recent discussions with agronomists across Australia who spend quite a bit of time in potato crops, and one topic that has regularly come up is the crop effect of some herbicides.

Potato crops can be sensitive to damage from herbicides that are registered for use in potatoes, as well as herbicides that are not registered for potatoes.

Spray drift from herbicides applied nearby can also damage potato crops, as well as spray tank contamination and herbicides that carry over from previous crops or pastures including sulfonylureas (which are widely used in cereal crops).

Warning signs

Most herbicide injury is first observed as general stunting of the canopy and/or distorted growth of the leaves and stems. However, glyphosate can cause problems in the successive potato crop if it is grown for seed production (glyphosate translocates to daughter tubers

and the symptoms only become evident if that seed is then grown out as a commercial crop).

If they are under stress, including stress from temperature extremes and physical damage (e.g. wind and hail), potato crops can also be injured by herbicides to which they are tolerant. Stress placed on potato crops can decrease the plant's ability to reduce uptake of the herbicide or deactivate the herbicide to which they are tolerant.

Over the next two columns, I will cover-off some of the herbicides that can cause damage in potato crops. In this edition, I'll cover Group C herbicides including metribuzin, linuron and prometryn.

Group C herbicides

Metribuzin, linuron and prometryn are all inhibitors of photosynthesis at photosystem II, also known as PS II inhibitors. Specifically, metribuzin belongs to the chemical family triazinones; linuron belongs

to the chemical family ureas; and prometryn belongs to the chemical family triazines.

All of these herbicides have root and foliar uptake and will translocate in the xylem; that is, if taken up by the roots they will move upwards to the growing points of the crop. It is this upward movement in the plant's xylem that causes herbicide crop effect symptoms to appear in the leaves. Metribuzin and linuron will not hinder the emergence of the potato crop, but rather show symptoms when the plant is exposed to sunlight, forms leaves and begins photosynthesis.

Symptoms

Initial symptoms are a yellowing (chlorosis) of leaf margins and tips, especially of older leaves. Younger leaves are more affected as they enlarge in size.

Yellowing first occurs between the veins and moves inward to the mid-vein. As the symptoms progress, leaves will turn brown (necrotic) and die. Plant death is not common but loss of yield

and quality is.

Symptoms are more pronounced in soils with a pH above 7.2 (alkaline) and varieties vary considerably in their sensitivity to injury. As a general rule (with a number of exceptions), white and red-skinned potato varieties are more sensitive than russet-skinned ones; Innovator and Nadine are two of the more sensitive varieties to metribuzin damage.

Always remember though, if you follow the label directions, any damage should be minimal and the crop yield should not be greatly affected.



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

Metribuzin damage in a young potato crop.

Convention 'appiness' is just a click away

WITH THE 2015 NATIONAL HORTICULTURE CONVENTION, TRADE SHOW AND AWARDS FOR EXCELLENCE UPON US, AUSVEG AND APPLE AND PEAR AUSTRALIA LIMITED ARE PLEASED TO ANNOUNCE THAT THE 2015 CONVENTION APP IS NOW LIVE.

The Convention app is designed to provide delegates with an easily accessible tool that has in-depth information on all of the events at the 2015 National Horticulture Convention, Trade Show and Awards for Excellence on the Gold Coast from 25-27 June. The app is available on a range of devices

including PC, tablets and smartphones.

The interface of the app allows delegates to effortlessly move between all of the Convention information, easily navigating between speaker sessions, the Convention program, venue maps and live Twitter updates.

Join the discussion

To have your say at the National Horticulture Convention, jump on Twitter and use the hash tag #HortCon2015. The same hash tag will be used to notify delegates of speaker times and important updates.

If you're unsure of what time the Trade Show opens on Friday

26 June or want to know what time a speaker is presenting, simply get out your smartphone and enter the web address below to view all the events and entertainment on offer.



To access the Convention app, please visit www.ausveg.com.au/app.

2015 NATIONAL HORTICULTURE CONVENTION APP LIVE NOW



ACCESSIBLE ON
SMART PHONE,
TABLET &
COMPUTER

WWW.AUSVEG.COM.AU/APP

- GET TO KNOW THE SPEAKERS
- FIND OUT WHEN & WHERE THE ACTION IS HAPPENING
- JOIN THE CONVERSATION WITH LIVE TWITTER UPDATES

AUSVEG apal
APPLE & PEAR AUSTRALIA LTD



Les Horsfield: 86 years young and still growing strong

WHILE THE AVERAGE AGE OF RETIREMENT FOR AUSTRALIAN MALES IS CLOSE TO 59 YEARS, LES HORSFIELD IS LIVING PROOF THAT AGE IS NO BARRIER WHEN IT COMES TO RUNNING A BUSINESS. THE OWNER-OPERATOR OF HORSFIELD TRADING PTY LTD – A SIX-PERSON COMPANY BASED IN THORPDALE, VICTORIA – HAS BEEN GROWING AND SELLING POTATOES FOR MORE THAN 60 YEARS, AS STEFANIA CEFOLA REPORTS.

Much has changed since Les Horsfield first set foot in the potato growing industry in the 1940s, but a combination of experience, perseverance and good old-fashioned hard work has seen the 86-year-old remain relevant in a contemporary marketplace while yielding significant returns.

“I started picking spuds in 1942 for a naval contractor at Flinders Mornington Peninsula during the Second World War before arriving in ‘Thorpy’ in 1946,” Les says.

“I was a young boy, only 17 at the time, and I spent my days working on a spud farm where I grew seeds and commercials

and managed the livestock. Later, I milked cows for a major occupation for 15 years before I became a full-time spud grower.

“It was a job I naturally fell into, and I suppose I was lucky back then because I was able to ‘buy’ the farm without any money, which was good because I didn’t have any. Rather, I entered a share farming agreement with a cousin and we had a professional money lender in the family which served me well.”

The youngest of three siblings, Les says money had never been his main motivator.

“My mother went through the

Depression on her own raising three small children with little financial or social support,” he says.

“Working in this industry, you have to be prepared to put in the blood, sweat and tears, often without any reward, and I learnt to work for love and not for money. In the early years I did a bit of contracting work and drove tractors, but you would usually find me bailing hay from 6am until midnight.

“Now, I am being told to slow down. I can no longer physically do the 4.30am or 5.30am starts, even if I wanted to. There are fewer than 30 of the original 110 potato growers still working in

the Central Hills area today, and I’m the only ‘old’ one.”

Decades of achievements and challenges

After so many years in the industry, there are countless memories and successes that stand out, some more than others.

“I recall us having a fairly good crop back in 1957... at one stage, we were selling up to 500 tonnes of potatoes a day,” Les recalls.

“We entered the export industry in 1960, which was pivotal for business, trading to French territories, and our best

week by far was probably in 1986 when we exported 36 containers of spuds in just one week."

Les says Horsfield Trading was also the first business of its kind to enter the irrigation field.

"One year we sold 15 electric combination units and seven diesels, and we also imported the first of the modern machinery that came into Australia," he explains.

While Les has recently stepped back from the marketing and administration arms of the business, he has

instead chosen to focus his energy on the farm itself, feeding cattle and growing the majority of the vegetables, grains and crops.

"I am a firm believer that the higher yield produced, the less substance in the potato, so my biggest challenge currently is pushing the message that it is quality we should be looking for in potato yield, not volume," he says.

"Producing locally grown, high quality potatoes is becoming more difficult with challenges posed by consumers and the

retail sector."

Les says water damage is a major issue for growers, as well as the introduction of soil-borne diseases and the need to continually adapt to changing climates.

"A separate issue is the fact that we just don't publicise the benefits of potatoes as much as we should," he says.

"Potatoes are our richest source of vitamin C; they contain more minerals than any other vegetable and they are cheap. I think we also fail to appreciate the importance of Australia's food processing industry. Sixty-six per cent of our total crop goes towards fresh and frozen chips, so the declining food manufacturing industry could have serious repercussions for potato growers."

A lasting legacy

Aside from his farming career, Les is an avid philanthropist, having accumulated more than 20,000 hours of volunteering in community groups and charity shows.

Les was also instrumental in starting the Potato Merchants

Association in the early 1960s and Potato Merchants of Australia in the early 1980s.

"The friendships I have forged over the years is certainly something I have most enjoyed about growing potatoes in the Thorpdale region," he says.

"We grew up during an age when farmers were human beings who had time for one another. It was a supportive, close-knit industry and helping each other out and sharing resources was something you just did."

While Les has no intention of hanging up his hat, he says he has made plans for the future.

"I would like nothing more than to keep the farm going until my two grandsons can take over the reins," he says.

"We have well-watered country and good dams – I don't want to throw it all away. Managing a farm is hard work, but there are many worse things in this world than work."



Photography by Chrisp Pictures.



New potato varieties developed in the U.S.

U.S. POTATO GROWERS WILL HAVE A NEW OPTION TO HELP INCREASE CROP YIELDS AND ADDRESS MARKET NEEDS AFTER THE MAINE POTATO BOARD AND RESEARCHERS FROM THE UNIVERSITY OF MAINE TEAMED UP TO DEVELOP THREE NEW POTATO VARIETIES FOR THE INDUSTRY.

Potatoes are unquestionably important to the U.S. state of Maine – the commodity is the largest cash crop for the state and many residents rely on the potato industry for employment.

In the last few years, the Maine Potato Board (MPB) and the University of Maine have worked together to develop three new potato varieties – Caribou Russet, Sebec and Easton – to ensure the state’s potato growers have access to some of the highest quality seeds.

Given that a number of characteristics are used to determine the quality of a certain potato variety, this was undoubtedly a lengthy process that spanned across 10-12 years.

“Potatoes are bred for a multitude of characteristics; everything from disease resistance to improved fry colour. To get the right combination of characteristics in one variety takes a large investment in time and

resources,” MPB Director of Development and Grower Relations Tim Hobbs said.

A decade-long process

When developing a new variety of potato, many years of research must be conducted before the end result is commercialised. In this case, university researchers worked with the MPB to identify the issues that growers and market producers currently face with existing varieties.

The breeding program was overseen by Dr Greg Porter from the University of Maine. Researchers in the School of Food and Agriculture used cross-pollination methods to combine the most favourable characteristics of existing potato varieties to produce the three new alternatives. These varieties were then field tested at the university’s Aroostook Research Farm.

“The university has the research and development

capability and commitment for developing new potato varieties, from the lab to the field, which takes years,” MPB Executive Director Don Flannery said.

“They understand what the growers and the industry are looking for and need. We in turn, the MPB, have the capacity to promote the varieties and maintain the quality of seed required for the integrity of the variety and the market.”

The golden trio

The Sebec and Easton varieties were both developed for the large-scale market as they both have high yields and a low risk for internal defects. In particular, the Sebec was introduced as an alternative to the Atlantic variety for potato chip production along the East Coast.

The Caribou Russet was licensed in March and is a cross between the Silverton Russet and Reeves Kingpin varieties. It has long tubers with lightly russeted skin and white flesh,

which makes it suitable for baking and mashing as well as large-scale processing due to its consistent, white flesh interior. The new variety is produced from large plants with excellent early vigour and mid-season maturity, high yields, moderate resistance to Common scab and Verticillium wilt and resistance to Golden nematode race Ro1.

Next steps

As the three new varieties are now in the stage of commercialisation, the MPB is working to ensure growers can access these new seeds. A limited amount of early generation seed is available from the Maine Seed Potato Board and from growers in Maine, while the Maine Certified Seed Potato Directory has information on commercial seed availability.

“We are already fielding questions from growers around the country as well as in Maine. This partnership is truly advantageous for the industry,” Mr Flannery added.

Looking ahead, the MPB and the University of Maine is working on releasing several new varieties for small-scale consumer markets.



For more information, visit the Maine Potato Board website at www.maineptatoes.com or the University of Maine website at www.umaine.edu.



Left: Examples of the Caribou Russet potato variety developed by the Maine Potato Board and the University of Maine in the US.

RIZOLEX[®] 100D



Now available in new odour retention bags

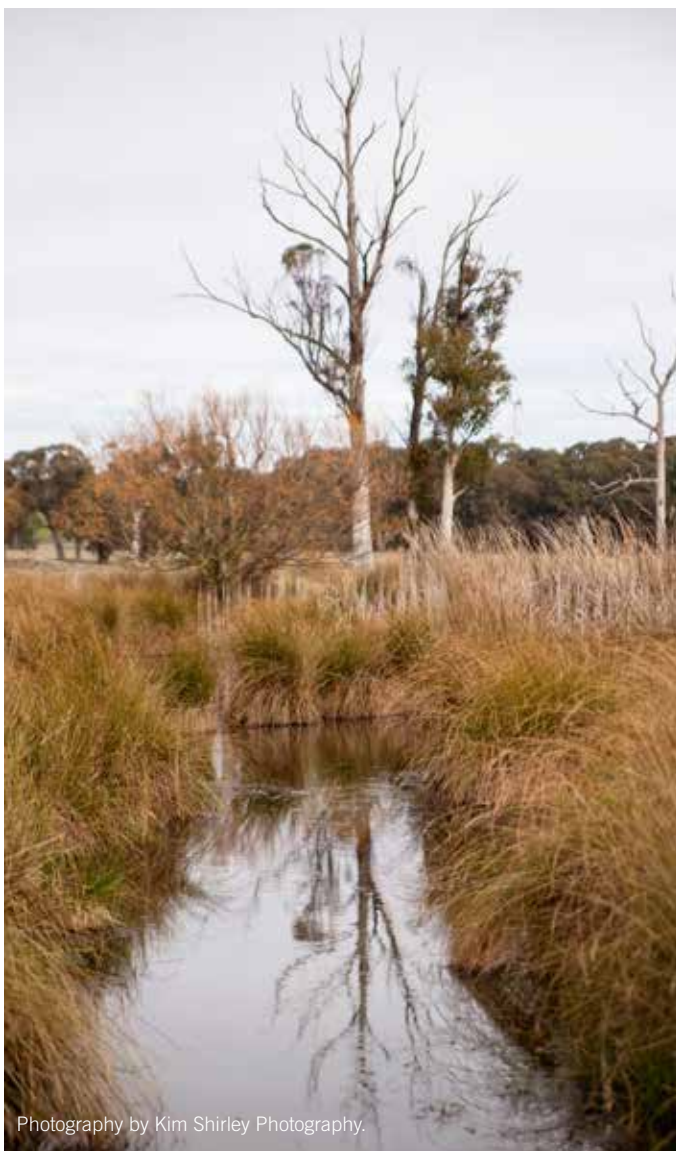
*Rizolex[®] 100D is still the same reliable fungicide
Australia's potato growers have come to trust,
but now you can store it anywhere without even knowing it is there.*



SUMITOMO CHEMICAL

For more information, visit www.sumitomo-chem.com.au

Rizolex[®] is a registered trademark of Sumitomo Chemical Co. Japan.



Photography by Kim Shirley Photography.

Using ecological zones to combat potato pests

WHILE A HIGH YIELDING CROP IS THE ULTIMATE GOAL FOR ANY POTATO GROWER, THE IMPLEMENTATION OF RESPONSIBLE FARMING PRACTICES IS IMPORTANT TO SECURE THE LONG-TERM SUSTAINABILITY OF A FARM. STEFANIA CEFOLA SPEAKS TO NEW SOUTH WALES POTATO GROWER GARRY KADWELL ABOUT THE BENEFITS OF INTRODUCING DEDICATED ECOLOGICAL ZONES ON HIS CROOKWELL PROPERTY.



NSW potato grower Garry Kadwell stands near a dedicated ecological zone on his Crookwell farm.

Garry Kadwell grew up with farming in his blood and his feet firmly planted in the seed potato industry.

The fourth-generation grower from Crookwell, on the Southern Tablelands of New South Wales, has always enjoyed the groundwork of agriculture and fondly recalls his childhood spent exploring the native vegetation on his grandparents' property.

Fast-forward several decades and it is obvious that Mr Kadwell has always been driven by a desire to succeed, both on a personal and commercial level. Today, he is among a class of Crookwell farmers that supply approximately 10 per cent of all Australia's certified seed potatoes: top-quality spuds that can be grown with a relatively low risk of pest and disease infiltration.

But, perhaps, what is most important to Mr Kadwell is his year-round commitment to responsible farming practices, which he said was heavily ingrained in the business' workplace culture.

"The philosophy behind our farming is concentrated on high production, but it is vital we offset that by having a farm that is, in the most part, sustainable, resilient and promotes healthy environmental conditions," Mr Kadwell said.

"This vision was realised – on a small scale – 30 years ago when I started noticing changes on the property, which I attributed to stock pressures on remnant vegetation areas. I knew that if we didn't do something to address the problem at the time, when we still had healthy trees, we would lose our seed bank and the potential to regenerate these areas naturally.

"Initially, the model we applied involved us fencing off particularly vulnerable areas in conservation, planting new trees and encouraging good vegetation cover, which we did with some success.

"Conserving the trees through planning conditions is helping us to re-establish

biodiversity across the whole farm, the advantages of which have become quite noticeable, especially over the past 10 years.”

Crookwell's eco-farm

Mr Kadwell has since integrated a number of dedicated ecological zones on his property in an effort to encourage the recurrence of native plants and wildlife.

In March this year, more than 500 people made the trip to his property during the Crookwell Potato Festival to observe his “eco-farm” and seed potato growing operation, which also highlighted the changes in farm technology over the years.

“Thirty-two per cent of our farm is under conservation, an increase from 12 per cent over the past five years,” Mr Kadwell said.

“By locking up more ground, we have actually lifted our production outputs.”

Mr Kadwell said the dedicated ecological zones, which are locked away from stock and are not used for growing, have

been effective in combating common potato pests, ranging from aphids, grasshoppers and weeds.

He said the native plants and “biodiverse-balanced areas” have assisted in promoting beneficial insects and increased bird life, resulting in a reduced need for pesticides and chemicals on his potato crops.

“We no longer resort to spraying any thistles and weeds. Instead, we will let them grow and then mulch them into the ground so that we can get the organic material back into the soil to promote carbon levels.

“We have also made the switch from using all chemical-based granule fertilisers to manures and foliar fertilisers timed and applied prescriptively by regular sap testing. This, in turn, has improved microbial activity in the soil and is helping to keep our crops very healthy.

“However, one of the best things we have done is an Integrated Pest Management (IPM) course which gave us a good insight into the principles, strategies and tactics of plant disease management to

effectively control potato pests. Importantly, we learnt how to identify insects and separate the beneficial from the harmful. If the insects are not creating an ‘economic loss’, then we no longer intervene.”

Natural benefits

Mr Kadwell said fencing off all remnant and regrowth native vegetation, including snow gum and peppermint gum, was “producing gains as simple as wind and frost protection”.

“We are seeing more growth in our pastures and crops and better irrigation and water use efficiency, and the wind protection provided by the zones enables us to irrigate on days prior to a suspected frost event,” he said.

“Another major plus is the return of native animals on the farm, such as kangaroos, echidnas and abundant bird life. Our wetlands area, in particular, is attracting a wide variety of bird life and the first platypus was spotted in a regenerated wetland a few months ago, which is proof that our water

quality is healthy and clean.”

This focus on water quality is the second phase in Mr Kadwell’s long-term conservation plan, which incorporates the use of hard hose irrigators and a 200-metre wide area outside the riverbank as an agricultural activity filter.

“We still have to use the area as an irrigation supply, but there’s a dual benefit in that we can artificially lower the water table during the breeding season, a requirement of certain water birds through irrigation,” Mr Kadwell said.

“These outcomes have given us great satisfaction and are proof that we can be highly productive and profitable while protecting the environment.

“But still we have a long way to go. Eventually, we aim to provide nesting islands and marshlands to protect our native species from predators, but that’s in another day’s work.”



Wetlands have attracted a wide range of native bird life as well as a platypus.



Vulnerable areas of the property were fenced off and new trees were planted to encourage growth.



Vehicle and livestock corridors also feature in the property.

Now is the time for a CoOL change

RECENT PUBLIC HEALTH SCARES LINKED TO CONTAMINATED IMPORTED PRODUCTS HAS BROUGHT AUSTRALIA'S COUNTRY OF ORIGIN LABELLING (CoOL) SYSTEMS UNDER INTENSE SCRUTINY. WE TAKE A LOOK AT THE ROAD TO REFORM AND THE PUSH FOR MEANINGFUL CHANGES THAT BENEFIT BOTH CONSUMERS AND GROWERS.

The primary purpose of a Country of Origin Labelling (CoOL) system is simple, yet undeniably important: to give consumers clarity about where the ingredients of a product are sourced so they can make informed purchasing decisions.

For Australia's vegetable and potato growers, the strength and clarity of such a system also has an impact on the opportunity for their quality produce to remain front of mind for consumers in a highly competitive market.

Up until now, the challenge of rectifying Australia's current CoOL system has proven difficult for key political decision makers but, in the aftermath of recent public health scares linked to imported food, the issue can no longer be filed away in the 'too hard' basket. The flaws in the current system must be rectified to ensure improved CoOL legislation provides consumers with meaningful information.

The tipping point

The campaign for clearer CoOL laws was reignited in February when fears of a hepatitis A outbreak linked to imported frozen berries surfaced. More than 30 cases of the disease were reported throughout Australia, resulting in an understandable wave of concern among the general public and policy makers alike.

Weeks later, a batch of imported tuna was recalled after four people contracted food poisoning at a Sydney café, further fuelling Australian consumers' desire to know where the food they are buying

and eating comes from.

Following the outbreak, Prime Minister Tony Abbott said people wanted to know more about where their food was coming from and, as a result, put together a taskforce of Ministers to present a CoOL proposal to Cabinet.

"For too long people have been talking about Country of Origin Labelling and nothing much has changed," Mr Abbott said.

"It's important that we grasp this particular nettle and actually make a difference."

The Ministerial Taskforce includes a vocal supporter of CoOL, Federal Agriculture Minister, the Hon. Barnaby Joyce MP.

"Country of Origin Labelling changes is something that's dear to my heart, it's something I've been fighting for years," Mr Joyce said in February.

Suggested changes

The current CoOL landscape consists of vague and ambiguous claims that confuse consumers, such as 'Made in Australia from local and imported ingredients'. In this case, suggestions have been made to change the term 'made in' to 'manufactured in' so consumers can make a clear distinction between where the ingredients were grown and where they were processed.

Another proposed solution includes visual labels such as pie charts, diagrams or bar graphs that show the amount of locally made content in products.

"Simple, diagrammatic information on a package will allow people to tell at a glance what proportion of the food in a package comes from Australia – and it must be compulsory," Mr Joyce said in a media release.

AUSVEG has also reiterated that, while it welcomes any positive changes to CoOL legislation, it needs to be done properly. One point of concern is to not only highlight the percentage of ingredients

Cabinet (expected in August), it is important the Federal Government sticks to its earlier pledge to have CoOL improvements implemented towards year's end. As it has already taken many years for this important issue to be given the consideration it deserves, it is essential to ensure that those seeking to derail or delay CoOL improvements are not successful, nor should we become distracted by side issues.

"Simple, diagrammatic information on a package will allow people to tell at a glance what proportion of the food in a package comes from Australia – and it must be compulsory."

- Barnaby Joyce

that are imported, but also include the names of countries from where characterising ingredients have been sourced.

"A system that highlights both the country of origin of ingredients and the country where they were processed would deliver the best quality information to allow Australian consumers to make informed purchases," AUSVEG Deputy CEO Andrew White said.

Overcoming hurdles

It is promising to see new standards recently enacted for importers of frozen berries to prove their fruit comes from farms and factories with strict sanitation standards, alongside the threat of stiff penalties for non-compliance.

In addition, the Federal Government is leading a series of consultation sessions and consumer research to deliver clearer and more consistent CoOL for food sold in Australia.

With the results of the consultation to be used to inform the Ministerial Taskforce's submission to

For instance, Australia's trade obligations must not be used as an excuse for failing to implement a transparent and robust CoOL system. Some of the world's largest and most successful economies have implemented systems without significant impacts on business and trade, including the European Union, United Kingdom, Canada, Japan and Russia.

Manufacturers that claim an increase in costs will result from the implementation of any changes to CoOL laws must also be challenged, as there are numerous examples that show how easily packaging is altered for marketing and promotional purposes on a regular basis.

The recent ruling by the World Trade Organisation (WTO) against America's CoOL system should also not affect the implementation and enforcement of stricter laws in Australia, given there are numerous examples of other major world economies implementing CoOL systems without incident.

"Recent political progress into CoOL reforms must not be lost because a different system in





An example of ambiguous labelling.

another country, which is more complex and has few similarities to the changes we want, has been challenged at the WTO," Mr White said.

Benefits are two-fold

AUSVEG remains determined to ensure Australia's CoOL system is improved to give consumers the clarity they need to make informed purchasing decisions. They should have the right to exercise their preference to buy Australian and ultimately avoid purchasing products of dubious

origins because, as a plethora of consumer studies have shown, Australians want to buy Australian produce.

This was reinforced by the findings of a recent CHOICE survey, which showed that 85 per cent of respondents said it was "crucial" or "very important" to know whether or not the food they bought had been grown in Australia. The demand and support for locally grown produce has also increased since the public health scares, as Australian producers are renowned for

their adherence to strict quality assurance standards before their products are made available to the public.

Australian grown potatoes are also in high demand, which is encouraging news for the local potato industry. A recent Potato Tracker study, which covers consumer attitudes to potato purchases, showed the importance of knowing where potatoes were grown in the months immediately following the hepatitis A outbreak increased by 14 per cent among respondents of the study.

"Country of origin has always been important to consumers, with Australian produce historically being synonymous with freshness and optimal shelf-life. This data shows that consumers are now more concerned than ever by where their food is coming from," Mr White said.

The benefits of a robust and transparent CoOL system would ultimately travel back to the farm gate as well. Our nation's hardworking vegetable and potato growers are proud of their reputation for producing clean, green and safe produce and

should therefore be given every opportunity to ensure their product is clearly labelled for consumers seeking to purchase locally grown options in-store.

"Australian vegetable and potato growers face a highly competitive domestic market where misleading labels on cheap imports can undercut their ability to compete on fair terms," Mr White said.

"By providing clarity around CoOL, we are not only giving consumers a choice, but also giving local growers a platform to compete against manipulatively-labelled, cheaper and inferior foreign product.

"At the end of the day, all we are asking for is transparency and truth in food labelling so that consumers can identify the origin of the major ingredients. That shouldn't be too much to ask."



For more information, contact AUSVEG:
Phone: (03) 9882 0277
Email: info@ausveg.com.au



NEED CALCIUM? USE CALCIPRILL®

Calciprill® is a 2-6mm prill made from very finely ground high purity limestone. It can be applied to established crops at any time and is ideal for calcium addition and pH adjustment.

It can be applied by the grower with standard fertilizer spreading equipment either on its own or with fertilizer.

Application Rates

Applying 100kgs per hectare of Calciprill supplies 38 kgs of calcium per hectare and can improve soil pH. Omya recommends undertaking tissue and/or soil analysis. For best results Calciprill can be applied every year to replace calcium removed upon harvesting.

Why use Calciprill?

- ✓ Excellent source of calcium, an essential nutrient in plant cell structure
- ✓ Reduce disease and improve potato quality
- ✓ Useful in precision agriculture to spot treat problem areas
- ✓ Prills are formulated to break down readily on contact with soil moisture
- ✓ Allows growers to carry out regular soil maintenance
- ✓ High reactivity means a fast response from the crop

Grow better potatoes with Calciprill.

For more information contact your local reseller or:

Eric Barry
0407 273 500

eric.barry@omya.com

Geoff McNair
0419374522

geoff.mcnair@omya.com



Customer Service 1800 251 306
www.omya.com.au



with Dr Jessica Lye

Close call: Zebra chip detected on Norfolk Island

A RECENT QUARANTINE SURVEY ON NORFOLK ISLAND HAS LED TO THE DETECTION OF *CANDIDATUS LIBERIBACTER SOLANACEARUM* AND ITS INSECT VECTOR, THE TOMATO-POTATO PSYLLID, WHICH CAUSES ZEBRA CHIP DISEASE IN POTATOES. AUSVEG NATIONAL MANAGER – SCIENTIFIC AFFAIRS DR JESSICA LYE EXPLAINS THE IMPLICATIONS FOR AUSTRALIA'S POTATO GROWERS.

Recently, Norfolk Island biosecurity personnel, in conjunction with researchers from the Plant Biosecurity Cooperative Research Centre (CRC) and Queensland Alliance for Agriculture and Food Innovation (QAAFI), conducted a quarantine survey that revealed the Tomato-potato psyllid (*Bactericera cockerelli*) and *Candidatus Liberibacter solanacearum* are widespread on the island, particularly in tomato, potato and capsicum crops.

This news is concerning for Australian potato growers not only because of Norfolk Island's close proximity to us, but also because concurrent feeding by the psyllid and infection by *Candidatus Liberibacter solanacearum* causes the disease Zebra chip, which is currently undetected in Australia.

Biosecurity measures are currently in place to reduce the

risk of a Zebra chip complex incursion in Australia. These include:

1. Testing and heat treating of imported carrot seed.
2. Biosecurity measures restricting movement of food and plant material between Norfolk Island and Australia.
3. Prohibited import of fresh potatoes to Australia and Norfolk Island from overseas markets.

Zebra chip 101

Candidatus Liberibacter solanacearum occurs in the phloem of infected plants and there are five strains found worldwide. Strains A and B primarily affect solanaceae, while the strain found in New Zealand is Haplotype A.

The severity of Zebra chip symptoms can vary due to uneven distribution of the bacterium throughout the plant.

The stage of growth when the plant becomes infected can also influence symptom severity. For example, potato tubers may show no symptoms if the plant is infected at a late stage.

While the Tomato-potato psyllid has an extensive host range, solanaceous plants such as potatoes and tomatoes are preferred targets. The psyllid is currently found in North and Central America, and in 2006 it was detected in the Auckland region of New Zealand. There have been no detections of this psyllid in Australia.

This insect has been shown to severely reduce yield and crop quality. Most life stages of the psyllid (adult and nymph) can impact on plant health by injecting a salivary toxin into plant tissue during feeding. The result – a condition called psyllid yellows – leads to reduced growth, stem death and chlorosis of leaf tissue.

Transmission via psyllids

Tomato-potato psyllids acquire the *Liberibacter* bacterium by feeding on infected host plants. They are then able to transmit the bacterium to other host plants during feeding.

Concurrent feeding by the psyllid and infection by *Candidatus Liberibacter solanacearum* results in Zebra chip disease, which manifests as reduced crop yield and crop health, stem death, chlorosis of leaf tissue and misshapen tubers. Foliage symptoms in potato plants include stunting, chlorosis and swollen nodes, causing a zig-zag appearance of the upper growth, a greater number of auxiliary buds and leaf scorching leading to early dieback.

It is important to be vigilant for early warning signs of this pest as it is difficult to eradicate once established.

Zebra chip: A history in brief

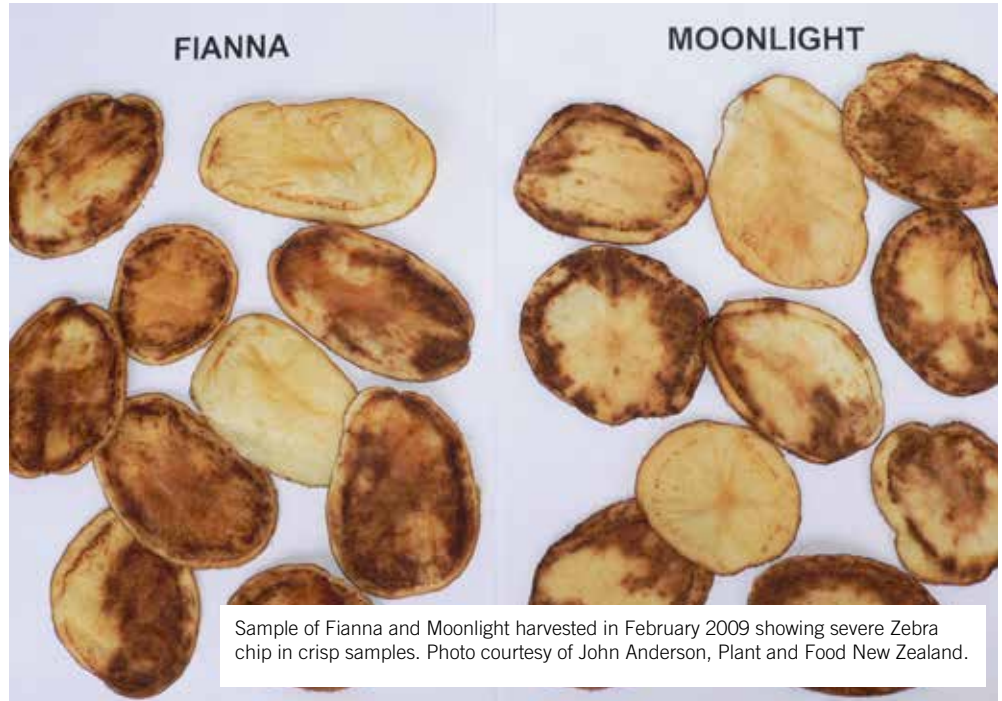
In the mid-1990s, an apparently new affliction of potatoes was observed in Mexico and parts of Central America. Foliar symptoms resembled those caused by phytoplasmas, including upward rolling of the leaflets, purple or yellow discoloration, aerial tubers, leaf scorch and early senescence.

The fresh tubers showed brown discoloration when cut and, when sliced and fried, showed very dark blotches, stripes or streaks. The presence of these characteristic stripes and streaks led to the adoption of the common name, Zebra chip. By 2000, these symptoms were observed in US potato fields, particularly in areas of Texas, and by 2004-05 the disease had caused significant economic damage in these areas.

Tomato-potato psyllids were detected in the Auckland region of New Zealand in 2006. Subsequent surveys have shown that they have spread throughout the North Island and over the northern half of the South Island. Between 2008 and 2011, New Zealand potato producers experienced losses of NZ\$120 million associated with Zebra chip.

Tuber symptoms

Tubers affected by the Zebra chip complex tend to be smaller and misshapen, but are more numerous and have rough skin. Tuber dormancy is affected, which results in premature sprouting. When tubers are cut in cross-section, necrotic flecking and brown



Sample of Fianna and Moonlight harvested in February 2009 showing severe Zebra chip in crisp samples. Photo courtesy of John Anderson, Plant and Food New Zealand.

discolouration of the vascular ring can be seen. This pattern becomes more distinct when sliced potatoes are fried, making these products largely unmarketable. Infected tubers are not hazardous to human health but are visually unappealing and can have a burnt taste.

Continued work on Norfolk Island

Researchers are now focusing efforts on determining the host range of the Tomato-potato psyllid and *Candidatus Liberibacter solanacearum* on Norfolk Island. This work will include testing for the bacterium in weed species.

According to the Plant Biosecurity CRC, presence

of the Zebra chip complex on Norfolk Island gives researchers an opportunity to test management strategies in an environment and climate that more closely resembles Queensland growing regions. Ultimately, this additional research in an environment that is more reflective of Australian growing regions will help to bolster current preparedness and prevention activities.

In keeping Australian growing regions free from the Zebra chip complex, it is clear that aiming for prevention by carrying out on-farm biosecurity best practice must be of key importance to stakeholders.

Imported carrot seed: Reducing the threat

While the Tomato-potato psyllid is not present in Australia, it is not known if endemic psyllids can carry the bacterium between plants. Therefore, to reduce the risk presented by this bacterium, border biosecurity measures were introduced in 2014 for molecular testing and heat treating of imported carrot seed.

These measures were implemented following publication of Bertolini et al. (2014), a research paper providing evidence that *Candidatus Liberibacter solanacearum* can be found in carrot seed.



The Tomato-potato psyllid. Photo courtesy of Whitney Cranshaw, Bugwood.org.



Any unusual plant pest should be reported immediately to the relevant state/territory agriculture agency through the Exotic Plant Pest Hotline (1800 084 881). Early reporting increases the chance of cost-effective control and eradication.

For further information, see the farm biosecurity website at www.farmbiosecurity.com.au or contact AUSVEG National Manager – Scientific Affairs Dr Jessica Lye on (03) 9882 0277 or email jessica.lye@ausveg.com.au.

The next generation of potato research

THERE IS ALWAYS SCOPE FOR RESEARCH IN THE POTATO INDUSTRY, WHETHER IT IS IN AUSTRALIA OR OVERSEAS. *POTATOES AUSTRALIA* GIVES READERS A GLIMPSE INTO THE LATEST RESEARCH PROJECTS BEING CONDUCTED BY PHD STUDENTS IN TASMANIA AND THE UNITED KINGDOM.

Name: Simon Smart
Studying: PhD – NIAB CUF, United Kingdom

What are you researching?

I am studying how plant-to-plant and stem-to-stem variation affects variation in tuber size within crops. Specifically, I have investigated how variation in seed tuber weight, date of emergence and within-row spacing affect the yield and number of tubers of individual plants and how these combine to create the tuber size distribution. I am particularly interested in the role of the seed tuber during establishment and

how it determines the number and size of the stems that make up each plant.

Why are you conducting this research?

In a typical ware crop, approximately 10 per cent of the yield occurs as tubers that are either too small (< 45 mm) or too large (> 80 mm) to be marketed, which is economically and environmentally wasteful. We can predict the mean tuber size of crops with reasonable accuracy but the causes of variation in tuber size are more uncertain. Plant-to-plant variation has long been noted to occur but it has been unclear whether it is detrimental to the

uniformity of the overall crop and if so, what factors affect it.

What does this research mean for the potato industry?

There is an increasing demand for narrower graded tubers (e.g. 65-85mm for baking potatoes) and consequently a greater need for growers to produce uniform crops. Knowledge of the factors that affect plant-to-plant variation will assist growers in managing variation in tuber size. In the longer term, improving our understanding of the growth of individual plants and stems will assist breeders in selecting traits that reduce variation in tuber size.

When will you complete your studies?

I am writing my thesis at the moment and hope to submit it within the next few months.

What would you like to do after you finish your studies?

I am continuing to research potatoes at NIAB CUF. In 2015 I started a new project examining the below-ground morphology of different varieties and determining how this affects their susceptibility to tuber greening.



For more information contact Simon Smart at simon.smart@niab.com.



Simon Smart, who is studying his PhD at NIAB CUF in the United Kingdom.



Name: Wossen Mengesha
Studying: PhD – University of Tasmania

What are you researching?

Globally, fungal and bacterial diseases are an ongoing challenge in limiting the yield and quality of potato. Biological-based pesticides, within an integrated disease management strategy, could be useful in promoting sustainable agriculture.

My PhD project is: "Evaluation of non-aerated compost tea for suppression of key fungal and bacterial diseases of potato in Tasmania and Ethiopia." Different experiments have been set up to look at the suitability of water extracts (compost tea) made from different composted organic materials in suppressing major soil-borne and foliar diseases as model pathosystems.

In our Tasmanian trials, I have examined the efficacy of compost teas made from local matured compost sources in controlling economically important pathogens of Tasmanian potatoes, such as Black scurf and Early blight. In Ethiopia, I made compost teas from a range of

agricultural and solid municipal wastes at variable stages of composting and found that some application treatments could suppress potato Bacterial wilt (*Ralstonia solanacearum*). This specifically is relevant for small-scale farming systems in Ethiopia where effective control measures are not yet available.

So far, data for major disease efficacy trials have been collected and follow-up experimental trials are ongoing, which includes characterisation of biological and chemical properties of effective compost teas. A common experience with compost tea is that results are not always repeatable, so we are trying to understand which factors are related to efficacy and what might improve results. For example, we are looking at additive compounds that make compost teas more effective and have some encouraging results.

Why are you conducting this research?

Health and economic implications of repeated use of persistent pesticides in the developing world are prompting the search for alternative disease management options. Similarly, as a result of a range of biotic factors, loss in farms operating in "organic systems"

is much higher as there are not enough available options that encourage growers.

Understanding mechanisms of disease suppression, designing methods to improve efficacy and developing compost tea solutions as broad spectrum potato disease protectants based on existing knowledge is the primary goal of the project.

What does this research mean for the potato industry?

Due to consumer preferences for organic produce in developed nations such as Australia, integrated disease management options (of which compost tea is just one) could play a role as alternative potato improvement solutions.

Apart from disease suppressive potential, some studies have claimed that

compost teas can improve fertility to the soil and thus improve plant vigorous growth. Given that, more research will be conducted to enhance the efficacy of compost tea technology and how it can benefit the potato industry.

When will you complete your studies?

I am hoping to complete my studies by the end of 2016.

What would you like to do after you finish your studies?

I would like to be involved in research and development of organic crop protectants and continue to contribute to potato research in Africa.



For more information contact Wossen Mengesha at wossen.mengesha@utas.edu.au.



Wossen Mengesha is studying his PhD at the University of Tasmania.

Q&A Young grower profile

Name: Daniel Kadwell

Age: 21

Location: Crookwell, New South Wales

Works: Kadwell & Co.

Grows: Maranca, Sebago, Atlantic, Virginia Rose, Snowden, Charisma and several trial varieties



How did you first become involved in the potato industry?

I was born into a fourth generation potato farm so I think becoming involved in the potato industry was inevitable, but I was grateful to complete my trade ticket as a plant mechanic first.

What is your role in the business?

I am fully involved in all areas of the business, from ground preparation to harvest. I am in charge of plant maintenance and record keeping to make sure the operation runs smoothly. It is a continual learning process.

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

The best thing about working in the potato industry is being in

the outdoors, as well as the sheer variety of work – from operating all types of machinery to embracing new technologies.

What are the biggest challenges that you face working in the industry?

Water is the biggest issue in our area, as we have a very limited opportunity to build new dams to meet the growth of the seed potato industry.

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

Disease is a constant threat to the seed industry. We must have tight biosecurity measures in place to combat this.

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

Opportunities for growth in the potato industry include new varieties forward contracted through the supply chain. Strong relationships must also be fostered through all sectors, not just the seed grower to the commercial grower. I believe that special purpose varieties should find a place in emerging export markets.

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

If I wasn't working in the potato industry, I would still be working on the farm producing stock and crops.

Where do you see yourself in five years?

In five years I hope to be on the same path growing potatoes and increasing our crops and varieties.



UK research: Improving potato cultivation practices

A THREE-YEAR U.K. POTATO COUNCIL RESEARCH PROJECT RECENTLY LOOKED AT DIFFERENT WAYS TO IMPROVE CULTIVATION PRACTICES IN POTATOES, AS APPROXIMATELY 70 PER CENT OF THE SOILS IN ENGLAND'S PRIMARY POTATO GROWING AREAS ARE AT HIGH RISK OF STRUCTURAL DEGRADATION. DIMI KYRIAKOU REPORTS.

It is necessary for potato seedbeds to be fine, friable, non-compacted, free-draining and structurally stable for the best chances of producing a high-yielding crop.

However, many potato growers fail to achieve these attributes as poor attention is often given to the soil at cultivation. There are also added time pressures, as well as the use of high-powered machinery that can either cause wet soil to be unfit for cultivation or pulverise dry soil excessively.

To investigate these issues further, a project from the UK Potato Council – R459 *Improving cultivation practices in potatoes to increase the window of workability and structural stability* – ran from April 2012 to March 2015.

The project aimed to improve cultivation practices in potatoes to increase soil structural stability and overall cultivatability, improve soil nitrogen use efficiency, reduce wastage and energy consumption and produce consistently larger yields.

Most importantly, the project aimed to give growers a better understanding of the necessary depth and physical parameters required within a seedbed to optimise yield, quality and harvestability, as well as evaluate the costs of using different types of machinery and depths during the cultivation process.

Key findings

From 2012-14, 50 replicated-block experiments were conducted on varying soil types, mostly in commercial potato fields.

While soil types can vary considerably across fields, natural water content, soil plastic limit and bulk density at planting can affect the seedbed produced if cultivation takes place at a fixed depth. Reducing the depth of cultivation slightly can often reduce compaction, while the soil nitrogen supply can be modified greatly by the timing and depth of cultivations, soil water content and activity of the roots.

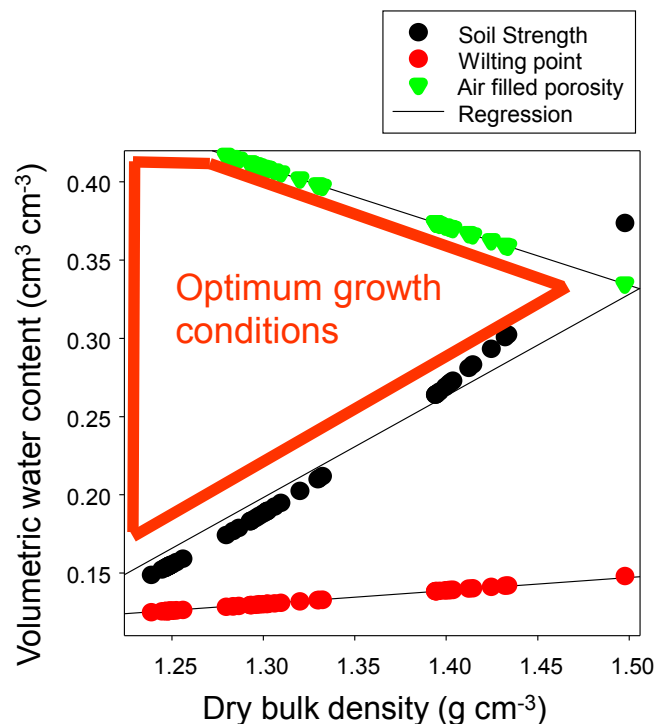
Yields

The research showed that soil is often cultivated deeper and more aggressively than what is required for growing high yields of potatoes.

When looking at the data from 16 experiments conducted in 2011-2014, a significantly lower yield (2.5 t/ha) was achieved when destoning 3-5cm deeper than the commercial depth, particularly on heavy soils. There was no evidence that destoning shallower than the commercial depth resulted in lower yield, but this could also give a greater opportunity for soils to be cultivated closer to their optimum soil water content.



Cultivation in May 2014.



Graph courtesy of Blair McKenzie, James Hutton Institute.



Destoners in action.



Destoning depths

Most sites in 2012 and 2013 showed no link between destoning depth and tuber bruising following harvest, although there was a directional trend for shallow destoning to result in more bruising in three experiments on very stony soils in 2014.

Shallow destoning did not affect planting depth or time to emerge, however there was a greater variation in planting depth and emergence in soil destoned deeper than the commercial practice, particularly in heavy soils. In general, working soil excessively deeply on heavy sites resulted in difficulty obtaining sufficient soil at the edges of the beds to form ridges. This, in turn, made it difficult to achieve consistent planting depth.

Cloddiness of ridges

Over-working soils by destoning

at depths more than 30cm resulted in more loose soil within the ridge, while soils were more dense where destoning was carried out at shallower depths.

The difficulty in producing a clod-free seedbed from traditional working depths on heavier soils may be significantly reduced by bedforming and destoning 3-5cm shallower than many growers currently do – this presents few risks to productivity or quality. More importantly, shallower destoning would give opportunity for soils to be cultivated closer to their optimum soil water content as well as reducing the wear on machinery and lowering labour costs.

Labour and fuel costs

Interestingly, the research showed an overall improvement (+21 per cent) in the rate of work when destoning 7cm

shallower than the commercial depth, which could ultimately translate into large savings in labour costs and a reduced reliance on contractors. Shallower cultivation reduces the wear on machinery as well as the chance of a breakdown during the planting season.

Also, the research predicted up to 25 per cent of savings in fuel can be made by cultivating beds shallower than what is currently being practiced.

Nitrogen supply

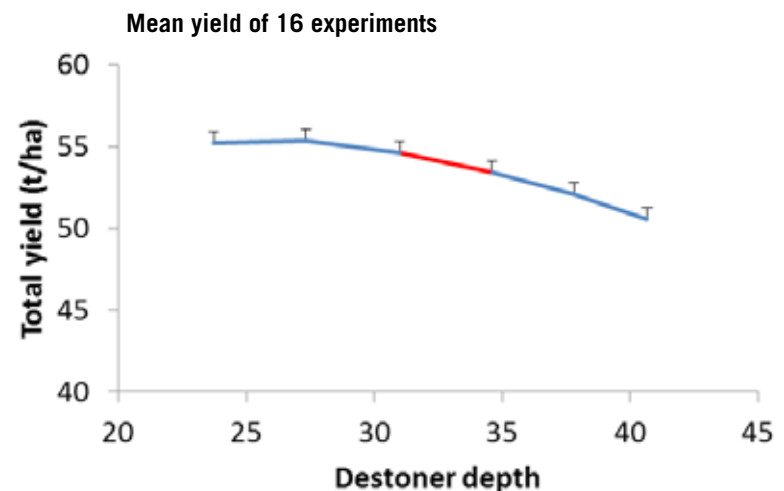
The data from the series of 14 experiments involving nitrogen application rate and cultivation depth indicated that the soil nitrogen supply of many potato soils is underestimated. This may be partly due to the

intensity of the cultivation used to create potato seedbeds.

The research found that destoning deeper did not liberate more nitrogen from the soil, despite working a bigger volume of soil. This may have been due to most organic matter being in the top 25cm of the soil profile.

The project noted that there is also an opportunity for further research in the area of potato cultivation, with a particular focus on ridge soil structure and the optimum amount required for the task of growing pre-pack and processing potatoes.

i For more information, visit the UK Potato Council website: www.potato.org.uk/publications/r459-improving-cultivation-practices-potatoes.



Measurement of shallow destoning.

Potato Tracker: Two new waves of consumer insights released

THE POTATO TRACKER PROJECT CONTINUES TO PROVIDE USEFUL INSIGHTS INTO THE POTATO PURCHASING HABITS OF CONSUMERS, PRESENTING A WIDE RANGE OF OPPORTUNITIES FOR GROWERS TO EDUCATE CONSUMERS ON THE BENEFITS OF POTATO CONSUMPTION. *POTATOES AUSTRALIA* HIGHLIGHTS THE KEY FINDINGS FROM WAVE 7 AND WAVE 8 OF THE PROJECT.

Understanding consumer attitudes to potatoes, as well as sales trends and market sizes over time, will go a long way in ensuring the Australian fresh potato industry continues to meet consumer needs as well as overall market trends.

To help make this process easier, market researchers Colmar Brunton have developed Potato Tracker. This is a comprehensive and dedicated monthly online tracking project that aims to help growers better understand consumer behaviour when purchasing potatoes in-store.

Wave 7 results

Potato purchase was stable in Wave 7, with consumption at an average of 14 times per month. The commodity also formed one of the top five purchased vegetables alongside tomatoes, carrots, cucumbers and lettuce. Ease of preparation and taste continue to be the main triggers for purchasing potatoes.

It was found that, on average, consumers waste 15 per cent of the potatoes they purchase. On the other hand, one third of consumers indicated they do not waste any of their potatoes. Respondents also expected their potatoes to stay fresh for almost 17 days after purchase; these

expectations were met 15 per cent of the time.

It was recommended that wastage could be decreased by communicating ideas where consumers can use the whole potato, such as mashing with the skin on and using leftover potato as pie and stew toppings.

The benefits of having storage information and best before dates on the pack, at the point of sale or on leaflets, could also provide some ways for consumers to enhance freshness and reduce wastage.

True to previous findings, there was once again a



potatoes where possible, from fertiliser products to retailers making use of explicit 'Aussie' labelling.

Barriers to purchase

Compared with the first half average, potatoes experienced a

poor quality and difficult/heavy to carry segments, limiting the future purchase of potatoes.

The report suggested that consumers may be running out of ideas of cooking with current potato varieties. To spark interest in new varieties, promoting a 'potato of the month' may be

"...over 10 per cent of consumers indicated they would increase their purchase of potatoes in the future, while satisfaction and recommendations to family and friends were also stronger."

considerable uplift in the importance of provenance in Wave 7, which may relate to the media coverage around this issue. Tasmania recorded the highest perceived importance of potatoes, while Northern Territory respondents were at the other end of the scale.

The report recommended that the potato industry could use this renewed exposure to promote Australian grown

decline in consumer sentiment – particularly satisfaction – with a reduced future purchase intent in Wave 7. In addition to consuming enough for their needs, the report noted that purchase, spend and value for money perceptions were lower. Price tracking revealed a slightly higher average national price of \$3.97/kg in March and there was also an increase in

helpful to consumers, particularly for use in seasonal dishes such as salads or stews.

As potato-based meals and cooking are heavily grounded in dinner occasions and Australian cuisines, consumers may also need some inspiration and education on new cuisines, dishes and meal occasions to grow the potato category.

Global trends

Wave 7 findings noted that there were over 3,000 products launched globally over the last three months containing potato as an ingredient – a higher trend than previous months. While Australia saw 79 potato product launches, the United Kingdom, France and the United States were the key countries for product launches, particularly in the categories of snacks, meals and bakery items.

Wave 8 results

After a drop in consumer sentiment in the previous month, satisfaction and endorsement noticeably increased in Wave 8. Over 10 per cent of consumers indicated they would increase their purchase of potatoes in the future, while satisfaction and recommendations to family and friends were also stronger.

On average, 2.6kg of potatoes were purchased and the recalled last spend was higher at \$4.90kg. Overall, consumers perceived washed and brushed

potatoes to be good value for money and they purchased both styles, generally in loose formats. While there was a drop in consumption occasions (12.6 times per month), purchase frequency was higher at 3.6 times per month.

The results from Wave 8 showed that smaller, pre-packaged options and ready-to-cook potato formats continued to be infrequently purchased, with consumers opting for larger pre-packed bags. The increase in 'quick meals' that incorporated potatoes was reflected in the commodity's popularity as an accompaniment to a dish (such as roast potatoes) rather than the key ingredient in a meal (such as Shepherd's pie). It was recommended to communicate recipes in-store, where potatoes are the key feature in a dish.

The report noted that the topical issue of sugar in the food industry may be having a positive impact on earlier purchase barriers, including weight and diet management

concerns. It was recommended to highlight the dietary and nutritional benefits of potatoes on pack and in-store to help inform consumers about the low fat and low sugar content of the commodity.

As provenance remained important to respondents in Wave 8, it was recommended to continue emphasising Australian and locally grown produce.

Barriers to purchase

Consumers were noticeably less likely to purchase potatoes out of habit and tradition in Wave 8. Place of birth was found to influence cooking styles, alongside family heritage and food trends.

While the majority of respondents who cooked potatoes were born in Australia, there are many other cuisines outside of traditional and modern Australia that use potatoes as a key ingredient, presenting an opportunity to encourage consumers to use potatoes in a variety of meals.

The report found that the

continued growth of Asian culture within Australia is likely contributing to the substantial decrease in tradition and habit as drivers to purchase. It was recommended to acknowledge the shift from traditional cuisines to drive the consumption of potatoes, and educate consumers on potato versatility and use within multicultural cuisines.



The Potato Tracker project will continue over a 12-month period with a wave of new findings released each month. Full copies of the report can be found on the AUSVEG website at www.ausveg.com.au/potatoes/potato-consumer-research.htm.

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

Project Number: PT13015





Elders Manjimup Branch Manager Shannon MacDonald (left) and Nigel Leve.

New Aussie grown spuds on the way to market

PROMISING RESULTS FROM A POTATO VARIETY ASSESSMENT TRIAL IN SOUTH AUSTRALIA HAS ALLOWED AGRIBUSINESS ELDERS TO INTRODUCE SEVERAL NEW VARIETIES TO THE MARKET. AS *POTATOES AUSTRALIA* REPORTS, THIS HAS ALSO CREATED AN OPPORTUNITY TO PROMOTE THE ROLE OF POTATOES IN A HEALTHY, BALANCED DIET.

From its modest beginnings in the Andean Mountains several thousand years ago, the potato has become an essential food source – and today over 8,000 varieties of potatoes are grown in over 130 countries around the world.

Elders has been selling potato seeds for over 16 years and supply about 20 per cent of seed potatoes for the fresh market per year. The company has a strong pipeline with 18 new varieties available over the next two years.

A potato variety assessment trial conducted in Parilla, South Australia during 2014/2015 revealed several new varieties. Planted in August 2014 and harvested in January 2015, the Parilla trial included 24 entries of open and protected varieties.

The focus of the trial was on fresh market application, which requires varieties with a smooth skin finish, low to medium dry matter content and cream to yellow skins and flesh.

Elders National Manager for Potatoes Rene de Jong said the successful Parilla trial provided an important comparison of the genetic potential of varieties, especially in relation to skin finish.

“Of the 24 varieties included in the trial, the standout was Lanorma – a recently imported Dutch variety – with great overall scores for yield, skin finish, appropriate light yellow flesh and great cooking quality,” Mr de Jong said.

New options

A number of varieties in the trial satisfied overall high yield potential, high skin finish, appropriate flesh colour and good cooking, including Kestrel, Daisy and Cabaret. Some varieties are currently licensed for the exclusive use of other growers and can be accessed with permission of the licensed grower/packer.

Some of the other new varieties in the Parilla trial included Marguerite, a locally bred potato from Agriculture Victoria Services. It has all the attributes for high yield, skin finish and a smooth, sweet white flesh, which has appeal in selected markets. Laperla, a light yellow fleshed variety was also in the top five yielding potatoes in the trial with acceptable skin finish for the wash market.

“While Laperla’s cooking quality was at the lower end in the trial, previous taste-testing showed it to be a popular choice as a roasted potato sample (olive oil and salt) with sweet, soft flesh. This variety has a quick growing cycle and bulks up well from modest tuber setting,” Mr de Jong said.

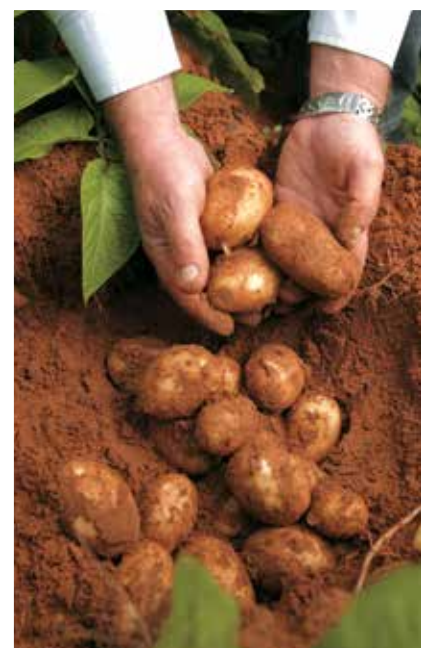
In addition, both Friar and Excalibur have good market attributes. Friar has a light yellow flesh, good skin finish and excellent cooking properties, while Excalibur is a cream fleshed variety that also has excellent cooking attributes.

“It is an exciting time in the potato industry in Australia with many new varieties – with high yield potential, high skin finish, appropriate flesh colour and good cooking – on their way to market,” Mr de Jong said.

Promoting potatoes

Accredited dietician Dr Trent Watson discusses in his 2008 *Potato Nutrition Report* a mistaken perception that starchy vegetables, such as potatoes, should be restricted from Australian diets.

In the report, Dr Watson



explains that potatoes are well placed to play a role in healthy diets as they can assist in the prevention and management of chronic disease, are a good source of fibre, low in fat and high in potassium – in fact, spuds have more potassium than bananas.

In light of this, Mr de Jong encourages growers and members of the potato industry to help educate consumers about how good potatoes are in a healthy diet.

“I challenge everyone to start the conversation and all do our part in helping to dispel the myths around potatoes and carbohydrates being ‘bad’ for us,” Mr de Jong said.

“Let’s share the good story of all the health benefits of fresh, Australian grown potatoes and help grow a healthy Australia.”



For more information please visit www.elders.com.au.

Victorian Potato Industry Advisory Committee launched



Victorian Potato Industry Advisory Committee Chair Des Jennings.

AUSVEG is pleased to announce the formation of the Victorian Potato Industry Advisory Committee (VPIAC). The VPIAC has been established to give Victorian potato growers greater representation and direction for industry development.

Highly experienced and knowledgeable growers of seed, fresh and processing

potatoes from regions across the state make up the committee, ensuring all sectors are covered and are of equal priority.

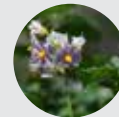
With backing from AUSVEG, the Eligible Industry Body (EIB) representing potato growers at a national level, the VPIAC will be able to advise on the important issues growers would like pursued, as well as ensure that

fully informed industry decisions are made on behalf of growers.

AUSVEG has invited well-known industry leader, Des Jennings, to be the convenor of the new advisory group. The inaugural meeting was held in May and provided the opportunity for the VPIAC to discuss the direction of the committee, membership and

R&D initiatives within the potato industry. Discussions were held around opportunities to ensure the longevity of the Victorian potato industry, with a particular focus on retaining youth in the industry to keep an eye on the future.

CALENDAR of events



25-27 June 2015

National Horticulture Convention, Trade Show and Awards for Excellence incorporating AUSVEG and Apple and Pear Australia Ltd.

Where: Gold Coast, QLD

What: The National Horticulture Convention is the biggest event in Australian horticulture, providing local and international delegates with an opportunity to forge relationships with members of the vegetable, potato, apple and pear industries. This is a must-attend event for growers, suppliers, wholesalers, researchers and agribusinesses alike.

Further information:

Please contact AUSVEG on (03) 9882 0277, email convention@ausveg.com.au, or visit www.ausveg.com.au/convention

28-30 July 2015

9th World Potato Congress

Where: Beijing, China

What: The World Potato Congress is dedicated to supporting the global growth and development of the potato. It is the first time the Congress will be held in the Yanqing, Beijing region and will be staged at the base of the Great Wall of China. The Congress will be held concurrently with the China Potato Expo and China Potato Congress. It is expected that more than 900 delegates will attend, including growers, researchers, producers, traders, processors and manufacturers.

Further information:

www.potatocongress.org



Stu Jennings

With any luck you might be reading your copy of *Potatoes Australia* magazine at the National Horticulture Convention on the Gold Coast. If you are, nice work getting here and enjoy the show. Make sure that you put the mag down and pay attention in the speaker sessions though!

I encourage everyone attending the Convention to take the time to attend these speaker sessions as well as all the opportunities on offer on the Trade Show floor. There is plenty to

see and hear about so plan your days and make the most of it.

The Convention isn't just about listening to the speakers of course. While the information presented, in my experience, is always noteworthy and can open your mind to new ideas, there is the other side of going to this event – and others like it – that you will never know about unless you go.

I am of course referring to the social side of things, something you may not consider significant to your business. The chance to spend face-to-face time with other growers, suppliers and industry personnel is often an underrated side of large events, but it is truly amazing how much you can learn just by talking to your peers and other leaders in their field.

Old school networking

Our world today is filled with Google, Facebook, Twitter, Instagram and all sorts of 'social' media that help to keep us informed and in touch, but with all of this it is easy to find ourselves really connecting less, not more!

I'm not suggesting that we all go 'offline', but I'm still not sure whether life with smartphones has become simpler or in fact just a little more complicated – perhaps it's just a matter of prioritising and making the right choices as to how we use them.

There are so many ways to 'share' now, but if we are not careful, these tools can take us away from others rather than bring us together as they were intended to do. That's why opportunities like the Convention are so



Young growers at the 2014 AUSVEG National Convention NextGen Saltwater Splash-tacular in Cairns.

important, not just to convey information but to actually be present and truly connect with others. The sense of community at this event is definitely worth experiencing.

Back on the farm, there are lots of great apps that have a real place each day and of course I'm a bandit for taking a photo and posting it on the YPP Facebook page. I do like being able to check the weather whenever I want, rather than wait and try to catch the forecast on the radio. Taking notes without a pen and pad has now become part of how I roll. I have, however, made a conscious decision to choose wisely when it comes to the time I spend online and make sure that I am present for my family and friends. Sometimes 'old school' is the only way to go.

I hope the season is treating you well at your place. It would be great to catch up and hear all about it sometime – maybe even on the Gold Coast!

Do yourself a favour – if you haven't made it to the Convention this year, put it in your diary and make a plan to be there next year. Even better, call up a few mates and organise to get there together. You'll be glad you did and I'd love to see you there.

Cheers,

Stu

www.youngpotatopeople.com.au



@youngpotatopeps



Find us on Facebook

www.facebook.com/groups/youngpotatopeople/

Proudly supported by





2015

Adama Rewards



- Available to eligible growers when purchasing Adama Rewards products from your participating retailer
- Simply ask to have your claim submitted when you purchase qualifying products between 1 June 2015 and 18 December 2015
- Receive \$50 Cash Back for every \$1000 (+GST) spent in one transaction during the eligible claim period.

See full terms and conditions in store or at adama.com, while stocks last.

Qualifying products for use in potatoes include: Afalon®, Linurex®, Mentor®, Rattler®, Axiom® MZ, Cavalry® Weatherguard, Chief® AquaFlo, Predict®, Sphinx®, Albatross®, Kohinor® 200 and Kohinor® 350.

ADAMA
adama.com



Handle with care

Get ahead with GRIMME, the world leader in potato technology. Our integrated range of receiving hoppers, graders and conveyors are engineered to maximise post-harvest quality and productivity. Combined with on-call service, genuine parts and expert knowledge from Landpower, GRIMME has all of your potato handling requirements covered. For more information, contact GRIMME Operations Manager, Rob Breedveld, on 03 9369 1188 or 0438 320 191.



www.landpower.com.au

