

vegetables

australia

March/April 2015

Bill Bulmer

Looking in a new direction

Daniel Adams

Young grower

Education in horticulture

A new wave of technology

National Horticulture Convention

AUSVEG and APAL unite



The most widely distributed
magazine in horticulture

AMMA
Audited Media
Association of Australia

cab

Visit www.ausveg.com.au

Audit Period: 01/04/2013 – 31/03/2014

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

Contents

March/April 2015

Regulars

- 5 Chairman & CEO messages
- 7 Editorial
- 48 Around the states

Features

- 10 When horticulture meets futuristic technology the possibilities are tremendous
- 14 A new direction for Bill Bulmer
- 30 Young grower profile: Daniel Adams

Industry update

- 16 Dodgy tomato dumpers back in the spotlight
- 26 Ask the industry
- 32 AUSVEG SA holds successful industry dinner
- 45 Hortus unveils new testing services for growers

News

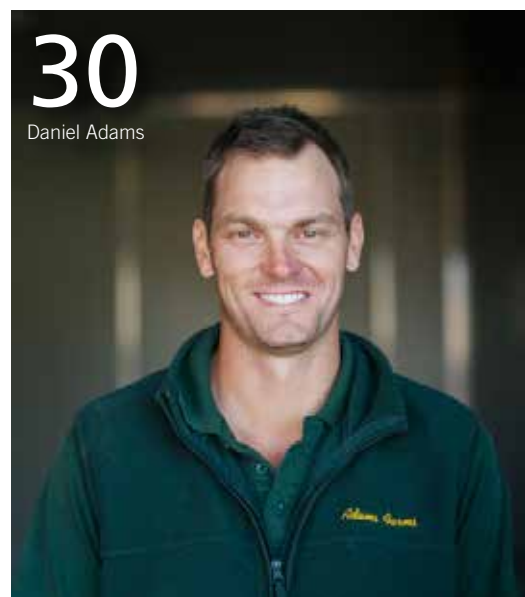
- 13 AUSVEG and APAL unite for National Horticulture Convention double header
- 46 Minor Use Awareness Program: Latest news
- 47 Permits

R&D

- 8 Veggie bites
- 18 New report highlights export opportunities to the Middle East and Asia
- 20 Biosecurity brief
- 22 The Front Line: Is Bambi the next big headache for growers?
- 24 Weeding out the issues in weed mat plastics
- 27 Veggie Stats: Cabbage
- 34 EnviroNews
- 36 EnviroVeg profile: David Addison
- 38 Key facts for exporting to Indonesia
- 40 Behind the scenes of vegetable production in the US
- 42 Controlling transplant shock in lettuce
- 43 Industry in the media
- 44 Experts gather for Summer School in ag robotics



14
Bill Bulmer



30
Daniel Adams



32
AUSVEG SA
Dinner

**THE BIGGEST EVENT IN
AUSTRALIAN HORTICULTURE**

JUST GOT BIGGER

Incorporating

AUSVEG

apal 
APPLE & PEAR AUSTRALIA LTD

***National Horticulture Convention, Trade
Show and Awards for Excellence
Jupiters Gold Coast QLD, Australia
25-27 June 2015***

**NOMINATIONS FOR
2015 NATIONAL AWARDS FOR EXCELLENCE
NOW OPEN**

AUSVEG Chairman and CEO messages



Geoff Moar

AUSVEG Chairman

In the past few weeks, Australian consumers have been left reeling at the prospect of eating unsafe food from overseas, following the widespread hepatitis A outbreak linked to imported frozen berries from China.

Given the vague Country of Origin Labelling (CoOL) that accompanies many food products, it's no surprise that Australians were shocked to discover how far these frozen berries had travelled, and how apparently easy it was for a contaminated product to enter Australia given that, in the majority of cases, only five per cent of imported fruit and vegetables are tested at the border.

The significant concerns arising from this alarming public health incident prompted AUSVEG to continue its longstanding, nationwide campaign for stronger CoOL laws, and more stringent screening processes for imported foods. Clearer CoOL laws will result in a fairer system where consumers know exactly where their food comes from and therefore allow them to make informed purchasing decisions.

Importantly, the benefits will also travel back to the farm gate to ensure our Australian growers operate on a level playing field, particularly against overseas producers who lack the strict quality assurance standards that are the norm for local growers.

Key political figures have also supported our message. This culminated in a joint press conference that AUSVEG held alongside Australian Greens Leader Christine Milne in February to debunk the myth that big business will face increased costs as a result of implementing any changes to CoOL laws. AUSVEG rebutted this argument by providing numerous examples of packaging that is easily altered for marketing and promotional

purposes on a regular basis.

Importantly, the Prime Minister and other key government figures have indicated a desire to see clearer Country of Origin Labelling, and AUSVEG will continue pushing hard, both publicly and behind the scenes, to make sure this happens.

At the end of the day, Australian consumers have a right to know where their food comes from and Australian growers have a right to compete on a level playing field with international producers. Stronger and clearer CoOL laws, combined with more stringent testing at the border, will go a long way in achieving this. As we have seen over the past few weeks, it's also what Australians want.

In lighter news, AUSVEG is pleased to announce that it will join forces with Apple and Pear Australia Limited (APAL) to host the 2015 National Horticulture Convention at Jupiters Gold Coast from 25-27 June. AUSVEG is continuing to work hard to make this Convention one to remember and I encourage our readers to take advantage of the opportunity to attend this unique event. More information on what to expect can be found in the 2015 Delegate Brochure, which accompanies this edition of *Vegetables Australia*.

Geoff Moar
Chairman
AUSVEG



Richard Mulcahy

AUSVEG Chief Executive Officer

For any industry to prosper, it is vital that the next generation of younger people are encouraged to enter its workforce and bring new and fresh ideas that will help ensure innovative practices are embraced in the years ahead. Unfortunately, this is an area where the Australian vegetable industry has experienced some difficulties in recent years.

In order for us to remain prosperous, it is important that we tackle this challenge head on, and it is pleasing to note steps are being taken to encourage the next generation to embrace careers in agriculture, through the development of new and exciting technologies.

We're not talking about the latest range of tractors and harvesters, but rather robots and drones. Many of our readers will already be familiar with the good work coming out of the University of Sydney's Australian Centre for Field Robotics, and how award-winning R&D projects such as 'Ladybird' will no doubt change the way Australian vegetable farms operate in the future.

Looking further north, some promising developments are also underway at the University of Queensland's* Gatton campus. Founded as Queensland Agricultural College in 1897, the university has deep roots in agriculture and is looking to revolutionise its expertise for the next generation through huge investments in both infrastructure and the courses themselves.

Earlier in the year I had the opportunity to meet representatives from the university who discussed a number of exciting technological initiatives being developed by students for use on farms across a wide range of sectors. What is perhaps most encouraging is the fact that some respected farming operations

in the Gatton area are already working with the students to trial drone technologies on their farms, with great results.

It is important to open up the lines of communication for the mutual benefit of industry and the educational institutions preparing the next wave of agricultural workers. These on-farm partnerships give the students real, practical experience and subsequently demonstrate to industry the potential of new technology in agriculture.

Growers will also have the opportunity to network with agriculture students at the 2015 National Horticulture Convention, which we are excited to announce will incorporate AUSVEG and Apple and Pear Australia Limited (APAL). We are now mere months away from the kick-off date of 25 June and I cannot emphasise enough the endless opportunities that will be presented to growers at this double-header event, as APAL will also contribute its own delegates and speakers from which all attendees can benefit.

More than 1,400 delegates are expected to descend on Jupiters Gold Coast this year and, with only a handful of booths left up for grabs at the Trade Show, the 2015 Convention is certainly shaping up to once again be the highlight of this year's horticultural calendar.

**Richard Mulcahy is also Adjunct Professor at the University of Queensland in the Business, Economics and Law Faculty.*

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**Writer/Journalist**Felicity Powell
felicity.powell@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



All research and development projects have been funded by Horticulture Innovation Australia Limited using the National Vegetable Levy and/or voluntary contributions from industry, and funds from the Australian Government. *Vegetables Australia* is produced by AUSVEG Ltd and is free for all National Vegetable Levy payers. For more information or to follow AUSVEG online visit:


www.ausveg.com.au

twitter.com/ausveg

Vegetables Australia is produced by AUSVEG and is free for all National Vegetable 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.

© 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 enquiries concerning reproduction and rights should be addressed to AUSVEG at:

PO Box 138, Camberwell, Vic, 3124

ISSN 1832-3340

**FRONT COVER:**

Bill Bulmer

Photograph by Lisa Hayman



and give a market snapshot of Indonesia as a potential export market (page 38). Also, we highlight some of the issues that come into play when choosing between photodegradable and biodegradable weed mat plastics (page 24).

In other industry news, readers will find a feature on the latest developments in anti-dumping, which has brought Italian tinned tomato imports back into focus (page 16). We also provide an overview of the Women in Horticulture Industry Leadership and Development Mission to the US on

page 40.

Regular Syngenta columnist Scott Mathew provides advice to some of the most common queries received from vegetable growers about spray boom selection and application (page 26), while AUSVEG Biosecurity Adviser Dr Kevin Clayton-Greene continues the discussion on the steps carried out by government and industry after an Emergency Plant Pest incursion (page 20).

Finally, turn to page 13 where we announce that Apple and Pear Australia Limited (APAL) will join AUSVEG for the 2015 National Horticulture Convention to be held at Jupiters Gold Coast from June 25-27.

10

University of Queensland's Gatton campus

We begin this edition of *Vegetables Australia* with a report on the many important agricultural initiatives being undertaken at the University of Queensland's Gatton campus, which aim to encourage more young people to embrace horticulture at a tertiary level and open the door for industry to work with them in the development of new technologies (page 10). We also speak with Dr Robert Fitch of the Australian Centre for Field Robotics, which recently held a Summer School on agricultural robotics (page 44).

One young grower who is already successful in the industry is Victorian Brussels sprouts grower Daniel Adams,

who is profiled in our regular Young Grower Q&A. He chats about his attendance on the most recent Industry Leadership and Development Mission to the US, which saw the group visit large-scale vegetable production areas in California and Arizona (page 30).

In EnviroVeg updates, John McPhee from the Tasmanian Institute of Agriculture and AUSVEG Deputy Chair David Addison share their insights into Controlled Traffic Farming (page 36). Readers are also encouraged to send in nominations for the Netafim Environmental and DuPont Community Stewardship awards



36

David Addison

to be presented at the 2015 National Horticulture Convention Gala Dinner (page 34).

Meanwhile in the research and development sphere, we bring updates on the recent UAE and Malaysia Exporting Symposium held in January,




Contact **Wayne Mills** to discuss the right HORTECH Harvester to suit your needs

0417 945 584



Veggie bites

Facts & figures...

\$261.2 million 

In 2012-13, exports of fruits and vegetables from Queensland to India were valued at \$261.2 million, according to Trade and Investment Queensland.

49%

The percentage of consumers who indicated that the main barrier to future carrot purchase is that they already consume enough for their needs, as recorded by the Project Harvest October 2014 report.



743kg

The weight of the pumpkin grown by Dale Oliver, which set the record for the heaviest pumpkin ever grown in Australia and New Zealand. The pumpkin was grown for the Summerland Pumpkin Competition held at Kyogle in northern New South Wales.

15%

The latest data from the Project Harvest November 2014 report shows that consumers are increasingly turning to sweet corn as a healthy addition their meals, with consumption up 15 per cent since March 2014.

\$15 million

From 1 March 2015, the Federal Government will lower the threshold for scrutiny of farmland sales by the Foreign Investment Review Board (FIRB) to a cumulative \$15 million, as reported by *ABC Rural*.

85%

The United Arab Emirates, Saudi Arabia and Qatar accounted for 85 per cent of Australia's vegetable exports to the Middle East in 2013-14, according to the discussion paper *Exporting Australia's vegetables to the Middle East and Asia: Market analysis and overview*.

5%

The average risk of death from all causes was reduced by five per cent for each additional daily serving of fruit and vegetables, according to an international study published in the British journal *BMJ* and reported by *Business Insider*.

12 days

Pumpkins are expected to stay fresh for over 12 days, according to consumer feedback included in the Project Harvest October 2014 report.



COMBAT AND PROTECT AGAINST DOWNY MILDEW

For more information, contact your local Nufarm distributor.

nufarm.com.au

Phostrol is a registered trademark used under licence by Nufarm Australia Limited.

Protect your cucurbits and yield against downy mildew with new Phostrol® 500 systemic fungicide.

Available in:

20L

200L

1000L



Nufarm
Phostrol[®]
SYSTEMIC FUNGICIDE



Grow a better tomorrow.



R&D

Farm Productivity,
Resource Use
& Management

R&D

Drive Train

When horticulture meets futuristic technology, the possibilities are tremendous

ATTRACTING FRESH BLOOD INTO THE VEGETABLE INDUSTRY HAS LONG BEEN A CONCERN FOR GROWERS, BUT SOME PROMISING DEVELOPMENTS ARE CURRENTLY UNDERWAY TO RECTIFY THE SITUATION. DIMI KYRIAKOU RECENTLY VISITED THE UNIVERSITY OF QUEENSLAND'S GATTON CAMPUS TO SEE THE LATEST TECHNOLOGIES BEING DEVELOPED FOR USE IN AGRICULTURE AND THE OPPORTUNITIES FOR INDUSTRY TO GET INVOLVED.



Photography by Rowena Dione Photography

Drones, robots, automation: What was once the domain of sci-fi storylines is now looming as a valuable tool for Australia's vegetable farms. And if University of Queensland (UQ) Associate Professor Kim Bryceson has her way, it will be brought to industry through the next generation of agriculture students.

Kim is the Associate Dean (Academic) for the Science Faculty and Associate Professor of Agribusiness in the School of Agriculture and Food Sciences at UQ. For the past 14 years, she has played an instrumental role in developing innovative technology-based courses for the agribusiness and agriculture programs at the university.

"My goal is to make this campus the place to come for advanced technology and agricultural science education. UQ is investing many millions of dollars developing new buildings, state-of-the-art laboratories and staff. We see Gatton as an extremely important campus, and both agribusiness and agriculture as extremely important areas to develop," she said.

Kim hopes the development of some exciting technologies will lure the next generation of agricultural workers into the sector, for the benefit of both the students and the wider industry.

"Agriculture has an image problem, but hopefully we can change that with dynamism, innovation and fun. Technology is one way to get young people in; it has a cascading effect on

getting their interest in the plant and animal kingdom."

A new wave of tech

The technologies on show for *Vegetables Australia* at the UQ Gatton campus included the Smart Campus Mesh Network and various 'bespoke' drones designed and built by students in Kim's lab. This included the NetDrone and the Beneficial BugDrone; both of which are the result of a collaborative effort of a team of researchers, led by Kim and PhD student Armando Navas.

The Smart Campus Mesh Network covers some 1,000 hectares of the entire campus, wherever there is WiFi connectivity, and provides comprehensive, 24/7 real-time biophysical data on the environment for use in growing crops, managing production animals in the fields and for monitoring the 'built' environment throughout the campus. The sensors in the network can also communicate with the drones being developed at the university.

The mesh network is based on 'plug and play' technology called Waspmote, from an innovative company in Spain called Libelium.

"We have developed a very good working relationship with Libelium and hope that we can develop further projects using their technologies in the agricultural space," Armando said.



University of Queensland Associate Professor Kim Bryceson is looking to revamp the agriculture courses at the Gatton campus.



and thermal infrared cameras.

The project has also piqued the interest of postgraduate student Daniel Rider, who is taking up the reins of the project for the next 12 months while Alex returns to uni.

“If you can find a way to semi-automate the identification of gaps in the seedling trays created by poor germination, or unhealthy seedlings as a result of unbalanced fertigation, it will mean a big difference to Withcott Seedlings in terms of labour and costs because

very precise way – and we have managed to do that quite successfully,” Michael said.

Affordable option

It takes the team at Gatton roughly a week to design and build a drone. They are easy to operate (even for those who may not be technically-minded) as the drones can be controlled via a remote control, a laptop with Mission Planner software on board, or even an app using the cellular network, WiFi or Bluetooth.

The team has been investigating autonomous flights where the drone’s flight path is based on GPS coordinates, which can be pre-programmed or changed mid-mission if necessary. The drones can also be set up with a “geofence”, which allows the user to limit the drone’s movements in an area and make it automatically fly back to base if it ‘broaches’ the fence.

“There are more sophisticated drones out there, but in reality they are expensive to build and service. Our technology is affordable, robust and easy to maintain. You can throw it in the back of the ute and it will keep on working. It’s something we can build in the lab and repair in the lab if we have a problem, so students can ‘use and abuse’

the technology and I don’t get too stressed that they might be destroying a very expensive piece of equipment!” Kim said.

“It gives us extreme flexibility and it is basically a sustainable technology with multiple uses. Add in the fact that it allows us a precise and accurate information collection system for production management and the technology starts looking seriously interesting for the future of vegetable growing. After all, if you have good quality information, you can make good quality decisions.”

Industry involvement

Kim realises the difficulty in ensuring such innovative technologies provide practical solutions for business, which is why the UQ scholarship students were encouraged to work with industry to develop the drones specifically for each local farm.

“This is an educational process for students where they can find out what the issues are on a farm and how we can use the technology to help the grower’s bottom line. You can’t understand the application of this technology until you work directly with a grower,” she said.

“At the same time, industry can also start to learn about education and see that this technology has value. If growers ▶



Drones for the farm

The NetDrone was designed specifically for use in a trial at Withcott Seedlings as part of a UQ Summer Science Scholarship undertaken by first year Bachelor Advanced Science student, Alexander Burton, who said he was interested in the technology and liked the sound of the project. The NetDrone is currently being flown under 50 acres of netting to inspect seedling trays for spatially variable germination. At a later growth stage, it will monitor fertigation (nutrition and water management) variability issues using multispectral

at the moment they manually check each of those seedling trays,” Daniel explained.

Meanwhile, the Beneficial BugDrone was developed by another Summer Science Scholarship recipient, second year Agricultural Science student Michael Godfrey, for a trial held at Rugby Farm. He designed and built the drone so that a more even and efficient distribution of beneficial insects over a 10 hectare crop of sweet corn could be achieved.

“The project was a way to look at reducing pesticide use on the farm by dropping these beneficial bugs in a



The NetDrone.





engage with students, they have a whole raft of young people interested in coming in to the sector.”

According to Rugby Farm Chief Agronomist Dr Surachat Vuthapanich, the three-month Beneficial BugDrone trial was an opportunity to highlight how the technology could produce a more efficient way to distribute beneficial insects in sweet corn.

“We have long released beneficial insects, but we had to find out how to release those insects in a way that was cost-effective and gave a uniform distribution,” he said.

In the trial, four types of beneficial bugs were mixed in with vermiculite approximately three days before they hatched to ensure they could survive when dispensed from a height onto the crops. The bugs were distributed once a week using a specially designed dispenser attached to the drone.

“The trial was all automated so we could set the flight path to different widths and change the application rate of vermiculite. The trial section took 10 minutes compared to the two hours it would have taken us to distribute the beneficial insects manually.”

Dr Vuthapanich deemed the trial a success, and added that the flexible nature of the drones meant they could be customised for other uses in precision agriculture, such as the attachment of a heat sensor camera to help detect animal pests or pick up colour differences in a crop.

He said the next step for Rugby Farm was to purchase a drone and continue trialling the distribution of beneficial insects on a larger scale with different crops.

“We know that we can make the drone work for us and use it as a tool to improve our production. But to get our own drone, we need to have training to learn how to fly it and be aware of all the rules and regulations.”

Promising potential

Kim said she is keen to help commercial enterprises make use of the technologies being developed at UQ: “We’re very happy to provide industry with training and education resources, but we are not in the game of being commercial. At the end of the day, it comes down to where the grower/ agribusiness wishes to take up the technology.”

She admits that there are some obvious security issues associated with any drone technology, but said the university is very aware of this factor.

“UQ is highly risk-averse and we have to teach everyone who works with the drones about the risk aspects. We fly for educational purposes within the Civil Aviation Safety

Authority (CASA) regulations and within UQ regulations, and we’re very strict about that with the students.”

Kim said her goal is to make this technology “simply a tool” to better manage agriculture and improve production in an efficient, cost-effective and sustainable way.

“Building operational sustainability into these projects is very important for the long-term. For me as a researcher, it’s about using this new technology to deliver innovative solutions to problems that industry might have. As an educator, it is about providing the latest and greatest tools and technologies for students to learn about and use so they leave university with the ability to add value for any future employer who has an eye to the future.

“At the end of the day, the research is not much good if it doesn’t have an applied, operational aspect at the end of it. UQ Gatton has that applied focus, with a very strong science and technology background underpinning it.”

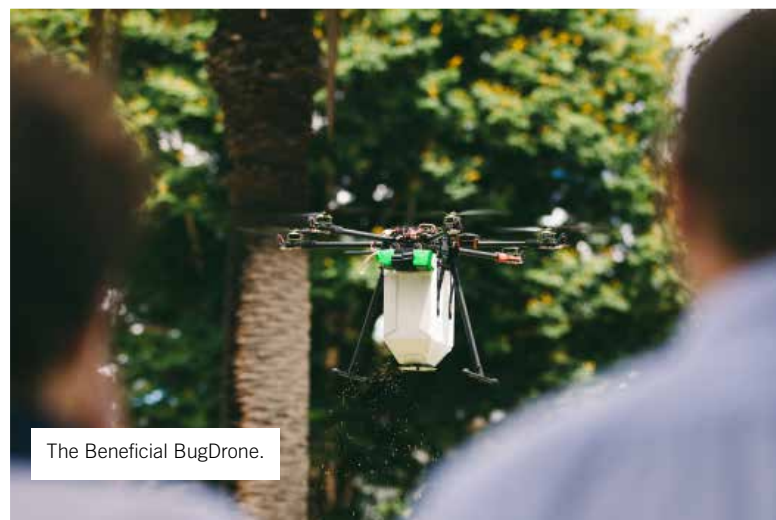
Of course, Kim welcomes more industry players who are interested in trialling student projects on their farms.

“In this year’s Precision Agriculture course in Semester 1 (March-June) there are about 35-40 students enrolled and it would be ideal to get (local) industry based projects for all of them.”

Judging by these developments, drones and mesh networks could very well become a staple tool in the vegetable farms of the future.



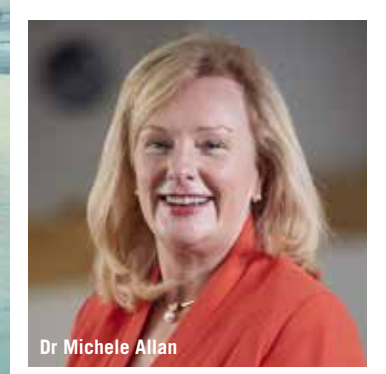
For more information, contact Associate Professor Kim Bryceson on (07) 5460 1152 or k.bryceson@uq.edu.au.



The Beneficial BugDrone.



Geoff Moar



Dr Michele Allan

AUSVEG and APAL unite for National Horticulture Convention double header

Two of the largest horticulture bodies will unite this year to create the National Horticulture Convention, Trade Show and Awards for Excellence.

AUSVEG confirmed in January that it would be joined by Apple and Pear Australia Ltd (APAL) to host the event, which will take place at Jupiters Gold Coast from 25-27 June. The National Horticulture Convention will be the largest event in Australian horticulture to date, with an anticipated 1,400 delegates to descend on the sunny Queensland coast in mid-2015.

Both organisations fully support the joint venture, with AUSVEG Chairman Geoff Moar and APAL Chair Dr Michele Allan saying that they are “delighted” that AUSVEG and APAL would be joining forces at the event.

Industry on show

The National Horticulture Convention will continue

to showcase the very latest technology and R&D in the industry at the biggest Trade Show to date. With the two largest sectors in horticulture being represented, exhibitors will have the unique opportunity to target growers across multiple sectors at the one event.

As the Trade Show is almost sold out, companies are encouraged to register their interest as soon as possible to avoid missing out on an exhibition space.

Meet and greet

Delegates will be able to enjoy all that has been on offer at the Convention in previous years, as well as the chance to network and converse with their apple and pear-growing colleagues. With multiple industries present, the Convention will provide opportunities for delegates to learn from the experiences of colleagues involved in other commodities.

In addition, an array of international and domestic experts on a variety of industry topics will present to delegates on their visions for the future, alongside practical methods growers can employ on-farm to help grow their businesses.

Some fun away from the farm

A number of events will also return for the National Horticulture Convention, including the NextGen young grower event, the Women in Horticulture event and the ever-popular Friday theme night, which last year transported delegates to a tropical Hawaiian paradise.

Kicking off with the Welcome Reception and Trade Show Opening on the evening of Thursday 25 June, attendees will be treated to a fun-filled three day program, which will conclude with the celebrated National Awards for

Excellence on Saturday 27 June. Nominations are now open and AUSVEG encourages industry members to nominate their peers.

The Awards ceremony will be an opportunity for the vegetable, potato, apple and pear industries to reflect on the successes of the past year and look ahead to the bright future of Australian horticulture.

All members of the Australian horticulture industry are encouraged to attend what will be the premier event on the 2015 calendar. The Delegate Brochure has been released and growers, researchers and members of the supply chain are urged to register now to ensure they are eligible for early bird discounts and to secure accommodation.



For more information, contact AUSVEG.
Phone: (03) 9882 0277
Email: convention@ausveg.com.au, or visit www.ausveg.com.au/convention.



A new direction for Bill Bulmer

LINDENOW IS A TINY VICTORIAN TOWN IN EAST GIPPSLAND AND ALSO HOME TO A SUCCESSFUL VEGETABLE GROWING OPERATION IN THE MITCHELL VALLEY: BULMER FARMS PTY LTD. *VEGETABLES AUSTRALIA* SPOKE TO NEWLY APPOINTED AUSVEG DIRECTOR BILL BULMER ABOUT HIS THOUGHTS ON THE INDUSTRY AND WHAT HE HOPES TO ACHIEVE IN HIS NEW ROLE.

What once began as a 32-hectare dairy farm in 1948 is today one of the area's large scale horticultural enterprises, spanning more than 300 hectares in the fertile river flats region of the Mitchell River Valley in Lindenow, Victoria.

The team behind Bulmer Farms has made substantial investments in the company's water infrastructure and land holdings over the years, as well as modernising their processing/packing and storage facilities. The farm now supplies fresh vegetables to wholesalers and processors throughout Australia under the brands of Gippsland Lakes Fresh Produce and Bulmer Farms.

After 42 years of farming, Bill Bulmer decided to hand over the reins to his sons Andrew (Managing Director) and Kaine (Production Manager). This decision may have relieved Bill

from the constant pressure that comes with running a business, but he says there is still plenty of work to be done both on the farm and within the wider vegetable industry.

"There is a lot of upkeep on the farm and I enjoy that. I'm a bit of a clean-up freak and I don't like to be untidy," he laughs.

"Now I can step back a little bit from the business and hopefully put a little bit back in to the industry. It's just the fact that there are a lot of issues that happen that the average everyday grower doesn't see, but they get affected by it."

Strong representation

While Bill's appointment as the Victorian Director of the AUSVEG Board came into effect last year, our Victorian readers



will already be familiar with his extensive involvement in the state's vegetable industry through his work with the Vegetable Growers Association of Victoria, the horticulture sector in the Victorian Farmers Federation, the East Gippsland Catchment Management

Authority and the East Gippsland Food Cluster.

"I've been involved in industry organisations for quite a few years, on and off. Like most things in life, if you ask a busy person to take on another job they are usually the ones who put up their hands," he says.





Photography by Lisa Hayman.



nature of backpackers often makes them unreliable.

"We need a full time, reliable workforce," Bill says. "We have a number of nations on our doorstep with substantial resources that we could be using to mutual benefit."

"At present we have to rely

through the Mitchell Valley and is the farm's major water supply.

"It's something that's been ongoing for the last 100 years to secure a reliable water supply. In recent times we have been working on the idea of building an off-stream storage dam within the region, but until we get the Ag-Hort portfolio worked out and where we sit among the other eight or nine portfolios on the government's agenda, I don't know what the outcome will be."

A unified voice

Bill is also looking forward to bringing his experience of representing the local and state vegetable industries to the national level through his role on the AUSVEG Board.

"You've got to have a central voice in the industry that's open and transparent," he explains. "It would be good for me to sit on the Board and have an open mind and clarity from picking up on what the state bodies are telling us, having good

clear communication to the group and making sure that's getting communicated back through the states."

While Bill does recognise that the industry is constantly changing, he still believes there are many opportunities to further the vegetable industry as a whole.

"The biggest avenue we need to go down is educating kids, because kids are the ones who will change how we think. They're the ones that could turn the industry around in years to come. It's easier to change the habits of the younger generation."

A modest man, Bill says it all comes with the job of being a passionate member of the Australian vegetable industry.

"I don't strive to gain anything personally out of anything that I do. I think we've got a good cause and a fantastic industry. At the end of the day, people in Australia eat the freshest, cleanest product going around and they don't realise how lucky they are," he says.

"I've heard people say that we need to sell the industry as a 'sexy' industry. I would prefer to say that we sell the industry as fantastic, clean, green and healthy, and that it has a bright prospect for all people that are involved."

upon labour hire contractors to fulfil our staffing needs. This arrangement is less than ideal as we are not in control of our own workforce. In fact, many of these operators have no appreciation of our industry; they are just placement agencies.

"Vegetable farming is not always a seasonal thing – we're here for 12 months of the year. All we're asking people is to do a job and we'll reward them for it."

He has seen a promising solution in MADEC workers from East Timor, who work on a six-month trial before returning home. They then have an option to return to Australia after six months. But, as Bill reiterates, "we still need the continuity of a supply of workers" particularly as Bulmer Farms employs around 100 workers with 60 to 80 working out in the field.

"It's the little things that are hard to monitor," he adds. "Everyone would like it to be very open and transparent, but there are a lot of grey areas within the system."

Another issue close to his heart is the unsecure and unreliable water supply, which is a downside to the vegetable industry in the area. The Mitchell River meanders

One thing that Bill expects in his new-found role at AUSVEG is extended consultation with government, which he believes will go a long way to achieving real and valid results for the industry.

"Governments don't want to listen to 10 whingeing farmers. If you talk to a politician, you don't just talk to them about your problems. You have to give them a solution as well," he explains.

"I think through an organisation like AUSVEG and state bodies, those problems come up through the growers, through the state, get filtered out and taken care of.

"Sometimes there are issues within the state that have to be handled, but more and more, a lot of things end up being federally implicated."

Tackling the issues that matter

When it comes to some of the most pressing issues at hand, Bill notes that maintaining a healthy workforce is one of the biggest challenges for the industry, not only in East Gippsland but throughout the country.

It's difficult to source enough willing workers from the local workforce, and the transient



Dodgy tomato dumpers back in the spotlight

THE FEDERAL GOVERNMENT'S ANTI-DUMPING COMMISSION RECENTLY RE-OPENED A CASE AGAINST TWO ITALIAN TINNED TOMATO EXPORTERS, FOLLOWING AN APPLICATION LODGED BY SPC ARDMONA. THE NEW INVESTIGATION COMES AFTER DUMPING DUTIES WERE IMPOSED ON 103 ITALIAN TOMATO EXPORTERS LAST YEAR, FOLLOWING ANTI-DUMPING COMMISSION INVESTIGATIONS. IT ALSO FOLLOWS THE COMMISSION INITIATING NEW MEASURES AIMED AT MAKING IT HARDER FOR FOREIGN COMPANIES TO DUMP CHEAP PRODUCE ON AUSTRALIAN SHORES, WRITES FELICITY POWELL.

The Anti-Dumping Commission defines dumping as when goods exported to Australia are priced lower than their "normal value", which is usually the price in the ordinary course of trade in the exporter's domestic market.

Dumping of produce on our shores makes it extremely difficult for local companies to compete on price, because local companies must factor in higher costs associated with inputs and labour.

Move welcomed

Earlier this year, Australia's Anti-Dumping Commission announced it would apply renewed scrutiny to two Italian tomato exporters.

The re-opening of the case, initiated with respect to tomatoes exported to Australia from Italy by Feger di Gerardo

Ferraioli S.p.A. and La Doria S.p.A, was welcomed by AUSVEG.

"This investigation is welcome news for Australia's vegetable and potato industries which have struggled to compete against cheap processed foreign produce," AUSVEG Deputy CEO Andrew White said at the time.

"As the nation's agricultural sector continues to shift towards a focus on free markets and international trade, it has become particularly important that Australian vegetable and potato growers and local processors are able to compete on an equal footing with their international counterparts."

Federal Member for Murray, Dr Sharman Stone MP, said even though 103 exporters now have tariffs applied to their products, the previous investigation didn't result in fair trade.





ABC Rural that the inclusion of these subsidies in this latest investigation gave him confidence to win the case.

"The scale is huge and I hope the commission will find that all the data is correct."

He said re-opening the case was the "right and fair thing to do for Australian food manufacturers".

"This new investigation signals to our international competitors that Australia is not a soft target for dumping goods," he said.

In 2014 when the first case against the exporters was opened, Mr Kelly said in a media release that since 2010, the illegal dumping of products had resulted in significant damage to SPC Ardmona including a loss of 40 per cent volume and reduced profitability as it struggled to price compete with the dumped Italian products.

"There has been a surge of support for Australian grown and made Ardmona tomato products. I urge all Australian consumers to consider the quality and value of Australian grown products and think carefully when they choose to buy tomato products in retailers," he said.

If the case against the Italian importers is successful, there could be implications for other Australian manufacturers. The European Union's Common Agriculture Policy applies to a large range of food products exported to Australia.

In recovery

In welcome news from SPC Ardmona, the company announced in February that it is slowly recovering following a tough year of business.

After being denied federal funding in 2014, the Victorian

Coalition Government announced a \$22 million rescue package. There was also a wave of support from consumers at supermarkets, which helped to keep the fruit and vegetable processor going.

In 2014, SPC's share of the Australian tinned tomato market rose five per cent. Sales benefited from better positioning of products in

supermarkets and tighter anti-dumping laws.

Alison Watkins, group managing director of Coca-Cola Amatil, SPC's parent company, said that she hopes SPC can keep the momentum going for years to come to remain viable.

"These businesses, we need to make sure that they're right for the next five years, 10 years, not just the next one year," she said.



"I welcome the decision by ADC Commissioner Dale Seymour in initiating the new anti-dumping case against the two Italian companies. Australia must ensure we have fair play in our markets so we can continue to produce great food not only for us, but the export markets too," Dr Stone said in a media release.

SPC's view

In its submission to the Anti-Dumping Commission, SPC Ardmona estimated that from 2010 to 2014 the processed tomato industry in Italy received €900 million (approximately AU\$1.2 billion) worth of subsidies under the EU's Common Agriculture Policy. The Australian agricultural industry does not receive any subsidies.

Outgoing managing director of SPC Ardmona, Peter Kelly, told



Mighty tough on chewing pests

with a little soft spot for beneficials



18 New report highlights export opportunities to the Middle East and Asia

FOLLOWING THE LAUNCH OF A DISCUSSION PAPER DETAILING THE OPPORTUNITIES THAT EXIST IN EXPORTING AUSTRALIA'S VEGETABLES TO THE MIDDLE EAST AND ASIA, *VEGETABLES AUSTRALIA* SPOKE TO NEW AUSVEG ECONOMIST STEVE RAZDAN ABOUT THE KEY FINDINGS FROM THE REPORT AND HOW AUSTRALIAN VEGETABLE GROWERS CAN POTENTIALLY CAPITALISE ON THESE LUCRATIVE MARKETS.

R&D

Drive Train



Photography by Luka Kauzlaric

AUSVEG Economist
Steve Razdan.

“Australia’s domestic market has been suffering from decreased profits and we currently produce more food than we consume. Expanding into export markets can address the issues of oversupply that have hurt domestic growers who have been suffering from declining profits,” Mr Razdan said.

“In light of the recent FTAs to Japan, South Korea and China, we thought it was a good opportunity to provide a snapshot of different markets overseas and show what vegetables are being exported, their value and how this could increase over time. The FTAs are a really good first step to help growers increase their bottom line and export their high quality produce.

“While we don’t have a FTA with countries in the Middle East, our Export Development Team is working to help our domestic growers export to this market. Projects are currently being undertaken to improve market access and increase export capability. This included a recent Export Symposium, which was hosted by AUSVEG in Adelaide and drew a big crowd of growers.”

A lucrative opportunity

According to the discussion paper, the Australian vegetable growing industry contributed around \$3.7 billion to the gross value of national agricultural production in 2013-14. In the same timeframe, the total value of exports was almost \$256 million.

Carrots and turnips were the largest commodity group that contributed to Australia’s export value in 2013-14 and amount to approximately 20 per cent of total vegetable exports every year. Carrots alone made up 75 per cent of total leviable export value in 2012.

“Australian vegetables tend to be of a higher quality and

Australia’s vegetable growers are doing it tough, amidst a demanding trifecta of events: an increase in production costs; a decrease in overall profit; and an oversupply of vegetables in the domestic market.

Given this challenging situation, looking to other business avenues could help ease the pressure on growers. One option is the possibility of exporting the current oversupply of product to international markets that crave the high standard of Australia’s vegetables.

This idea forms the crux of a discussion paper entitled *Exporting Australia’s vegetables to the Middle East and Asia: Market analysis and*

overview, which was developed to provide local growers with a snapshot of Australia’s domestic and export markets, and our current vegetable trade with the Middle East, Japan, South Korea and China.

Economic perspective

The discussion paper was prepared by AUSVEG Economist Steve Razdan, who joined the organisation in 2014. Having previously worked for the Federal Department of Industry in Canberra, Mr Razdan brings a wealth of knowledge and experience to the role.

“I work with the Australian Bureau of Statistics (ABS)

and the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) on the data they produce,” Mr Razdan said.

“I want to convey an indication of growers’ financial performance and, if possible, help them to make sound business decisions.”

He explained the Middle East and Asia formed the focus of the discussion paper as they are currently experiencing high population growth, as well as increased wealth. The establishment of recent Free Trade Agreements (FTAs) and Australia’s convenient location also increases the viability of vegetable exports to these markets.

therefore of a higher price,” Mr Razdan said.

“Australian growers have the opportunity to obtain market share due to their premium products. We found especially with carrots that Australia can really take advantage of the opportunity because we already sell a lot of carrots to Asia and the Middle East.”

Debunking the export myth

The discussion paper also highlighted that in the past, many Australian vegetable growers believed the development of export markets was too difficult or time-consuming. Inadequate prices for exported vegetables and shipping costs were also commonly stated impediments.

Alternatively, Mr Razdan explained that local growers possess significant strengths that can work to their advantage in the export space.

“Australia has a perception of having higher food standards and safety standards, which is very important. With increased wealth and a growing middle class in Asia and the Middle East, we’re finding consumers overseas are demanding higher quality produce and a broader range of produce as well. This is where Australian growers have an advantage,” Mr Razdan explained.

“A lot of businesses have been handed down over generations where export hasn’t really been a big part of the family farming business.

“Growers have a great opportunity to make more money and help their bottom line. Australian vegetables are a lot better quality than many competitor products and that’s what these export markets are looking for. We also have an advantage of counter seasonality to the northern hemisphere.”

A helping hand

As there are significant opportunities for Australian growers to build profitability through exports, AUSVEG is actively working

with interested growers to improve their export readiness, promote export opportunities and communicate information about the exporting process.

“AUSVEG can help growers ascertain where the demand for produce is, and link them up to the best export markets for their businesses. We work closely with government bodies such as Austrade to help bridge the gap and make sure government policies align with growers’ needs,” Mr Razdan said.

“With tariff reductions in Asia, this is only going to improve the economics of exporting. With a bit more information, we could really penetrate the Middle East as well.

“If growers are interested in exporting, there are avenues to take and we would love to foster and continue relationships with different stakeholders to see them progress through export markets.”

The Middle East

- Population of approximately 400 million.
- The United Arab Emirates, Saudi Arabia and Qatar accounted for 85 per cent of Australia’s vegetable exports to the Middle East in 2013-14.
- Carrots and turnips dominated Australia’s exports to Middle Eastern countries, with carrots comprising the majority due to their high quality, taste, reliable supply all year and colour.
- Western Australia is the main carrot exporting Australian state, accounting for over 90 per cent of carrot exports.
- All fresh vegetables consumed in the United Arab Emirates are imported in the hotter months from June to September.
- Onions, garlic and tomatoes are mainly imported from India, Jordan and China. The latter remains the most competitive threat for Australian carrot exports to the Middle East.
- Australian carrots are commonly used by the juicing industry.
- Growth in the food sector in the United Arab Emirates is forecast to grow at 20 per cent per annum.

South Korea

- Population of approximately 51 million.
- Australia’s third largest export partner.
- Nearly 90 per cent of Australia’s vegetable exports to South Korea are potatoes, with asparagus comprising approximately five per cent.
- There is an increased demand for processed vegetables due to changing lifestyles.
- The Korea-Australia Free Trade Agreement (KAFTA) will ensure Australia is on a level playing field with other countries and eliminate tariffs. For example, the 30 per cent tariff on carrots will be progressively eliminated by 2018.

China

- Population of over 1.3 billion.
- Australia’s largest trading partner.
- Produces almost half of the world’s fresh vegetables.
- Third biggest export destination for Australian processed vegetables, but only 17th for fresh vegetables (based on 2013-14 figures).
- The increasing middle class, better living standards and population growth has led to more people seeking foods with a higher nutritional value, better quality and freshness.
- The tastes of younger consumers are likely to alter food consumption patterns due to a higher exposure to foreign food and therefore a greater mix of vegetables.
- The China-Australia Free Trade Agreement (ChAFTA) will eliminate the 10-13 per cent tariff on all fresh vegetables within four years.

Japan

- Population of approximately 130 million.
- The leading export destination for Australian vegetables in Asia, accounting for almost 40 per cent of its export value to Asia in 2013-14.
- Since 2009-10, Australian vegetable exports to Japan have increased by 43 per cent.
- Asparagus, juice of single/mixed fruits, onions, carrots and sweet corn are some examples of Australia’s exports to Japan.
- Most vegetables are imported to fill off-season supply. Lower production volumes and smaller sizes of land have increased Japan’s dependency on imported vegetables.
- Japanese consumers have a negative perception on domestic produce due to food safety concerns following the 2011 tsunami. They therefore seek higher quality imported vegetables.
- Despite China being Japan’s biggest import source, some vegetables have been restricted or banned due to food safety concerns.
- The Japan-Australia Economic Partnership Agreement has removed tariffs on carrots, broccoli, cauliflower and cabbage. Other vegetables like broad beans will have their tariffs gradually reduced over time.



A copy of the discussion paper can be found on the AUSVEG website at: www.ausveg.com.au/resources/statistics/discussion-papers
This project has been funded by Horticulture Innovation Australia Limited, using the National Vegetable Levy, and funds from the Australian Government.

Project Number: VG12078



with Dr Kevin
Clayton-Greene



THE EMERGENCY PLANT PEST RESPONSE DEED IS A PARTNERSHIP ARRANGEMENT BETWEEN GOVERNMENT AND INDUSTRY THAT PROVIDES A FRAMEWORK FOR DECISION MAKING DURING AN EMERGENCY PLANT PEST (EPP) INCURSION. IN THE LAST EDITION OF *BIOSECURITY BRIEF*, WE DISCUSSED THE PURPOSE OF 'THE DEED' AND THE CONSULTATIVE COMMITTEE ON EMERGENCY PLANT PESTS (CCEPP). IN THIS EDITION WE DISCUSS THE STEPS CARRIED OUT BY GOVERNMENT AND INDUSTRY AFTER THE CCEPP HAS RECOMMENDED THAT A PEST IS AN EPP.

What is the incident definition phase?

The incident definition phase begins after the CCEPP has recommended that the pest falls under the definition of being an EPP. During this phase, the state in which the EPP outbreak has occurred (the Lead Agency) takes steps to contain the EPP. This often involves putting properties or regions under quarantine. Normal commitments, such as tracing and surveillance for the EPP, are carried out by the Lead Agency and all other applicable states and territories during this phase.

What is 'trace back' information?

Finding the origin of the EPP outbreak involves careful evaluation of trace back information, which can be gained from farm visitor registries, nursery records, importation invoices and various other sources. It is important to find the source of the pest, so that the original method of transmission may be controlled. For example, if a disease is brought into the country through infected seed, the import pathway may require additional regulation.

What is 'trace forward' information?

Trace forward information involves tracking EPP movements after the first detection. Again, this is where farm visitor registries can be particularly useful because plant pests are often transmitted on clothing, footwear and tyre treads.

What actions are carried out during surveillance?

Surveillance activities will vary depending on the type of EPP. For insect pests, surveillance activities may consist of visual inspection for adults, larvae, eggs or damage from feeding. This may also involve the use of sticky traps and pheromone traps. For bacterial, viral and fungal pests, plant tissue samples will often be collected for DNA analysis.

Why is tracing and surveillance information important?

Surveillance and tracing are of key importance during the incident definition phase. In order to make a determination

on the technical feasibility of eradication, the CCEPP must have a good understanding of where the pest originated from and how far it has spread.

What happens after tracing and surveillance information has been collected?

Based on available information, the CCEPP must determine if eradication of the EPP is technically possible and feasible. If members of the CCEPP agree that the EPP is eradicable, a response plan for eradication is developed. Response plans cover containment measures, continued surveillance, further research, destruction of plant material and Owner Reimbursement Costs.

Response plans are regularly updated or amended as new information comes to light. All parties must agree on the budget in a Response Plan in order for it to go forward. This agreement occurs through the National Management Group, which is made up of various Plant Health Agencies in Australia and CEOs, or their delegates, from affected industry parties.

How are Emergency Plant Pests categorised and what are the implications for industry?

EPPs are categorised into four classes based on the public versus private benefit of eradication. In the event of eradication, EPP classes dictate how much cost will be incurred by industry and how much will be incurred by the states and federal government.

A Class 1 EPP is identified as posing a serious threat to the environment or public sector (e.g. Sudden oak death). In this case, the government will cover 100 per cent of eradication costs. At the other end of the scale, a Class 4 EPP is deemed to have little or minor impacts on the public or environment, and in this case the cost sharing for eradication between industry and government is 80 per cent to 20 per cent respectively.



For more information contact
AUSVEG
Phone: (03) 9882 0277
Email: info@ausveg.com.au
Project Number: VG11013



BELT[®]

Mighty tough with a little soft spot

Ruthlessly effective on
difficult-to-control chewing pests.

Soft on most beneficial
species and pollinators when
used as directed.

THE RIGHT FIT

FOR YOUR IPM

www.bayercropscience.com.au

Bayer CropScience Pty Ltd ABN 87 000 226 022 391-393 Tooronga Road, Hawthorn East, Vic 3123
Technical Enquiries: 1800 804 479 enquiries.australia@bayercropscience.com
Belt[®] is a registered trademark of the Bayer Group.



Bayer CropScience



Oh deer!

Is Bambi the next big headache for growers?

ICONIC AND ELEGANT, WILD DEER RARELY ELICIT THE SAME SENSE OF LOATHING ATTRIBUTED TO PESTS SUCH AS THE CANE TOAD. HOWEVER, AS AUSVEG BIOSECURITY AND SPECIAL PROJECTS COORDINATOR DR JESSICA LYE RECENTLY FOUND OUT, AUSTRALIAN FERAL DEER ARE EXPANDING THEIR RANGE AND ARE INCREASINGLY BECOMING A PROBLEM FOR VEGETABLE GROWERS.

According to Andrew Cox, CEO of the Invasive Species Council, feral deer pose a major problem to the vegetable industry, as well as agriculturalists across Australia.

“We regard deer as the biggest emerging pest problem in eastern Australia. They’re probably going to become as widespread as pigs and goats,” he said.

“They are prolific grazers so, therefore, they have high consumptions of vegetable matter each day.

“Until now they’ve predominantly been in forested areas but they’re moving out of the forested areas into the grasslands and woodlands and they are feeding on crops.”

Mr Cox explained that deer-induced damage to fences is becoming more common and they are increasingly a nuisance in urban areas, damaging gardens and causing road accidents.

“There are populations now emerging in north-west New South Wales, also in the Western Slopes, Condobolin, up near

Cobar and Moree. Down the south they’re near the border area. Around the Grampians there are red deer; sambar is the big one in Victoria.”

From a grower’s point of view, weeds and plant pathogens can be carried between properties on hooves and in deer faeces. Feral deer can also vector animal pests such as ticks and pathogens that affect human health such as *E. coli*, making them a biosecurity risk for a wide range of production industries. Most importantly, they have a liking for anything

green and fresh.

“They like fresh growth. If there is a food source of course they’re going to be attracted to it. We shouldn’t assume they will stick to the forests. They will expand further, if there is no control program, as their numbers increase and they are forced to inhabit new areas,” Mr Cox said.

“I’ve had a lot of complaints from land owners who are up every night dealing with deer.

“They’re quite hard to control because once you go after them they all scatter.”



A Toowoomba Valley horticulturalist recently spoke to *ABC Country Hour* about the impact of deer in the region.

“This year my son had beans in. They came in and took off all the tops of the beans when they were young, so he lost a lot of money there. Every time they come in they cost you money... these are a major farming pest,” he said.

More facts needed

While it is evident that deer species are dispersing across many areas of Australia, very little is known about deer distribution or current population numbers. This has implications for determining what the current and future impacts of feral deer will be on agricultural regions.

“It’s difficult to get a handle on the numbers because of the lack of studies. The last study was done about 10 years ago. A very conservative estimate was in the order of about 200,000 deer at that time. We think that was a gross underestimation,” Mr Cox said.

“In good seasons they increase their numbers by about 70 per cent, depending on the species.”

Most information about feral deer in Australia has arisen from anecdotal evidence, Mr Cox explained.

“We’re certainly hearing

from around the country that there are lots of concerns from agricultural groups, growers and farmers that deer are already a serious problem. There are other places where deer aren’t a problem yet but it’s clear they will become a problem pretty quickly.

“Probably what’s missing are some extra tools in the tool box... we certainly need to understand much more about where deer are and develop some new control measures.”

Friend or foe?

Despite the lack of research, Mr Cox said it is clear that escapes from deer farms and deliberate releases have contributed to growing populations.

“Deer farming was very lucrative until the early to mid-1990s and then the bottom dropped out of the market and people just opened their gates. That’s when the new populations emerged.”

The status of deer is also inconsistent within Australia. In Queensland and South Australia, they have been declared a pest. However, in New South Wales, Victoria and Tasmania, feral deer are protected for recreational hunting purposes.

The Invasive Species Council is adamant that recreational hunting is not enough to control deer population growth.

“When you’re doing feral animal control for an emerging species, you should be directing your efforts to where the densities are low and to the edges of the deer population to try and prevent the spread. That’s exactly the places where the hunters are not,” Mr Cox said.

However, Fred Davies, a deer farmer from Dunolly in Victoria, believes that declaring deer as a pest species in the state would be a mistake because the domestic market for deer meat is in a growth phase.

“...Why on earth would you make them a pest and shoot them to rot in the bush. This is an industry we have ready and waiting right in front of us,” he recently told *The Weekly Times*.

As deer continue to make their presence known in agricultural regions, the warning from the Invasive Species Council is clear: “If you don’t act early then you lose your chance to control the problem.”

i Any unusual plant pest should be reported immediately to the relevant state or territory agriculture agency through the Exotic Plant Pest Hotline (1800 084 881).

For further information, see the farm biosecurity website at www.farmbiosecurity.com.au, or contact AUSVEG Biosecurity and Special Projects Coordinator Dr Jessica Lye on (03) 9882 0277 or email jessica.lye@ausveg.com.au.



“Deer farming was very lucrative until the early to mid-1990s and then the bottom dropped out of the market and people just opened their gates. That’s when the new populations emerged.”

- Andrew Cox, Invasive Species Council

Weeding out the issues in weed mat plastics

THE USE OF PHOTODEGRADABLE OR BIODEGRADABLE WEED MATS ON VEGETABLE FARMS IS COMMON PRACTICE, BUT WHAT SHOULD GROWERS KEEP IN MIND WHEN CHOOSING THESE PRODUCTS AND MAINTAINING THE LONG-TERM HEALTH OF THEIR SOILS? *VEGETABLES AUSTRALIA* INVESTIGATES.

Approximately 60 million square metres of plastic weed mats are used in Australia each year, according to environmental consulting group AgEconPlus – and many will never completely decompose.

Given that 2015 is the International Year of Soils, it's an opportune time for growers to learn more about the global importance of soil health and the various threats to it. This article will focus on the differences between photodegradable and biodegradable weed mats and the things to remember when buying these products, as well as the opportunities to research their potential long-term impact on soil.

The facts

According to CSIRO Manufacturing Flagships research scientist Dr Parveen Sangwan, the degradability of polymeric materials is influenced by their physico-chemical properties, environmental conditions and presence of degrading microorganisms and/or enzymes.

"Degradable plastics are those that disintegrate on exposure to certain triggers such as sunlight (UV radiation), heat, oxygen, moisture, chemicals and microorganisms. On exposure to one or more of these triggers, polymers undergo significant changes in their chemical structure, resulting in fragmentation and loss of some

of its properties, with residue being left behind. Depending on the chemical properties, the material will degrade up to a certain extent, under a set of conditions, within a certain time period," she said.

From this, degradable plastics can be rendered

among growers that this is not always the case.

"Photodegradable plastics do leave a residue, but there is no substantial data available to suggest the nature and extent of ill effect that plastic residue has on soil health," Dr Sangwan said.

"ambiguous term" in marketing and is perhaps leading to further confusion among consumers.

Mischievous marketing

Companies are increasingly using environmental claims as a way to differentiate themselves and their products from their competitors. When it comes to choosing between photodegradable and biodegradable weed mats, Dr Sangwan suggests that growers should exercise some caution, particularly because the time required for the mineralisation of some biodegradable plastics available in the market can be too long to be considered environmentally friendly.

"A lot of information is lacking, especially in terms of how good these degradable plastics are for the soil," she said.

"A label should specify what percentage of the product is biodegradable or photodegradable, if it is one polymer or composite, how much time it will take to degrade and under what conditions."

According to the Australian Competitor and Consumer Commission (ACCC), Australia

"A label should specify what percentage of the product is biodegradable or photodegradable, if it is one polymer or composite, how much time it will take to degrade and under what conditions."

- Dr Parveen Sangwan, CSIRO

as photodegradable or biodegradable. In the case of photodegradable plastics, sunlight is the main trigger for the product to disintegrate. In general, these types of plastics tend to break down into small particles of plastic rather than decompose completely. The idea is that these small pieces of plastic will then degrade further, but there is some concern

On the other hand, biodegradable plastics are degraded by naturally occurring microorganisms (bacteria and fungi), which feed on the product and mineralise it completely, leaving no toxic residues. While this may seem like the ideal solution for vegetable farms, Dr Sangwan argues that the word 'biodegradable' has become an

An example of a biodegradable weed mat designed at the CSIRO.



"To get a fair understanding of how these materials behave in the soil, you need to do long-term studies."

- Dr Parveen Sangwan, CSIRO



NEW



Haifa Turbo-K™

Ask for it today at your local Landmark store

Complex NPK granular fertilisers for pre-plant or side dressings

**14-6-14.1
18-3.9-14.9
12-4.4-13.2**



- Top quality K source, based on Haifa's Multi-K™.
- Careful balance of K, Mg and S.
- Optimal ratio of ammonium and nitrate.
- Minimum sodium and chloride.
- Accurate sulphur content for low environmental impact.
- Highly uniform granules for enhanced plant-availability and high use efficiency.



Pioneering the Future



has no mandatory standard on the biodegradability or degradability of products, however a voluntary Australian Standard AS4736 exists. There are also various international voluntary standards and tests for biodegradability overseas.

AS 4736-2006, *Biodegradable plastics – Biodegradable plastics suitable for composting and other microbial treatment*, has stringent requirements for the timeframe in which a product must break down in a commercial composting environment, its toxicity and the amount of organic material it contains. The ACCC states that businesses that claim a product is 'biodegradable', 'degradable' or 'recyclable' must ensure those claims are substantiated and comply with the Trade Practices Act 1974.

"We always advise our clients who test their products at CSIRO to be more open, honest and consistent about the labelling and the claims they make on products. I think that is required from all manufacturers, suppliers and distributors," Dr Sangwan said.

"Farmers want a product that is financially viable, performs well during its service life and in the end degrades rapidly without leaving any harmful residues in the soil. Consumers should know what they're buying and how a material will perform so they can make an informed decision."

While the CSIRO has established a world-class facility in Melbourne to conduct biodegradation testing for companies wishing to make accurate marketing claims, they would like to see it used more. This may partly be because the regulations within Australia are not as strict as they are overseas.

"Biodegradable plastics are quite popular in Europe where there are policies and regulations in place."

Research opportunities

Dr Sangwan believes that further research may need to be conducted in this field, particularly in regards to long-term studies on degradable weed mats and their effect on soil health.

"To get a fair understanding of how these materials behave in the soil, you need to do long-term studies. I think that's what is missing from CSIRO's point of view. We've never been involved in research where you monitor or assess the fate of degraded plastic fragments and how they influence the soil processes and/or plant growth," she said.

Given this, there is a possibility for growers and suppliers to come on board to participate in trials or test their products for their own peace of mind.

"For example, a research project could look at using a particular weed mat on a farm, monitoring the soil over time and getting some really important and relevant information. The resources are there, the relationship is there, it's just a matter of having that interest and funding to start."

Dr Sangwan added that in the meantime, it is worthwhile for growers who buy these products to ask their suppliers some detailed questions about the product being photodegradable or biodegradable, to ensure the representations made on the label are accurate.

"There has to be some sort of clarity. Consumers need to be educated, manufacturers should be honest and consistent, and government could put some regulation and policies into place."



For more information, contact CSIRO Research Scientist Dr Parveen Sangwan at parveen.sangwan@csiro.au.



with Scott Mathew



SPRAY BOOM SELECTION AND APPLICATION FORM THE FOCUS OF THIS EDITION OF *ASK THE INDUSTRY*. SYNGENTA TECHNICAL SERVICES LEAD SCOTT MATHEW CLARIFIES THE AREAS OF CONFUSION AND PROVIDES ADVICE TO SOME OF THE MOST COMMON QUERIES RECEIVED FROM VEGETABLE GROWERS.

I have been looking at purchasing a new spray boom, can you make any suggestions?

While spray equipment is a major investment for any grower, I don't have a preference for a particular brand of spray boom over another. However, most of the poor spray results that I see are not a result of the machinery being used.

The vast majority of poor results I see are because the spray boom is not correctly set up for the application in which it is being used. I often find that the spray equipment is set in one configuration for all spray applications, and is not tailored to different application needs, such as different crops, crop protection products or application targets (diseases, insects or weeds).

Spray technology has changed dramatically over the years and is continually evolving, so it is worth attending spray technology workshops, talking

to other growers from the local area (to determine what equipment is working well and what equipment is not), and asking manufacturers if they are able to bring a demonstration model to your property to see it working in your crops.

Then, make your choice carefully, remembering that it comes down to a range of factors and past experiences.

I am looking to improve my application technique. What suggestions do you have that might help?

Firstly it is important to remember that all spray applications are a compromise of some sort, where the operator of the equipment must make a judgment call to balance the requirements of the product being applied, the crop in which the application is being made and the current spray conditions. For example,

selecting the wrong nozzle for the product may result in the spray droplets drifting or evaporation preventing the product from reaching the target area.

The best thing to do is conduct on-farm application trials to test a range of factors that may affect your application techniques. Look at making changes to things like nozzles, water rates, travel speed, and air flow (if using air-assisted sprayers).

Also, trials require a significant commitment of time and resources. At first it can seem time-consuming, but overall the findings will be extremely valuable in improving your application techniques.

Is water sensitive paper an effective way to look at changes in application?

Water sensitive paper is a quick and easy way to determine what effect the changes you

have made to your equipment will have on the performance of a crop protection product application.

They can be placed in various sections of the crop canopy (such as upper and lower leaves as well as inner and outer canopy) to measure coverage and critically spray penetration into the canopy, particularly to lower leaves where diseases such as sclerotinia can be found. Results are easily observed and necessary changes can be made instantaneously to ensure better results.

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



Vantal[®] upgrade



less is more...

- less volume
- less storage
- less handling
- less risk

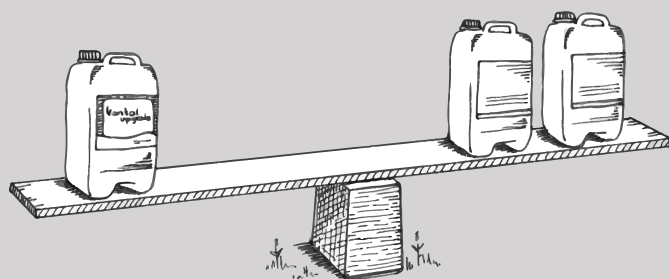
Vantal Upgrade 36 g/L EW abamectin

For the control of certain mites and insect pests in horticultural crops.

Double the strength of industry standard abamectin insecticides.

A water-based formulation with approximately half the organic solvents of industry standard abamectin EC formulations - reducing operator handling risk, reducing odour, and giving you better storage stability.

Less really is more with new Vantal Upgrade.



Veggie Stats: Cabbage

TO ENABLE DEEPER INSIGHTS INTO THE FINANCIAL, PRODUCTION AND EXPORTING PERFORMANCE OF KEY AUSTRALIAN VEGETABLE PRODUCTS, WE HAVE DEVELOPED A SERIES OF CROP-SPECIFIC VEGGIE STATS PROFILES. THE FIFTH INSTALMENT OF THIS SERIES FOCUSES ON CABBAGE PRODUCTION.

R&D

Drive Train

The following Veggie Stats article has been developed specifically to give readers a detailed snapshot of the key facts and figures on cabbage. Veggie Stats utilises data from the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) and the Global Trade Atlas, funded by Horticulture Innovation Australia Limited (HIA) using the National Vegetable Levy and funds from the Australian Government.

It is important to note the data itself provides a broad indication of the performance of cabbage growers and should be interpreted carefully. In addition to this, the information provided is not specific to every Australian grower since each enterprise operates differently from one another.

The data is presented at the national level and therefore does not account for differences among jurisdictions.

CHEMINOVA
HELPING YOU GROW

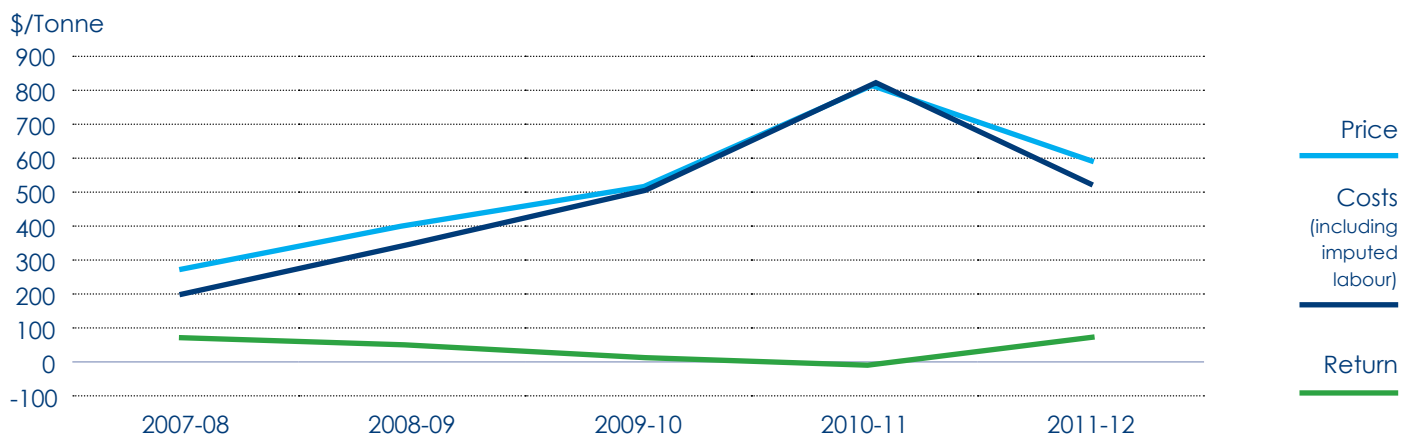
For more information go to www.cheminova.com.au
or call 1800 624 597 to be referred to your Cheminova Regional Sales Manager.
Cheminova Australia • ABN 23 110 199 169 • 12 Julius Avenue, North Ryde, NSW 2113

VEGGIE STATS: CABBAGE

Cabbage Production – Key facts and figures

- Cabbage growers' returns, on average, have been falling since 2007-08. However, returns increased in 2011-12.
- Since 2007-08, average domestic cabbage prices increased by 114%, however average costs also climbed by 160%.
- Cabbage production has increased on average by 7% since 2007-08.
- Australia's fresh cabbage, kohlrabi and kale exports are generally sent to Asia, with Singapore and Papua New Guinea the main recipients.

Australian Cabbage Growers' Financial Performance (average per farm)



Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 73
Returns: The difference between price and costs (including imputed labour).

Current Financial Performance

Australian cabbage growers' returns on average totalled \$67 per tonne in 2011-12.

In 2011-12, the average price received per tonne of cabbage was \$587, whereas the average cost to produce a tonne of cabbage was \$520.

Long Term Trends

Cabbage growers' returns, on average, have been falling since 2007-08. Although, returns increased in 2011-12.

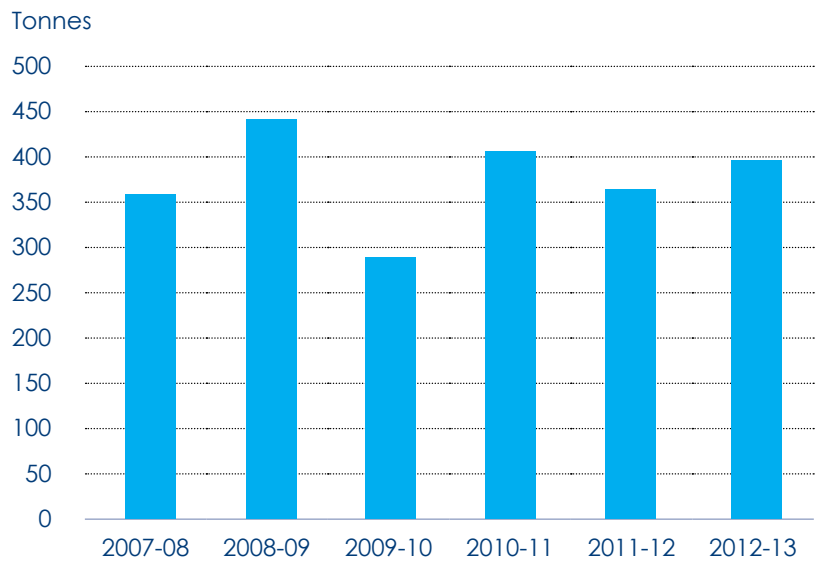
Australian Cabbage Growers' Production (average per farm)

Australian Cabbage Production

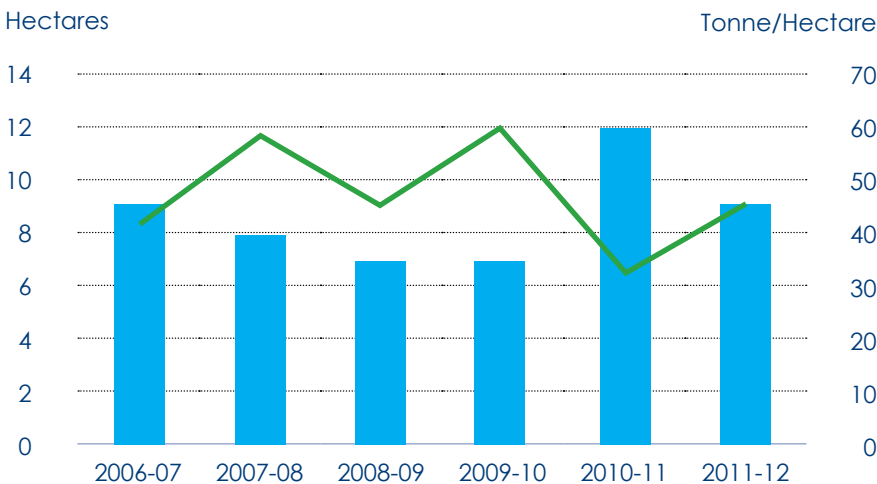
Australian cabbage production averaged 399 tonnes in 2011-12, up 9% on the previous year.

Average cabbage production has varied over the years, with no clear trend.

Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 73



Area Planted v Yield (average per farm)



Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 73

Australian Cabbage Production

The average area planted in 2011-12 fell by 25% from the previous year.

In 2011-12, cabbage growers' average yields bounced back from the previous year's low and improved by 41%.

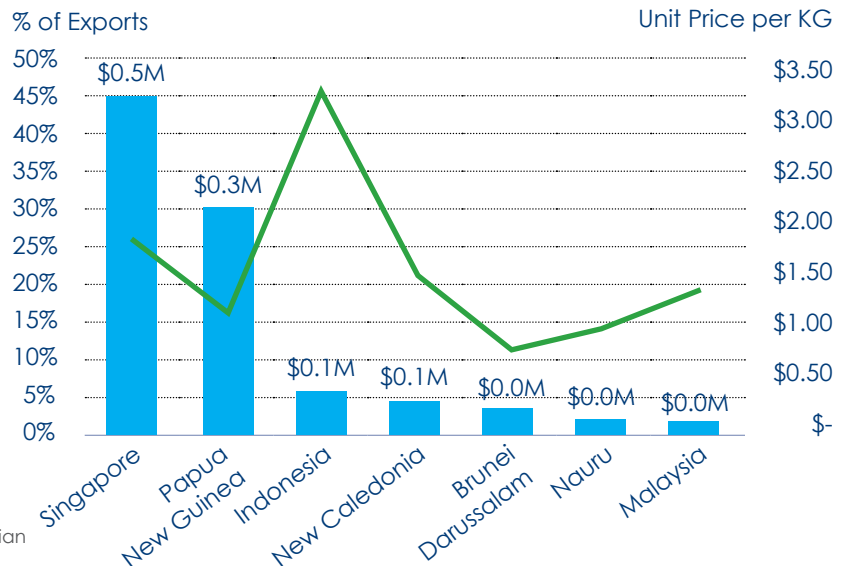
Area Planted
Yield

Destination of Australian Cabbage Exports and Export Prices Received

Exports

More than three quarters of Australia's cabbage exports were sent to Singapore and Papua New Guinea in 2012-13.

Australia's cabbage exports received the highest export price per kg from Indonesia, whilst the lowest price was Brunei Darussalam at \$0.87 per kg.



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

Q&A Young grower profile

Name: Daniel Adams
Age: 33
Location: Coldstream, Victoria
Works: Adams Farms
Grows: Brussels sprouts



How did you first become involved in the vegetable industry?

We are a family business, of which I am the third generation, so I grew up on the farm. I didn't always plan to work here but that's the way it has panned out.

What is your role in the business?

Second in Command to my dad who, along with my Uncle Ray, is the big wig. It still involves being told what to do as well as general management type duties. I am still learning from them and aim to one day be able to do as good a job as they have done over the years.

How would you describe your average day at work?

An average day at work varies depending on the time of year. Summer is spent mostly sitting on a tractor preparing the land for planting and winter is split between the paddock and shed where I do everything from getting my hands dirty to coordinating work crews, whether they are pickers or packers.

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

Being vegetable growers, I think the most enjoyable thing is being able to see the fruits of your labour. It can be very hard and challenging work at times but it is rewarding when things go to plan and sprouts grow how they are supposed to!

What are some of the biggest challenges you face as a grower?

Apart from the everyday challenges of things like pest control, labour issues and water management, the biggest challenge we face is probably similar to every farm, and that is trying to combat the rising cost of everything to be able to continue to produce a product the customers are happy with in a profitable manner.

How do you think more young people could become encouraged to take up jobs in the vegetable industry?

Isn't there only one way to get more people involved in an industry? More money! Apart from that, it's getting young people, or any people for that matter, to realise how important the fruit and vegetable industry is. Without it the whole world will go hungry (or die from obesity because they won't be eating healthily). If people see this, then they may want to get involved and contribute to keeping the world ticking.

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

If I wasn't working in the vegetable industry, I wish I could say I would be a professional sportsman. Cricketer or footballer most likely. In reality though the closest I would have got is sports administration.

Where do you see yourself in five years?

Hopefully in five years I will be the big man on campus, continuing on the family business and being able to send dad on a few long holidays!

You recently participated in the 2015 Industry Leadership and Development Mission to the US. What did you gain from this experience?

I think the biggest thing I learnt from the experience is that I still have a lot to learn about farming and the vegetable industry. Going to the US was a fantastic experience and being able to see the way they do things was awesome, but also the opportunity to spend



two solid weeks with other Australian growers, getting to know them, talking to them, listening to them and learning from them was just as important as the farm visits. It is not an opportunity that you can get easily.

What was the highlight of the 2015 Mission and why?

The World Ag Expo in Tulare was special; the size of it was just phenomenal and the New Holland exhibit was especially



nice to look at! My favourite site visit would have been the Bolthouse Packing facility, again the size of it was amazing and it was really interesting to see how it all works.

The hospitality at Vessey Farms was fantastic and that was an enjoyable farm visit. Again many highlights for me were conversations with the other guys on the tour, anything that Johnny 'The Chief' Hine did was a highlight and seeing Jim Ertler break a world record for eating the most Mexican food in one sitting was also pretty special!



AUSVEG SA

South Australian Vegetable Industry Dinner 2015



AUSVEG SA Chairman
Danny De Ieso.

AUSVEG SA holds successful industry dinner

AUSVEG SA RECENTLY INVITED GROWERS, INDUSTRY MEMBERS AND MEMBERS OF PARLIAMENT TO CELEBRATE THEIR ACHIEVEMENTS AT THE INAUGURAL SOUTH AUSTRALIAN VEGETABLE INDUSTRY DINNER IN ADELAIDE ON 28 JANUARY 2015.



South Australian carrot grower Barry Nicol received a Lifetime Achievement Award at the dinner.

The AUSVEG SA South Australian Vegetable Industry Dinner, held at the Arkaba Hotel in Adelaide and attended by over 200 industry members, saw growers from throughout Australia, leading suppliers and members of parliament join in a celebration of South Australia's \$550 million vegetable and potato industries.

Federal Member for Grey Rowan Ramsey MP, South Australian Senator Anne

Ruston and South Australian Shadow Minister for Agriculture The Hon. David Ridgway MLC attended, along with AUSVEG Chairman Geoff Moar and representatives from Horticulture Innovation Australia Limited and Primary Producers SA.

The night was an opportunity for South Australian growers to catch up with their counterparts from interstate, as well as leading supply chain companies.

Lifetime achievement

The event culminated with the surprise presentation of a Lifetime Achievement Award to South Australian carrot grower and industry legend, Barry Nicol. AUSVEG SA Chair, Danny De Ieso, presented the award to Mr Nicol for his many years of outstanding contributions to the South Australian vegetable industry.

The AUSVEG SA Chairman, Executive Committee and

State Manager Jordan Brooke-Barnett would like to thank members of the vegetable industry and sponsors for supporting the event, which will become a regular fixture on the South Australian horticultural calendar.

AUSVEG SA is also grateful to its corporate partners and dinner sponsors for their support and contributions to the dinner, as well as the ongoing support for South Australia's vegetable and potato industries.



Photography by Andrew Beveridge.

Powdery Mildew Control sounds sweeter with Flute



- Activity at five stages of the disease life-cycle
- Water-based formulation for unmatched crop safety
- Unique Mode of Action Group U6
- Controls resistant strains
- 1 day withholding period (cucurbits)

Flute 50 EW
FUNGICIDE

AgNOVA
TECHNOLOGIES

agnova.com.au

© Flute is a registered trademark of Nippon Soda Co., Ltd

Recognising innovation in the industry

AUSVEG is once again seeking nominations for the 2015 National Awards for Excellence, to be held this year at the National Horticulture Convention Gala Dinner on 27 June at Jupiters Gold Coast in Queensland. These Awards are given in recognition of leaders within the industry and will be a highlight of the Convention incorporating AUSVEG and Apple and Pear Australia Limited (APAL).

EnviroVeg members are encouraged to nominate for the Netafim Environmental Award and the DuPont Community Stewardship Award, which acknowledge advancements in the area of environmental management and exceptional stewardship of on-farm supplies.

These awards are also an excellent way to communicate the efforts of growers in your local community, who have implemented and maintained innovations in environmental management on their properties and so demonstrated heightened community awareness.

2015 Netafim Environmental Award criteria

- An individual who has demonstrated a commitment to implement sustainable farming practices on-farm.
- An individual who has developed an innovative solution to meet an environmental challenge on-farm.
- An individual who has shown leadership in promoting environmental issues in the local and wider community.

2015 DuPont Community Stewardship Award criteria

- An individual or business that is proactive in developing and/or implementing a system or program of safe storage and use of on-farm materials above and beyond industry standards.
- An individual or business that engages in local or national community

events/initiatives with the objective of developing wider industry.

- An individual or business that demonstrates the responsible planning and management of resources, leading to environmental impacts.
- The 2015 National Awards for Excellence aim to give the leaders within our industry the recognition they deserve. In this vein, we at AUSVEG ask you to think about the people in your area who are deserving of recognition for their efforts and to let us know who they are.

Also keep in mind that AUSVEG has awards for a number of other categories, including Grower of the Year and the Industry Impact Award. If you feel there are candidates appropriate for other awards, we encourage you to nominate them.



2014 Netafim Environmental Award winner Colin Houston (centre).



You can contact the AUSVEG office and provide a nomination over the phone by calling (03) 9882 0277 or online by visiting www.ausveg.com.au/convention.

Communicating efficient irrigation practices

A recently released Horticulture Innovation Australia Limited report has outlined the issues that growers want to know about when considering their irrigation practices.

The report, entitled *Communicating efficient irrigation practices in the horticulture industry* (HG10020), describes how innovative approaches to efficient irrigation practices in this sector have been sustained by developing a communications plan for the irrigation industry and generating relevant material in journals, newsletters and websites.

The project analysed horticulture industries and

the broader irrigation sector in Australia to identify current knowledge gaps about irrigation technology and practice. The gap analysis involved two surveys conducted in June 2012 to better understand and improve irrigation communications in the horticulture sector. One survey included horticulture growers, the other included horticulture and irrigation industry personnel.

The results

The vast majority of respondents (75 per cent) said that having access to up-to-date irrigation information was “most important” in comparison to having information on other

farm activities (such as weed and pest control). According to the report, the topics that growers want to know the most about include efficient ways of managing water, irrigation system maintenance, the relationship between soil and irrigation, irrigation system operation and water security.

Continued innovation over the last decade in the vegetable and broader horticulture industries has resulted in large improvements in efficiency and cost savings for growers. Vegetable growers looking for alternative irrigation techniques can consult various industry reports, including *Design and demonstration of precision agriculture irrigation applied to different vegetable crops*

(VG08029), *Driving better vegetable irrigation through profitable practice change* (VG07023) and *Benchmarking vegetable industry water use* (VG04015), which can be found on the InfoVeg database on the AUSVEG website (www.ausveg.com.au/infoveg).

Growers should be aware that irrigation systems continue to improve. Updating them to use new methods, such as drip irrigation or fertigation in permanent beds, can help to drastically increase water use efficiency and reduce operating costs.

To find out more about efficient irrigation practices, growers should consult their agronomist or local irrigation expert.

The key to compost

AGRONOMIST BOB SHAFFER, OF SOIL CULTURE IN THE UNITED STATES, PARTNERS CLOSELY WITH BAYER AND LEADING AUSTRALIAN VEGETABLE GROWERS TO PROVIDE AWARENESS, KNOWLEDGE AND PRACTICAL SKILLS IN THE DEVELOPMENT OF ON-FARM COMPOST. FOLLOWING ARE EXCERPTS TAKEN FROM HIS ARTICLE ON COMPOST IN *ACRES U.S.A MAGAZINE*.



35



minerals and skilful tillage to be of the greatest benefit to soil health and crop quality.

High value

One of the highest values of compost as a soil amendment is to increase the biomass of cover crops. The cover crop is the most effective, low cost, simple means by which to increase

functioning of beneficial soil organisms, which results in the need to cure the pile at the end of the thermal processing.

Agriculture has experienced and reflects the problems associated with degradation of habitat and associated reduction of beneficial animals. Inappropriate use of pesticides alone may increase pest control issues in the longer term.

A better strategy to prevent pest damage is to diversify the agroecosystem, which will increase antagonism and predation on pests by beneficial animals and simultaneously elevate crop resistance and tolerance to pests. In short, supporting agroecosystem diversity increases resilience and prevents pest outbreaks.

Building compost is similar in that limiting soil pathogens is best left to natural soil processes by understanding how to create compost environments that increase the degree of antagonism against pathogens and increase beneficial biology.

Compost is organic matter that has been aerobically decomposed by microorganisms. It is a high-quality, stable form of nitrogen and carbon applied as an amendment to farm soils.

Compost has predictable stages of decomposition that are closely associated with characteristics of the feedstock (input materials) and how the feedstock is processed. The feedstock needs to provide diverse, high-quality microorganism food in adequate volumes in the short- and long-term for a premium compost to be produced.

The composting process is chemical, physical and biological, producing ammonia, carbon dioxide, heat, water vapour and humus. For farmers, the nitrogen, carbon and humus present in compost are desired end products.

Compost quality

Diversity should be designed into soil management programs. Therefore, compost feedstock should be varied to provide microbes with a wide range of

high quality organic material. It is also important for farmers to grow a variety of plants, to mineralise the soil and let soil microbes proliferate.

Ideally, compost feedstock should be produced on-site in order to manage excessive costs associated with transportation equipment, labour and fuel. For this reason, feedstock is limited on most farms and the need to effectively compost available organic matter is critical. Small amounts of high-quality compost made locally have higher value than large volumes of pre-processed compost produced from materials transported over long distances.

Rates of application, timing and placement of compost still need to be managed to improve soil health and prevent nitrate, phosphate or mineral excesses in the soil. Compost needs to be used within a holistic farm management system that includes cover crops, mulches,



soil humus levels and rebuild soil health.

The roots of cover crops deposit organic matter at depth in the soil profile and produce large amounts of humus when they decompose. By using compost to grow larger cover crop biomass, a significantly greater benefit is derived than would be possible by either compost or cover crops on their own.

Compost curing

Curing compost is a technique intended to improve the quality of thermally processed compost. Thermal compost processing subjects the feedstock organic matter to high heat in order to sterilise pathogens. This sterilisation process is damaging to the effective

Bob Shaffer is a horticulturist, agronomist and viticulturist and has been consulting and training farmers in sustainable, science-based farming systems for 40 years. Not only do his clients include some of California's largest compost companies, he also set up the recycling program in San Francisco that produces the millions of tonnes of compost that are applied to vegetables in California.

This article was adapted and republished with permission.



To read the full article, contact the AUSVEG Environment Coordinator at tristan.obrien@ausveg.com.au.



Filling the potholes in Controlled Traffic Farming

AUSVEG DEPUTY CHAIR DAVID ADDISON AND HIS SON JAMES HAVE BEGUN TRANSITIONING THEIR TASMANIAN PROPERTY TO CONTROLLED TRAFFIC FARMING (CTF), WITH THE HELP OF RESEARCHER JOHN MCPHEE. *VEGETABLES AUSTRALIA* OUTLINES THE CHALLENGES OF IMPLEMENTING CTF ON THE ADDISON FARM AND THE ISSUES THESE SYSTEMS CAN SOMETIMES FACE.

For David Addison, the promise of an increase in yield encouraged him to undertake Controlled Traffic Farming (CTF) on his property in Moriarty, Tasmania. Having visited a number of CTF farms in Europe in 2009 alongside researcher John McPhee from the Tasmanian Institute of Agriculture, he returned home with many messages about the impacts of farm machinery compacting the soil.

"The strong message was that plants aren't 'fools' and they regulate their growth in response to the level of compaction in the soil. This then regulates the uptake of moisture and nutrition, irrespective of availability," Mr Addison said.

Compaction is detrimental to plant growth, but it is a particular problem when it takes place below the depth of tillage (about 30 centimetres), which typically occurs when using heavy machinery in conventional growing systems. Deep compaction is very difficult to remediate.

On his own property, Mr Addison realised there was evidence that highlighted where improvements could be made. The areas near gates with the most traffic performed poorly, while the best paddocks were those that had been in grass long-term.

"It's quite clear: get the wheels off the soil and you will see the benefits pretty quickly," he said.

Researcher John McPhee from the Tasmanian Institute of Agriculture echoed this message.

"Unless you remove the heavy traffic off the soil in which you're growing your crops, you're not going to give them ideal conditions. With a CTF operation, tillage is no longer required to manage compaction. Big improvements come quickly after changing your practice," he explained.

"For example, in a fully integrated CTF system, growers would expect to reduce their tillage operations between 30 per cent and 70 per cent within one season, depending on which crop is grown."

Directing traffic

Although the idea behind CTF is simple, this does not mean the transition to CTF is always easy. Guidance is an essential part of establishing a CTF system, but the more complicated issues relate to transitioning machinery to a particular track gauge. Each piece of equipment must have the same track gauge, and the working width must be a multiple of the track gauge.

However, this is not always possible. The issue of mismatched track gauge and working width is particularly evident with harvesters, as different crops require different types of harvester, and they rarely match up in terms of track gauge or working width.



EnviroVeg

A promising approach

In the meantime, Mr Addison is excited about the opportunity provided by seasonal CTF.

“Growers in Europe that have been on CTF for 15 years have clearly demonstrated soil improvements, crop improvements and economics,” he said, noting that fully-integrated CTF is possible in some scenarios.

“There are vegetables in which fully integrated CTF can work, like hand harvested crops including zucchini, pumpkins and broccoli,” Mr McPhee added.

Mr Addison is also aware of additional benefits to be gained from CTF. A lack of driving means you don’t need as much ground preparation, which then amounts to reduced energy use as the machinery will work the uncompacted ground.

An understanding of the energy used by machinery

in compacting the soil can also be gained by comparing the extra energy used when walking on loose sand or loose soil with the ease of walking down a sealed road. That extra energy and consequent soil degradation is costing growers as the tractor is creating a significant part of the work for the ground preparation machine.

This has become more apparent in recent times by the use of bigger and heavier machinery to achieve efficiency gains. Perhaps in the future, small robotic machinery without an operator that can work 24 hours might be the answer.

But at the end of the day, the greatest outcome of CTF is also a simple one: “Improved yield is the most important thing; other things like reduced fuel-use are secondary,” Mr Addison said.

“You need to look at all your equipment and decide what you can use and what needs to be replaced,” Mr Addison said.

Other issues can become apparent too, particularly when hiring contractors who use their own equipment – as is common in Tasmania and for growers such as Mr Addison.

“In this economy we try to get a rotation of crops harvested nearly all the time, so there’s a lot of traffic. Each contractor has their own idea about what the best course is,” he said.

Despite these issues, Mr McPhee encouraged growers

not to get too precious about the harvester issue. Instead, he refers to ‘Seasonal Controlled Traffic Farming’.

“We accept that harvesting is difficult to match into CTF, so you use your standard harvester, but after harvest you immediately continue using the same wheel tracks as before – which can be re-located with guidance. This is much more manageable for growers and costs far less as well. The response won’t be as rapid as under a fully-integrated CTF system, but gradual changes do occur,” he said.





R&D
Market &
Value Chain
Development

R&D
Consumer
Alignment

Key facts for exporting to Indonesia

AS PART OF ONGOING EFFORTS TO DEVELOP NEW MARKETS, WE PROVIDE A SNAPSHOT OF THE INDONESIAN MARKET, WHICH HAS BEEN IDENTIFIED AS A POTENTIAL GROWTH AREA FOR AUSTRALIAN VEGETABLE EXPORTS.

From 2009-14, exports of Australian vegetables to Indonesia have increased by 66 per cent. Australia is a key supplier of fresh vegetables to Indonesia and is the seventh largest export market for Australian vegetables.

Key Australian commodities that are exported to Indonesia are onions and potatoes. However, there are also significant opportunities to increase the export of carrots, broccoli, cauliflower, lettuce and other leafy green vegetables.

Indonesia is an open market and therefore competition among suppliers is high.

Important points

Australian vegetables are required to have a phytosanitary certificate to enter Indonesia. To view other importing requirements to Indonesia, please visit the Manual of Importing Country Requirements (MICoR) website at www.daff.gov.au/micor.

Some exporters have experienced corruption among authorities in Indonesia; this should be taken into consideration when approaching new business opportunities. Organisations like the Australian Trade Commission (Austrade)

will be able to assist new exporters navigate the market.

When doing business in Indonesia, there are also some cultural differences to be aware of.

- It is important to treat people's business cards with respect.
- Friday afternoon meetings should be avoided as it is Prayer Day.

- First-time meetings rarely produce any real result.
- Decision making frequently occurs through a consensus. Attempting to force a decision will often have an adverse effect on negotiations.

Market	Total Australian veg exports 2013/14 (AUD)	Percentage change from 2009 – 14	Overall key imports	AU key exports
Indonesia	\$10.8 million	66%	Tomato, Carrots, Onions, Potatoes	Onion, Potato, Leek

Interested in learning more about Indonesia?

AUSVEG will be taking a delegation of Australian vegetable growers to Food and Hotel Indonesia, a key trade show in the region, from 15-18 April. Participation in the trade show is fully funded and levy paying vegetable growers are encouraged to express their interest in attending via export@ausveg.com.au or by contacting AUSVEG directly on 03 9882 0277.

2015 Export calendar of events

15-18 April 2015

Food and Hotel
Indonesia
Jakarta, Indonesia

21-28 June 2015

2015 AUSVEG Reverse
Trade Mission

25-27 June 2015

2015 National Horticulture
Convention
Jupiters Gold Coast, QLD

26 June 2015

2015 Produce Display
Jupiters Gold Coast, QLD

2-4 September 2015

Asia Fruit Logistica
Lantau, Hong Kong

Experts on export enlighten Aussie growers

IN LATE JANUARY, AUSVEG HELD A SUCCESSFUL EXPORTING SYMPOSIUM IN ADELAIDE, SOUTH AUSTRALIA. MORE THAN 60 GROWERS AND INDUSTRY MEMBERS FROM ACROSS THE COUNTRY ATTENDED THE EVENT TO LEARN MORE ABOUT EXPORTING PRODUCE TO MALAYSIA AND THE UNITED ARAB EMIRATES.

The Malaysia and United Arab Emirates (UAE) Export Symposium featured expert speakers and industry representatives who provided advice to local growers on exporting to these countries. With a combined value of over \$30 million, these markets have been identified as promising growth areas for Australian vegetable exports.

Notable speakers included international guests from Malaysia who gave attendees a unique in-market perspective.

These speakers were insightful in their comments regarding how 'brand Australia' and more broadly, Australian produce, is perceived in the Malaysian marketplace.

The feedback from attendees was encouraging, with guests welcoming the presentations and engaging with the presenters. Many growers also took the opportunity to network with fellow industry members.

Material from the symposium is available on the AUSVEG website, including videos of the

speaker presentations. This material will be available for anyone wishing to recap the information provided at the symposium.

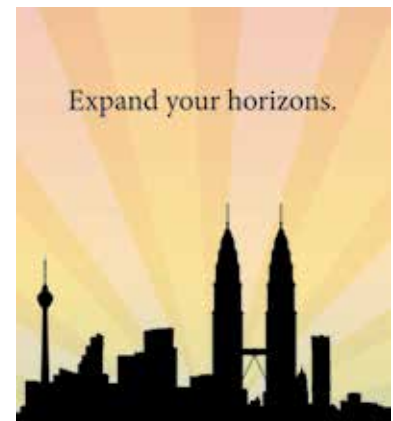
Following the success of the Malaysia and UAE Export Symposium, AUSVEG will hold further events throughout the year to encourage growers to consider exporting to emerging international markets.

AUSVEG would like to thank all those who presented and attended the symposium.



In Dubai,
the sky is the limit.

Exporting to Malaysia and the UAE:
A Symposium for Vegetable Growers
28-29 January 2015.
Somewhere.



Expand your horizons.

Exporting to Malaysia and the UAE:
A Symposium for Vegetable Growers
28-29 January 2015. The Arkaba Hotel,
152 Glen Diamond Rd, Fullarton SA.



IrriGate soil surfactant has a new lower price. And ask about Agricrop's "bonus trial product" promotion

Melons



Potatoes



Irri GateTM
Soil surfactant

Vegetables



Tree Crops



Improve irrigation efficiency and reduce nutrient run-off from as little as \$12.50 per ha, with Australia's most reliable soil surfactant

For more information on this product contact: Telephone : +61-7-3348 4113
email : sales@agricrop.com.au visit : www.agricrop.com.au



Workers harvest, wash and pack produce in the field at Boggiatto Produce in the Salinas Valley, California.

R&D
Market &
Value Chain
Development

R&D
Farm Productivity,
Resource Use
& Management

R&D
Consumer
Alignment

Women in Horticulture: Behind the scenes of vegetable production in the US

CALIFORNIA, ILLINOIS, INDIANA AND ARIZONA RECENTLY PLAYED HOST TO THE 2014 WOMEN IN HORTICULTURE INDUSTRY LEADERSHIP AND DEVELOPMENT MISSION. PARTICIPANTS WERE GIVEN A UNIQUE INSIGHT INTO THE LATEST FARMING METHODS, EQUIPMENT AND TECHNOLOGY IN THESE AREAS OF THE US, WHILE ALSO HIGHLIGHTING THE ROLE THAT WOMEN PLAY IN AUSTRALIAN AND INTERNATIONAL HORTICULTURE.

The Women in Horticulture Industry Leadership and Development Mission is always a highlight of the vegetable industry calendar. In 2014, a group of Australia's most prominent female growers visited leading and innovative vegetable growing operations in the United States, as well as the facilities of major agricultural companies.

Participants were introduced to production, technical and supply chain systems

in a country that sets many benchmarks in vegetable growing worldwide. The group made contact with a number of influential women in the US industry, and gained fresh knowledge on new innovations relating to on-farm productivity and consumer demand that can be explored further in Australia.

The carrot capital

The mission kicked off in what was arguably the most suitable

location – Bakersfield, otherwise known as the carrot capital of California and the US overall. Eighty per cent of the nation's carrots are produced in this region and the industry is worth over half a billion dollars.

Participants had their first taste of the area with a visit to Bolthouse Farms, one of the leading growers of fresh and processed carrots. The carrots here are grown for size rather than taste, with the record set at 50cm in length.

However, the farm's main product is the "shortcut carrot" or baby carrot. While not as sweet as its Australian companion, shortcut carrots are less likely to split when peeled or chopped due to its low Brix (sugar) content. The chopping and peeling process is as automated as possible, with most workers only supervising the equipment.

Bolthouse Farms has recently expanded into salad dressings and juice products to capture a



Boggiatto's salad product is harvested at a young age, making it smaller and sweeter.



Inside Taylor Farm's processing facility in the Salinas Valley.



larger market share. Also, all pieces of equipment purchased are modified to achieve greater efficiency or to perform a specific job in the field, sometimes being built from scratch.

A visit to a number of supermarket chains also gave the group an insight into the marketing of produce in the US. Organics are extremely popular among consumers and many fresh produce items are clearly developed with the consumer in mind, such as pre-made platters with vegetable sticks and dips.

The "Salad" Valley

A visit to Boggiatto Produce in the 'salad bowl of the world', Salinas Valley, allowed participants to witness the harvesting of romaine and iceberg lettuce. As this process is done by hand, the company has designed and customised vehicles to continually transport water so workers can easily harvest, wash and pack the produce in the field.

As this process requires a lot of manual labour, Boggiatto Produce relies on immigrant workers to fill the roster. The company ensures that all the workers are properly trained and pay above the minimum wage to maximise staff retention. As a result, many of the workers have returned for each season for more than 10 years.

Boggiatto's salad product is harvested at a young age, making it smaller and sweeter, and is sold under the brands of Garden Hearts and Iceberg Babies. The company has played a key role in the marketing and development of these products, working directly with chefs and restaurants to create and

promote a niche product for the food service industry.

The next stop in the Valley was Taylor Farms, which supplies McDonald's stores across the country year-round. This visit gave participants the opportunity to see things from a processor's perspective.

At Taylor Farms, different growers are supplied with different coloured crates so that their produce is easily identified. The crates must be labelled correctly to be accepted and an entire shipment can be rejected if just one crate shows signs of contamination.

At the end of each season in the Salinas Valley, Taylor Farms completely dismantles the factory floor and transports all the equipment to Yuma, Arizona, to continue to supply produce throughout the winter months. While this process takes several days, it is more cost-effective than purchasing a permanent set of equipment for the Yuma facility.

Industry innovation

From California, the group headed east to visit the John Deere headquarters in Moline, Illinois, where they learnt that fully automated tractors were on the horizon. These tractors will be programmed to follow specific routes and report any abnormalities or issues within the crops, resulting in a more efficient process and reducing labour costs.

The participants then travelled to Indianapolis to visit the Dow AgroSciences headquarters and research facility. The group walked away with a better appreciation of the time, effort and money it takes for a product to be made available to the market; the average Dow product results from 10 years

of research and development and an investment of more than US\$1 million each day.

Finally, the group travelled to Yuma, a major US farming hub that shoulders the borders of Mexico, California and Arizona. Over two days, the group witnessed Yuma's strong focus on horticulture, visiting vegetable processors such as Tanimura and Antle Produce Company and the growers who supply the produce. The participants noted that some farms grew a number of lettuce varieties in each line in the field, making it quicker and cheaper to create a mixed lettuce pack during harvest.

The Yuma region is also known for being the sunniest place on earth and therefore requires extremely effective crop irrigation systems. Fortunately, the nearby Colorado River acts as a sufficient supplier of water. In addition, growers in Yuma have easy access to a labour force of green-card commuters from Mexico, given its close proximity to the country. Many of these workers choose not to migrate over the border and return to Mexico after each day's work in the US, as their wage allows them to enjoy a much higher standard of living.

Tours of a variety of machinery dealerships in Yuma also highlighted the importance that local businesses place on community spirit and involvement, with many of the participants commenting that their dealer plays a significant role in the purchase of a certain make of equipment.

The final stop was Greenheart Nursery, a major commercial supplier of seedlings to farms across California and Arizona. While many of the varieties are commercially available, some are patented by farmers.

A successful visit

While vegetable growers in Australia and the US face many of the same issues, American growers have had to innovate quickly to keep up with a higher demand for produce. Operations in the US are automated wherever possible, allowing growers to produce a high volume of product at a relatively low cost. Local growers should look to adopt as much automation into their businesses as possible to remain competitive.

Fresh produce in the US is also designed to appeal directly to the consumer, with many companies choosing to diversify their operation to gain a larger market share. It was suggested that Australian growers should continue to use data from various vegetable industry projects to tailor their products to meet consumer demand, particularly in terms of convenience.

It's expected that the participants will maintain the relationships formed with their new-found international counterparts. In the meantime, they have a great opportunity to share their knowledge of American vegetable production processes with their Australian colleagues, and hopefully be inspired to develop new ideas for their businesses.



A full project report will be released in coming weeks and will be made available on the AUSVEG website: www.ausveg.com.au

This initiative was funded by Horticulture Innovation Australia Limited (HIA) using the National Vegetable Levy, voluntary contributions from industry and funds from the Australian Government.

Project Number: VG13706

Controlling transplant shock in lettuce



NEW RESEARCH UNDERTAKEN BY APPLIED HORTICULTURAL RESEARCH SHOWS THAT DRENCHING LETTUCE SEEDLINGS WITH POTASSIUM NITRATE AT TRANSPLANTING CAN INCREASE YIELDS BY 20 PER CENT.

Transplant shock is the reduction in growth which occurs when seedlings are transplanted from a container into the field. Significant transplant shock can cause poor plant stands and a lower percentage cut of good quality lettuce at harvest.

It has been observed that drenching lettuce seedlings with potassium nitrate just before they are transplanted into the field can help the young plants to establish more quickly. In other words, reduce transplant shock.

Potassium nitrate supplies the plants with both potassium and nitrogen at the same time, and it can be readily absorbed both by the roots and the leaves of the young plants.

Recently, Applied Horticultural Research (AHR) set out to test this observation in properly conducted, replicated field trials.

Investigating transplant shock in lettuce cultivars

AHR researchers applied a potassium nitrate solution to seedlings of cos (cv. Quintas) and iceberg (cv. Toscanas) lettuce just before they were transplanted into the field at a commercial lettuce farm in Sydney.

The potassium nitrate was applied as a drench over the top of the plants, at a rate of 40 grams per 2.5 litres

of water per 1,000 seedlings while the seedlings were still in the trays. The seedlings were then transplanted into the field (September 2014) at a density of 44,000 plants per hectare as a randomised complete block trial.

The plants were assessed four weeks after transplanting, and then again at seven weeks (commercial maturity). At each assessment, individual plants were harvested from the centre rows, trimmed as fresh market lettuce with the roots and the base of the stem removed. Head fresh weights were then recorded in grams per plant.

What was found?

Pre-harvest growth responses

Researchers found that potassium nitrate drenching resulted in larger plants, four weeks from transplanting (see Figure 1).

The potassium nitrate treatment resulted in a 25 per cent increase in shoot fresh weight compared to the control when applied to iceberg lettuce (see Figure 2) and a 22 per cent increase in fresh weight in cos lettuce, four weeks after transplanting (see Figure 3). The pre-harvest shoot weight results were statistically significant ($P < 0.05$) for both lettuce types.

Harvest growth responses

Improvement in shoot weight

in response to the potassium nitrate treatment was also observed at the harvest stage.

In iceberg lettuce, the head weights of drenched plants were 19 per cent higher than plants that did not receive the potassium nitrate drench (see Figure 4).

In cos lettuce, potassium nitrate drenching improved head weights at harvest by 12 per cent compared to the control plants (see Figure 5). The harvest yield results were statistically significant ($P < 0.05$) for both lettuce types.

Researchers found that lettuce fresh weight was significantly improved when potassium nitrate was applied as a drench at transplanting at a dilution rate of 40 grams per 2.5 litres of water per 1,000 seedlings.

Overall, potassium nitrate was observed to reduce transplant shock which resulted in 12-19 per cent higher yields at harvest.

Looking ahead, the researchers plan to expand their study to other treatments, such as controlling lettuce pests.

"The next stage is to test the effect of

drenching lettuce seedlings with potassium nitrate after Durivo® or Confidor® have been applied in the nursery to control lettuce aphid," Applied Horticultural Research CEO Dr Gordon Rogers said.



For more information, contact Dr Gordon Rogers at gordon@ahr.com.au or 0418 517 777.

This project was funded by Horticulture Innovation Australia Limited (HIA) using the National Vegetable Levy and funds from the Australian Government.

Project Number: VG12017

Iceberg Lettuce (cv. Toscanas)

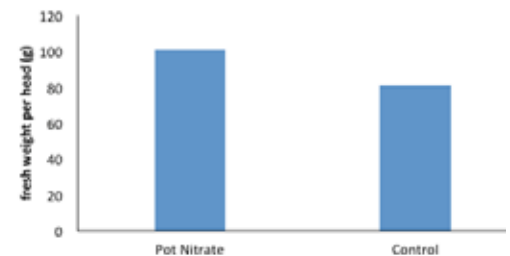


Figure 2: Iceberg lettuce shoot weight, four weeks post-transplant (pre-harvest).

Cos Lettuce (cv. Quintas)

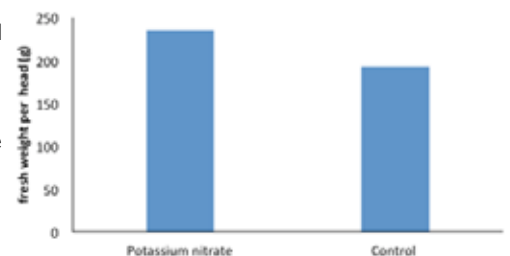


Figure 3: Cos lettuce shoot weight, four weeks post-transplant (pre-harvest).

Iceberg Lettuce (cv. Toscanas)

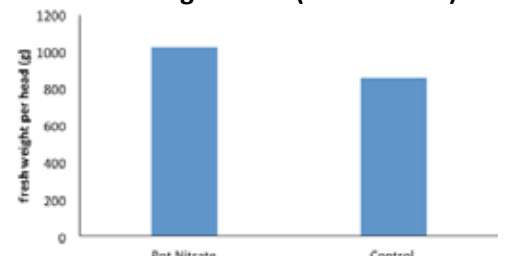


Figure 4: Iceberg lettuce head weights at harvest.

Cos Lettuce (cv. Quintas)

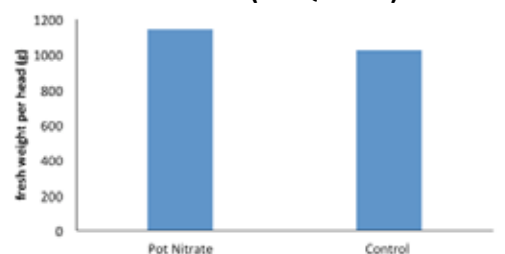


Figure 5: Cos lettuce head weights at harvest.



Figure 1: Iceberg lettuce 15 days after transplant. Potassium nitrate (left) versus control (right).



AUSVEG dramatically increased its presence in the media in February, after attracting extensive nationwide coverage of its long-standing campaign for clearer Country of Origin Labelling (CoOL) laws. This issue featured prominently in the media following a hepatitis A outbreak linked to imported frozen berries from China.

The media coverage reached a record-breaking 23,023,445 Australians throughout the month, indicating that AUSVEG made an unsurpassed impression with its media advocacy on this issue. A total of 1,357 media reports mentioned AUSVEG, which was a striking increase from 722 hits in January.

AUSVEG has highlighted many issues important to the Australian vegetable industry so far this year and will continue this strong representation

throughout all avenues of the national media landscape into the future.

Country of Origin Labelling laws

AUSVEG CEO Richard Mulcahy and Deputy CEO Andrew White appeared extensively on TV, radio and print media following the hepatitis A outbreak. Mr Mulcahy and Mr White said the severity of the issue strengthened the need for clearer CoOL laws and more stringent testing protocols for imported food.

The strong presence of AUSVEG has also been influential in political circles. In February, Mr White and Australian Greens Leader Christine Milne held a joint press conference in Canberra to call out big businesses that claim increased costs are the biggest barrier for incorporating

clearer labelling on products. Mr White provided numerous examples of packaging that is easily altered for marketing and promotional purposes on a regular basis.

Malaysia and UAE Export Symposium

AUSVEG Manager – National Export Development Michael Coote appeared on broadcast media discussing the success of the AUSVEG Malaysia and United Arab Emirates Export Symposium which was held in Adelaide in January. Mr Coote said the event was an opportunity for growers to learn more about these two markets, which have been identified as potential growth areas for Australian vegetable exports.

Working Holiday Visa program

AUSVEG Manager – Communications Andrew MacDonald featured on broadcast and in print media discussing how a proposed change to the Working Holiday Visa program to allow extensions for tourism industry work could result in a shortage of seasonal workers on Australian farms during peak harvesting periods.

Nielsen Consumer Research data

AUSVEG Senior Communications Officer Tamara Ungar appeared on broadcast and in print media discussing Nielsen consumer

research that shows Asian vegetables are featuring regularly in Australian diets. Ms Ungar said that the aim of the data was to support growers to help them make strategic business decisions.

Free Trade Agreements

AUSVEG Economist Steve Razdan appeared on broadcast media discussing how recent Free Trade Agreements with Japan, South Korea and China could increase profits for vegetable growers by providing potentially lucrative export markets for their produce.

Key Topics

- AUSVEG advocates for stronger Country of Origin Labelling laws and stricter testing processes for imported foods, following a recent outbreak of hepatitis A linked to imported frozen berries.
- AUSVEG Malaysia and UAE Export Symposium offers information for growers to expand their markets.
- AUSVEG opposes proposed changes to the Working Holiday Visa program.
- Nielsen Consumer Research data shows Asian vegetables are popular with Australian consumers.
- Free Trade Agreements could potentially open doors for Australian growers.

TOTALLY INTEGRATED PACKAGING SOLUTIONS FOR AUSTRALIA'S FRESH PRODUCE MARKET

From packing shed to the retail outlet, edp can supply *everything* needed for the handling and packaging of your fresh fruit and vegetables.

KEEPING
AUSTRALIA
MANUFACTURING

www.edp.com.au

edp[®]

edp australia Pty Ltd
31-37 O'Brien Street
Mooroopna VIC 3629
Phone (03) 5820 5337
Fax (03) 5825 2758
Email sales@edp.com.au



Experts gather for Summer School in ag robotics

THE UNIVERSITY OF SYDNEY'S AUSTRALIAN CENTRE FOR FIELD ROBOTICS (ACFR) RECENTLY PLAYED HOST TO A SUMMER SCHOOL ON AGRICULTURAL ROBOTICS. THE EVENT BROUGHT LEADING SPECIALISTS TOGETHER TO DISCUSS HOW ROBOTS WILL REVOLUTIONISE THE FARMING SECTOR BY AIDING ON-FARM PRODUCTIVITY AND HELPING CREATE MORE JOBS.



The 'Ladybird' horticulture robot.

According to Dr Robert Fitch, manager of systems planning at the ACFR, the field of agricultural robotics is undergoing a period of exciting change.

"We are in the pioneering stages of forming a new, independent agricultural robotics community. Although there is a wealth of important work that reaches back many years, it is only now that we as a community are starting to reach critical mass in bringing together roboticists, agricultural engineers, agricultural scientists, growers, industry leaders and government leaders," he said.

"We are (also) starting to see research leave the lab and enter the real world in a significant way... Robotics is a young discipline relatively speaking; it is only about 50 years old. But now we have mathematical understanding and mature hardware platforms, such as manipulator arms and ground robots that did not exist even five years ago. There are intermediate research

results that are ready to be put into action."

Projects in development

Beginning the process of getting these intermediate research results into development was one of the main focuses of the Summer School.

"One direct outcome of the Summer School is the start of many new collaborations. Attendees realised that many of us are working on similar problems independently and much of this is early-stage research. There is good opportunity for leveraging this work through collaboration," Dr Fitch explained.

"Also, many common problems are shared worldwide, such as an overall decline in the number of growers and people working in agriculture and horticulture, major issues with weed control, the need for autonomous harvesting and the need for high-fidelity crop information. The new collaborations will lead

to developments in all of these areas."

Highlights of the event

The Summer School was attended by several high calibre speakers, as well as experts, both domestic and international, from diverse backgrounds such as academia, industry and government.

"We heard the views of representatives from horticulture, cotton, grains and the US Department of Agriculture (USDA). We also heard about the main results and lessons learnt from major projects in Australia, the US, Europe and Asia," Dr Fitch said.

"The technical material covered core topics in outdoor robotics tailored to agricultural robots. We also saw a live demonstration of the 'Ladybird' horticulture robot, visited a newly commissioned robotic dairy in Camden NSW and participated in hands-on computer-based activities that helped people to understand,

first-hand, the difficulties of outdoor operation from the robot's perspective."

Looking forward to future growth

Dr Fitch believes it is important to remember that the results that have immediate practical value now are often based on years of fundamental work that, at the time, had little to no prospects for immediate use.

"Agricultural robotics is an adventure that will play out over many years and we must invest in research that will pay off in the long-term while at the same time harvesting the investments of the past," he said.

"My belief, shared by others at the Summer School, is that agricultural robotics will reinvigorate passion for agriculture and horticulture and will entice younger generations back into the business."



For more information, contact Dr Robert Fitch on (02) 9351 7126 or info@acfr.usyd.edu.au.

Hortus unveils new testing services for growers

FOOD SAFETY HAS EMERGED AS AN INCREDIBLY IMPORTANT ISSUE IN THE AGRICULTURAL INDUSTRY FOLLOWING THE RECENT HEPATITIS A OUTBREAK LINKED TO IMPORTED FROZEN BERRIES. *VEGETABLES AUSTRALIA* SPOKE TO HORTUS TECHNICAL SERVICES MANAGING DIRECTOR JACK MILBANK ABOUT EXCITING NEW DEVELOPMENTS FOR THE COMPANY, INCLUDING NEW LAB TESTING CAPABILITIES AND THE OPPORTUNITY FOR IMPORTS TO BE TESTED AS STRINGENTLY AS LOCAL PRODUCE.

Hortus Technical Services provides independent services for the Australian horticultural industry to test for food safety and pathogen diagnosis for soil, produce and leaf tissue.

Hortus has recently completed setting up an accredited food safety lab primarily aimed at enabling growers to meet their food safety and compliance testing for E.coli, salmonella, and listeria. The already established microbiology lab has also started providing pathogen diagnosis services where growers can send in soil samples where suspected pathogens exist.

“We have a fully functioning microbiology lab where we now employ a microbiologist and two applied biologists. We’ve tried to move to the next step from just having a standard agricultural soil testing lab which is all chemistry based, to now incorporate a full service biology lab that offers both food safety

as well as pathogen diagnosis and research work which can be done,” Mr Milbank said.

Broad reach

Hortus is one of the biggest independent lab and integrated agronomy companies in Australia, testing crops from all over Australia.

“We do a bit of chia, up in the Ord River scheme, we do a number of samples for a lot of the berry growers around Western Australia and we do a majority of the hydroponic cucumber growers around Virginia in South Australia. We can test for a broad range of horticultural tree crops like avocados, macadamias, mangoes, as well as melon growers,” Mr Milbank explained.

“We’ve also just opened up a nutrient testing lab in Bowen and Ayr, so the crop spectrum is pretty diverse. One of the necessities, because of the increase in production in the

north, is the timeliness of getting the fruit samples to test for food safety – they have to be received within a 24 hour time frame. It should be quite an advantage to the growers having a lab based in central Queensland that enables us to serve the Sunshine Coast, Bundaberg, and then up to Ayr and Bowen.”

Food safety for imports

In light of the recent food safety scare where Australian consumers contracted hepatitis A after eating frozen berries imported from China, Mr Milbank said it is important to highlight that food safety testing can very easily be conducted for imported goods.

“This is not anything extra towards what we do at Hortus. We’re just saying, with all imported produce, why doesn’t the same thing happen? All the consumers want is for there to be a level playing field of compliance with imported

products versus what quality systems Australian growers go through.

“When something like this happens we see where the glitches in the system exist. It’s not that they’re difficult to fix; it’s very easily fixed. We have Post Harvest Services Managers in Brisbane, and we’re swabbing containers of zucchinis, rock melons, avocados that are being exported, as proof in the form of a pre-shipment inspection that they meet the chemical residue limits, and that they’re free from any food safety concerns.

“We even do fruit testing to test the nutritional content and integrity of the fruit prior to its dispatch. If we’re going to that level of detail and surety and supplying quality produce to Australia and to export markets, let’s just do exactly that to anything that’s being imported into the country. We’ve got the systems set up, it’s just a matter of regulating and enforcing that to happen.”

“We have a fully functioning microbiology lab...”

- Jack Milbank, Hortus Technical Services



Shelley Mino, Post Harvest Services Manager at Hortus, visits the Brisbane Markets three or four times a week, where she collects samples on site and sends them to the lab. Growers can also post their samples to: Locked Bag 3901, Bundaberg QLD 4670, or they can phone (07) 4132 5000. Hortus has staff in Ayr, Bowen, Sunshine Coast, Gatton and Bundaberg.



MINOR USE AWARENESS PROGRAM

Minor Use Awareness Program: Latest news

GET INVOLVED IN MINOR USE! SUBMIT YOUR DETAILS TO BE PART OF THE AUSTRALIAN VEGETABLE INDUSTRY MINOR USE DATABASE.

R&D
Farm Productivity,
Resource Use
& Management

What is minor use?

Minor use is the permit system in Australia that allows for approved off-label use of agrichemicals for specific purposes. It is designed to assist minor crops gain greater access to agrichemicals when needed, and for approved minor use of agrichemicals on major crops.

Why is minor use important?

Minor use plays an integral role in the Australian vegetable industry as on-label options are often limited for many vegetable crops, especially in the case of emerging crops grown for niche markets.

What is being done?

When it comes to minor use to best represent the needs of growers, a primary point of contact is needed. AUSVEG has engaged a Minor Use and Agronomy Coordinator, Scott Kwasny, to administer the Minor Use Awareness Program, a Minor Use Database and the Minor Use Prioritisation Strategy for the Australian vegetable industry.

Why have a Minor Use Database?

By developing a database for all stakeholders in the vegetable industry, it will allow for more

effective communication and understanding of the current needs regarding agrichemicals.

When requests are processed by the AUSVEG Minor Use and Agronomy Coordinator, further information will be sourced from stakeholders in the Minor Use Database.

This will allow all interested and involved parties to have input into the current needs when it comes to vegetable crop pest management, and create better representation for grower needs in minor use. The information gathered as part of the database will allow growers of different vegetable crops to have a more accurate and active voice representing their needs to chemical companies.

This is your opportunity to be a part of improved access to chemicals, and have your say regarding minor use requests and priorities for the vegetable industry.

The Minor Use Prioritisation Strategy needs input and involvement to better represent vegetable growers and industry as a whole. When it comes to minor use in the vegetable industry, involvement is key.



To request any of the minor use forms please contact AUSVEG Minor Use and Agronomy Coordinator Scott Kwasny on (03) 9882 0277 or email skwasny@ausveg.com.au. Project Number: VG13096

CALENDAR



25-27 June 2015

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

Where: Jupiters Gold Coast, QLD

What: The National 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

24-28 August 2015

2015 Youth-Ag Summit

Where: Canberra, ACT

What: Falling under the theme, Feeding a Hungry Planet, the 2015 Youth-Ag Summit will provide a forum for young agricultural leaders to discuss potential solutions to global issues, discover opportunities and act on solutions for sustainable agriculture that will help feed a growing population.

Further information:

Please visit www.youthagsummit.com

Minor use permits

Permit Number	Crop	Pesticide Group	Active	Pest	Date Issued	Expiry Date	Permit Holder	States
PER14034	Spinach, silverbeet and spring onions	Fungicide	Chlorothalonil	Downy mildew, Alternaria leaf blight, Grey mould	9-Dec-14	31-Oct-19	Growcom	All states except Vic
PER14907	Bassica leafy vegetables, plus other leafy vegetables and root and tuber vegetables	Insecticide	Emamectin	Diamondback moth, Heliothis and Vegetable looper, Cabbage white butterfly	9-Dec-14	30-Nov-19	Growcom	All states except Vic
PER13147 Version 2	Cauliflower	Herbicide	Clopyralid	Capeweed and Clover	21-Nov-11	30-Nov-19	Growcom	WA
PER14479 Version 2	Spinach, beetroot, celery, silverbeet, gailum, chicory, endive and radicchio	Fungicide	Propiconazole	Leaf spot, Septoria spot, Early blight, Powdery mildew, Rust and Septoria leaf spot	12-May-14	30-Nov-19	Growcom	All states except Vic
PER14891	Beetroot	Fungicide	Trifloxystrobin	Alternaria leaf spot and Cercospora leaf spot	1-Jan-15	30-Sep-19	Growcom	All states except Vic
PER14958	Brassica leafy vegetables, silverbeet, spinach, leafy lettuce, beetroot, chicory, endive, parsley, radicchio, radish, rocket	Fungicide	Mancozeb and Dimethomorph	Downy mildew and Alternaria leaf spots	21-Dec-14	31-Oct-19	Growcom	All states except Vic
PER14964	Lettuce (head and leafy varieties) plant nursery phase, prior to transplanting in the field	Fungicide	Chlorothalonil	Anthraco-nose or Shot hole	21-Dec-14	30-Nov-19	Growcom	All states except Vic
PER14892	Cucumber, zucchini, pumpkin, squash, capsicum, eggplant, lettuce (head) leafy lettuce, chicory, endive, radicchio, chard, cress, kale, mustard, rocket, spinach, silverbeet, brassica leafy vegetables, beetroot, broccoli, sweet corn, snow peas and sugar snap peas	Insecticide	Pymetrozine	Various aphids, Silverleaf and Greenhouse whitefly (suppression)	6-Jan-15	31-May-17	Growcom	All states except Vic
PER10845 Version 2	Brassica leafy vegetables	Fungicide	Zineb	Cercospora leaf spot and Downy mildew	11-Jun-09	31-May-20	Growcom	All states except Vic
PER13397	Peas (green and processing), eggplant (or aubergine), chilli peppers, paprika, silverbeet and spinach	Herbicide	Clethodim	Various grass weeds as per product label listing for other vegetable crop types	15-Nov-13	31-Mar-18	Growcom	All states except Vic
PER13859	Fruit fly host crops following harvest	N/A	Dimethoate	Fruit fly	9-Feb-15	31-Jul-24	Growcom	All states
PER14858	Parsnip	N/A	Pendimethalin	Broadleaf and grass weeds	1-Apr-15	31-Mar-20	Growcom	All states except Vic and NT
PER11949 Version 2	Radish and beetroot	Insecticide	Lambda-cyhalothrin	Diamondback moth, Vegetable looper, Onion thrips, Plague thrips, Rutherglen bug and Vegetable weevil	1-Apr-10	31-Mar-18	Growcom	All states except Vic
PER10976 Version 2	Snow and sugar snap peas	Herbicide	Bentazone-sodium	Weeds	10-Aug-09	31-Mar-20	Growcom	All states except Vic

All efforts have been made to provide the most current, complete and accurate information on these permits, however we recommend that you confirm the details of these permits at the following APVMA website: <http://www.apvma.gov.au/permits/search.php>

Around the states

Victoria



The new Melbourne Market at Epping is nearing completion and was expected to be open in early July for fruit and vegetable stand and store holders. The indication now is that it will be delayed and open in August/September.

There is an open day in May for all stand, retailers and store holders. The market will have new trading hours from 3.30am to 7.00am on Monday, Thursday and Friday and 4.30am to 7.30am on Tuesday and Wednesday.

The VGA has been actively representing vegetable growers and stand holders to seek a practical transformation from the Footscray market to the new market at Epping.

In other industry news, a HIA-funded project covering parsley diseases and disorders is expected to commence

in March. Monthly disease surveys, diagnostics and management inputs will be carried out as well on several farms in southern Victoria. Parsley production has declined over recent years due to environmental and disease pressure.

Finally, the VGA has a new Executive Officer Ken Orr, who has a 35-year background in horticultural sales, product development, agronomy and extension. Ken started with the VGA in January and replaces Helena Whitman who had a five-year association with the VGA.

Ken Orr

VGA Victoria
Executive Officer
Phone: (03) 9687 4707
Fax: (03) 9687 4723
Email: ken.orr@vgavic.or.au



Queensland



Growcom, in conjunction with Workplace Health and Safety Queensland (WHSQ) and supported by the Office of Fair and Safe Work, will deliver a series of workshops around the state concerned with tackling farm safety issues.

The Serious About Farm Safety workshops will aim to help growers better manage their health and safety on farm, which can also help to improve their bottom lines.

The workshops will run from the end of March to July. The Serious About Farm Safety Employer Handbook will be launched at these workshops and additional resources will also be available. Topics of the workshops include:

- Setting up a safety management system.
- Ensuring management commitment.
- Consultation with employees.
- Implementing risk management.
- Ensuring safe work procedures.
- Managing hazardous manual tasks.
- The importance of training and supervision.
- Reporting safety.
- Workers compensation and return to work issues.
- Setting up workplaces for wellness.

Some elements of the workshop will have interactive elements, and growers can expect to take away skills and information that they can implement into their own businesses. We seek to keep costs as low as possible to

ensure maximum attendance. Registration fees are:

- \$50 per business for Growcom Members (and you can bring as many people from your business as you wish).
- \$71.50 per business for Non-Growcom Members (and you can bring as many people from your business as you wish).

The workshops will be held at the following places and dates. Please note that venues will be confirmed on registration.

March

- Wednesday 25: Gayndah
- Thursday 26: Bundaberg

April

- Tuesday 28: Bowen
- Wednesday 29: Ayr

May

- Thursday 14: Yeppoon

June

- Wednesday 3: Sunshine Coast
- Thursday 11: Stanthorpe

July

- Thursday 23: Lockyer Valley
- Thursday 30: Mareeba
- Friday 31: Mourilyan

To register, access the online registration form at www.growcom.com.au/fsw15. Alternatively, you can call Growcom reception or Growcom Workplace Relations Advisor Annabel Hutch on 07 3620 3844 and we can register for you. Registration will be confirmed when the registration fee is paid.

Alex Livingstone

Growcom
Chief Executive Officer
68 Anderson Street,
Fortitude Valley, QLD 4006
Phone: (07) 3620 3844
Fax: (07) 3620 3880

South Australia



If the South Australian vegetable and potato industries are to thrive, we need effective advocacy to ensure that the industry's best interests are taken into account by governments of all levels.

Much of this advocacy work is done behind the scenes. If vegetable and potato interests are not being represented in key government discussions, our industry will be continually burdened by regulation. A priority of AUSVEG SA in the coming months is to continue our ongoing agri-political work with all major parties on key issues affecting our industry.

AUSVEG SA is fortunate to have the support of AUSVEG at a national level, allowing our organisation to spend more

time on policy than many other industry groups. As a result, we have worked on a number of critical issues for the industry since the beginning of 2015 and will continue doing so as the year progresses.

Key activities in 2015

- Successful lobbying of the Adelaide and Mount Lofty Ranges NRM board for a reduction of the annual NRM Water Levy paid by growers from \$10/ML to \$6/ML.
- Working with other industry groups to advocate for increasing industry access to 400 series (skilled) visas to fill critical gaps in the vegetable and potato industries.

- Engaging on water issues in a number of areas throughout South Australia to unlock new areas of potential production to accommodate the growth in our industry.
- Advocating for the liberalisation of restrictive planning regulations in the Northern Adelaide Plains region to allow for responsible development.
- Advocating on behalf of growers in response to increasing union pressure in the Northern Adelaide Plains region.

If the vegetable and potato industries in South Australia want to be heard within government, then the industry must participate in development

of policy. AUSVEG SA has made it a priority to engage in as many policy areas as possible to ensure industry interests are heard.

While the wheels of government often turn slowly, AUSVEG SA is confident that a greater voice for growers will achieve meaningful long-term reform for the South Australian industry.

Growers interested in providing input to AUSVEG SA policy can call the State Manager – South Australia on (08) 8221 5220.

Jordan Brooke-Barnett

AUSVEG SA
State Manager
Suite 205, 22 Grenfell St
Adelaide SA 5000
Phone: (08) 8221 5220

Northern Territory



Biosecurity continues to be the focus of activity in horticulture in the NT. The response to the Cucumber green mottle mosaic virus (CGMMV) incursion and the Banana freckle Eradication Program are both continuing in the Top End.

In January, Dr Aviv Dombrovsky, a plant pathologist and leader in CGMMV research from the Volcani Institute in Israel, came to Australia with the assistance of the NT Government and other industry sponsors to address cucurbit growers, industry representatives and government officers on the situation with CGMMV in Israel. Israel lost approximately 1,000 hectares of watermelons in 2013 to CGMMV and had multiple outbreaks

in their cucumber shade houses, which severely limited production.

Dr Aviv explained that while seed was an avenue for transmission to new sites, his research showed that it was difficult to effectively treat the seed to remove the virus from the inside as well as the outside of the seed. However, almost all infected seeds grew into non-infected plants. It was the efficiency of the disease to spread by contact from these few infected plants and its persistence in plant matter in the soil that formed the devastating characteristics of this virus.

Dr Aviv's institute is working closely with their Israeli cucurbit growers to help them manage

and contain the virus by developing a more sensitive test to provide completely virus-free seed, better methods of soil disinfection, planting strategies to reduce infection from contaminated soil, improved monitoring and the early removal of suspect plants to reduce disease transmission. The response to Dr Aviv's visit was very positive.

The meetings in Katherine and Darwin were very well attended, with representatives from industry travelling from as far away as Kununurra. Growers and industry representatives have strongly suggested that this practice of bringing in an expert from a country that is also battling such an incursion to be considered as an important

part of any exotic pest incursion response.

The NT CGMMV outbreak remains confined to the original areas. The NT Government is committed to eradicating the virus and maintaining market access for the virus-free NT cucurbit growers with a rigorous monitoring and testing program.

Greg Owens

NT Farmers Association
Vegetable Grower Engagement Officer
M: 0437 092 551
www.ntfarmers.org.au
greg@ntfarmers.org.au



Tasmania



It's a familiar tale right across Australia – local council approves an application for an on-farm development, rejecting the objections of neighbours who have chosen to live in rural areas or on the urban fringe.

This time around it was a development application that enabled hens to be housed in a shed on an egg farm in some of Tasmania's best farming country, but I'm sure there are similar tales going on in your own backyard.

There should be no controversy about an egg producer wanting to build a chook house in the country, but there was. In this case, the dispute was about the proximity of the new chook shed to tourist cottages, within the

"attenuation" distance or buffer zone.

"The smell, the noise ... we may even have to consider shutting our business down," the owner said.

This case epitomises the need for constantly-updated right to farm legislation, for want of a better expression. In Tasmania that legislation is the Primary Industry Activities Protection Act that came into force in 1995, which the government is reviewing.

Those who come to the country for its lifestyle benefits must have a real appreciation that life for the neighbouring farmer must go on.

Agriculture has to be at the top of the planning hierarchy, rather than pushing farmers into

what's left over after everything else has taken the space it needs. Agriculture must not be seen as the remainder when other uses have been catered for.

We would like to see a form of buyer beware certification. A person who buys land adjoining a farm must certify they accept the neighbouring farmer's right to farm. Other states have similar requirements.

Sensible planning will minimise the possibility of disputes and is the best way to overcome this type of issue. In the end, the council approved the development, with environmental conditions.

Nobody sets out deliberately to affect water quality, create unwarranted noise or smells

or antagonise their neighbours, but the reality must be that – in a farming landscape – farming always takes precedence.

This is particularly so when there are other forces at work to end the conversion of forest to farmland in this state. That just reduces our options completely.

Wayne Johnston

Tasmanian Farmers & Graziers Association
President
Cnr Cimitiere and Charles Streets
Launceston, Tas 7250
Phone: (03) 6332 1800
Fax: (03) 6331 4344

New South Wales



With the state election looming at the end of March, NSW Farmers has launched its StandUpForFarmers campaign. The campaign will shine the spotlight on the issues impacting rural and regional communities and will draw on local events, grassroots activism, digital channels, social media and word of mouth to mobilise farmers and those in rural and regional NSW to 'Stand Up,

Shout Out and Be Heard'.

Six key issues have been identified that unite country NSW and are vital to the growth and prosperity of the state. These issues are better country rail and roads, action on drought, healthy rural communities, fairer farm gate returns, protecting our land and water, as well as investment in farm innovation.

Within these key issues, NSW Farmers is advocating for better biosecurity measures in terms of strengthened R&D and to implement policy to manage biosecurity risks such as abandoned orchards. To do this we have been actively participating in the NSW Department of Primary Industry's biosecurity reforms and reinforcing the need for

better horticultural traceability through property identification codes and upkeep of regular local biosecurity programs.

This is not simply a matter of productivity, but also about safeguarding the long-term capacity of our producers to provide food and fibre for the people of NSW and Australia. Failure to properly and comprehensively address biosecurity concerns will risk undermining our ongoing ability to complete this action. Most market access is based on freedom from pests and diseases; having internationally accepted management practices is important to ensure that this situation remains.

Country NSW is an important contributor to our state and our way of life. We want to see real

and lasting change that aides our rural communities and promotes our first class agriculture industry, so we are asking people to visit the StandUpForFarmers website, support the cause on social media and take action so country NSW is no longer taken for granted.

Peter Darley

NSW Farmers' Association
Horticulture Committee
Chairman
Level 25, 66 Goulburn Street
Sydney, NSW 2000
Phone: (02) 8251 1804
Fax: (02) 8251 1750

Western Australia



As an industry association it is our task to provide value to our members, whether it be through advocacy or other services. We were therefore very pleased to recently launch the vegetablesWA Insurance Scheme as a whole new way to deliver real value to our members.

The scheme combines the purchasing power of multiple growers using a trusted insurance broker on our behalf in negotiating the best possible deal with a whole range of insurance providers. When piloting the scheme, growers were able to get a 25 to 40 per cent reduction to their existing premium. Many were able to also get significantly improved insurance coverage as well and benefit from the services of a dedicated broker.

By participating in the pilot scheme, growers were able to make greater savings than their entire Agricultural Produce Commission (APC) Fee for Service contribution, which is great news. I encourage all growers to contact us at vegetablesWA to get a quote as

the more who participate, the better the discounts will be. It's exciting to be able to help members in new ways.

We have also had some extremely good news recently when I joined Water Minister, the Hon. Mia Davies MP, to launch the latest projects under the Water for Food program funded by Royalties for Regions. We are pleased to have a government willing to invest in creating a more profitable industry for the future.

The current round of projects will further explore the economics of irrigation infrastructure investment at Myalup, Midlands (Gingin to Dongara) and Manjimup. These projects will build on the existing work undertaken by vegetablesWA and funded by the WA Agricultural Produce Commission (APC) and Horticulture Innovation Australia Limited. vegetablesWA President Maureen Dobra has been asked to sit on the Ministerial Advisory Panel on the Myalup project, which will look at

various alternatives originally proposed by vegetablesWA in 2012.

I am pleased to report that the constitutional changes proposed at the vegetablesWA AGM last year were passed unanimously and accepted by the WA Department of Commerce, with effect from late last year. This puts our organisation on an even firmer footing for the future.

Meanwhile, the WA Department of Agriculture and Food continues to undergo changes as a result of funding decreases. Growers and vegetablesWA will have to adapt to this situation too and have another look at how we can best leverage the resources available to us. I want to put on record the sincere appreciation we have for the contributions to our industry of a number of staff who have recently left DAFWA, including Terry Hill, Allan Mackay, Ian McPharlin and Georgina Wilson.

Labour availability issues continue as something we are pursuing with government. Following our representations

last year with the relevant minister, The Hon Michaelia Cash, we have been working further with departmental representatives as well as the Food, Fibre and Timber Industries Training Council and the Chamber of Commerce and Industry. I would again encourage growers to ensure that any agreements they have with labour hire providers include the appropriate clauses to ensure that the visa status of employees is correct.

Our Field Extension Officers also continue to undertake their important roles. As always, growers should not hesitate to contact them or other staff if there is something we may be able to assist with. The office number is (08) 9481 0834.

John Shannon
vegetablesWA
Executive Officer
103 Outram St
West Perth WA 6005
Phone: (08) 9481 0834
Email: john.shannon@
vegetableswa.com.au

CURRENTLY TAKING ORDERS 2015 SEASON

BIODEGRADABLE MULCH FILM LAY AND LEAVE

- ✓ Weed Control
- ✓ Moisture & Soil Retention
- ✓ Heat Reflection
- ✓ Soil Enhancing
- ✓ Easy to Order
- ✓ Aust. Wide Delivery

Australian Bio-Plastics
GROWING TODAY - PROTECTING TOMORROW™

Ph. 03 5824 1632 Mob. 0438 579 989 www.ausbioplas.com.au



Energises and protects crops right from the start

DURIVO® is a long lasting, soil applied insecticide giving protection against sucking and chewing pests on Brassica, Leafy and Solanaceae crops.



syngenta.

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

For further information please call the Syngenta Technical Product Advice Line on 1800 067 108 or visit our website at www.syngenta.com.au. Product labels and usage directions should be followed for the application of any product referred to in this publication. For further technical information or product advice, contact the Technical Product Advice Line on 1800 067 108 or visit www.syngenta.com.au. The information contained in this brochure is believed to be accurate. No responsibility or liability is accepted in respect of this information and those non-excludable conditions implied by any Federal or State legislation or law of a [®]Registered trademark of a Syngenta Group Company. [™]Trademark of a Syngenta Group Company. AD13/356

TM