vegetables australia

September/October 2014

Andrew Craigie
Going for EnviroVeg Gold

Sean Croft
The organic edge

Rob Baan
Linking fresh veggies to health

Soil Wealth project
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Geoff Moar

AUSVEG Chairman

As always, AUSVEG is committed to providing Australian vegetable growers with opportunities to expand their knowledge, networks and access to fresh produce markets in both the domestic and international arenas. Many of you know that achieving such feats can, from time to time, involve some precious time away from the farm. However, given the benefits and valuable learning and networking opportunities it can bring to our industry, such investments of time can be worth the effort.

This year, Australia was fortunate enough to host the 29th International Horticultural Congress, an event that has only ventured to the southern hemisphere once before in its 150-year existence. From 18-22 August, over 3,000 delegates from 100 countries flooded Brisbane's Convention and Exhibition Centre to learn about ground-breaking R&D underway in different horticultural industries throughout the world.

Among those present was a delegation of 25 individuals from across the vegetable industry, who attended the event with AUSVEG representatives. It was a busy week of networking and knowledge-building, and pleasingly, the group walked away with some new ideas that could possibly translate into future R&D projects on home soil.

After sitting in on more than 40 symposia, the delegates also noted that their week at the Congress reinforced just how highly Australia ranks on the world stage in terms of its quality of produce and exceptional standard of farming practices. While this is an encouraging thought, there is still plenty of room to improve and expand. Our nation's vegetable growers must continue to develop their farming operations in order to remain competitive into the future. One way to achieve this is to build strong business networks, particularly in existing and developing export markets. This has been identified as a key area where we may be able to counteract pressures at home, and simultaneously grow our farming operations in the long-term.

Fortunately, such developments are already underway. In early September, a contingent of Australian vegetable growers and industry representatives travelled to Hong Kong to attend Asia Fruit Logistica, the continent's leading trade show for the international fresh fruit and vegetable business. It gave attendees the opportunity to meet with key exporters, suppliers and customers from around the world and sample the array of new products and concepts that were on show.

Mid next month, the industry will also be represented at Agritech Japan. This is another reputable international event that attracts agricultural industry professionals throughout Asia who are seeking suppliers.

As international business opportunities continue to emerge, AUSVEG remains committed to helping growers explore the exciting potential of export markets.

Geoff Moar
Chairman
AUSVEG

Richard Mulcahy

AUSVEG Chief Executive Officer

In a time where there is constant pressure on vegetable growers throughout the country to deliver fresh, quality produce in an increasingly challenging environment, it is essential that we recognise and celebrate those who are passionate about our industry and are determined to see it develop further.

One individual who meets this description is Dutch cultivator and Koppert Cress CEO, Rob Baan. For those who were fortunate enough to see his Speaker Session at the 2014 AUSVEG National Convention, or presentation at the Produce Innovation Seminar, you would know that he is a colourful representation of what this industry needs: passionate growers who aren't afraid to be creative and try new methods of production that ensure fresh vegetables are as appealing to consumers as possible. This edition of *Vegetables Australia* features an in-depth interview with Mr Baan and I am sure that his thoughts will challenge you to view the existing market in a new light.

Fortunately, innovation in the vegetable industry is not confined to Europe. Closer to home, local operators such as Kalfresh in south-east Queensland are also playing their part. The recent Kalfresh Carrot Field Day invited the general public to visit the company's fields and factory facilities and see for themselves how fresh produce is delivered from paddock to plate. Judging from the successful turnout, numbering in the hundreds, it is clear that transparency between growers and consumers goes a long way in promoting the value of fresh Australian vegetables.

Innovation is the key to ongoing success in any field. No matter how long you have been working in the industry, it is imperative to embrace new thoughts and ideas – while also balancing these with tried and true methods – to ensure that the Australian vegetable industry remains vibrant for many years to come.

On a more general note, many of the important breakthroughs within our industry would not be possible without the levy-funded R&D projects that ensure we remain at the forefront of innovation. At the time of printing, NSW Liberal Senator Bill Heffernan had announced plans for a Senate inquiry into the entire agricultural research and marketing levy system, with the aim to investigate how levies are collected and used. At this stage it's expected the Senate's Rural and Regional Affairs Committee will produce a report by the end of the year.

As the national peak industry body for vegetable growers, AUSVEG will keep you updated on developments as they occur, as we continue striving to ensure levy-investment delivers strong returns at the farm gate.

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FRONT COVER:
Andrew Craigie
Photograph by Belle Young

Editorial

With the bitterly cold winter turning into spring, we bring you a packed edition of *Vegetables Australia*, full of content that is sure to be of interest to readers across the country as they look to the fertile and busy times ahead.

There has been a lot of focus on export markets recently, after the successful Reverse Trade Mission in June highlighted the significant opportunities within growers' reach. Our regular Economist article looks at the potential export markets for Australian vegetable growers in Asia and, interestingly, the Middle East (page 26). Following the successful Asia Fruit Logistica trade show in early September, we also present a run-down of export opportunities in the Hong Kong market (page 40).

One of the highlights at this year's AUSVEG National Convention Speaker Sessions was Rob Baan. The Dutch cultivator and Koppert Cress CEO had plenty to say about the importance of eating fresh, healthy food like vegetables and shares some of his words of wisdom on page 10.

In R&D updates we examine an important research extension program that aims to build the soil management skills and knowledge of vegetable growers and advisors throughout the country (page 16). We also present new research findings from another study which show that consumers do not look for a specific vegetable portion size when shopping, instead preferring to have more options of a basic size available to them. More on this report can be found on page 38.

Our grower profiles in this edition focus on Young Grower Con Laftsis, based in South Australia, who grows greenhouse capsicum and eggplant (page 18). Our Grower Profile focuses on Arahura Farms, the largest certified organic grower in Australia. Marketing Manager Sean Croft speaks to *Vegetables Australia* about his passion for growing organic produce, and his tireless work in the family business (page 30).

EnviroVeg updates include an interview with Dr John Cumming from Infotech Research, who discusses his current research project which examines how vegetable growers are using energy on their farms (page 32). Readers will also find a profile on EnviroVeg Gold Member Andrew Craigie, who speaks about the benefits the EnviroVeg program has brought to his farming operation in Tasmania and why he decided to make the move to the Gold tier of the program (page 34).

Finally, we bring news of the recent International Horticultural Congress in Brisbane (page 37), the Kalfresh Carrot Field Day (page 46) and look forward to the Northern Australian Food Futures Conference (page 29).

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Facts & figures...

$119

Australian cauliflower growers' returns on average totalled $119 per tonne in 2011-12, up 892 per cent on the previous year, according to ABARES data.

$2 million

Pumpkin, squash and gourd exports totalled more than $2 million in value in 2012-13. More than half of these exports were sent to Singapore, according to ABARES data.

79c

Australia's carrot and turnip exports received the highest export price from both the United Arab Emirates and Qatar at 79 cents per kilogram, according to the Global Trade Information Service.

25%

The average area planted for cabbage production in 2011-12 fell by 25 per cent from the previous year, according to ABARES data.

61%

The percentage of consumers who purchase zucchini as an ingredient in their dishes, according to the April 2014 Project Harvest report.

129

The number of global launches of products that contain zucchini, according to the April 2014 Project Harvest report.

50%

For 50 per cent of people, the ease of preparing cabbage was the key trigger for purchase, according to the April 2014 Project Harvest report.

2.5

Celery was purchased on average 2.5 times per month, according to the April 2014 Project Harvest report

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Rob Baan: Let's change the way we look at fresh vegetables and health

ROB BAAN HAS BEEN CALLED A LOT OF THINGS, INCLUDING THE WILLY WONKA OF VEGETABLES AND THE CHRISTOPHER COLUMBUS OF HORTICULTURE, WHICH REFLECTS HIS INHERENT SENSE OF ADVENTURE AND CREATIVITY WITHIN THE INDUSTRY. COMPARISONS ASIDE, THERE IS CERTAINLY ONE WORD YOU CAN USE TO DESCRIBE MR BAAN: PASSIONATE. FELICITY POWELL EXPLAINS.

R&D
Farm Productivity, Resource Use & Management

Wearing an eye-catching green blazer over a ladybug print shirt, Rob Baan commanded attention at the 2014 Produce Innovation Seminar, held in the lead-up to the AUSVEG National Convention in Cairns. He spoke to over 50 attendees at the Seminar about his successful business Koppert Cress, which specialises in cresses, described as "seedlings of unique plants, which each have their own specific effect on the senses", according to the company's website.

Koppert Cress is based in Monster, the Netherlands. The high tech greenhouses on the 1.7 hectare site not only house new and interesting varieties of cress, but also include a demonstration kitchen. The kitchen allows Mr Baan to communicate directly to the end users of his products – chefs, restaurants, caterers and hotels. This also allows for a familiarity with the products and ensures a reliable supply of experimental cress is distributed across Europe. Some examples of the innovative cress produced by Mr Baan include cress that tastes like camembert and a yellow edible flower garnish that "makes you drool like a dead mule".

However Mr Baan is much more than a creative cultivator running a successful business distributing to Europe and beyond. He is also a passionate advocate for encouraging people to increase their consumption of vegetables and highlighting the health benefits of vegetables at the same time.

"I am surprised by how few vegetables are eaten here, and how poor the diet is in Australia in vegetable consumption. It is low and that is dangerous because we as humans are made to eat plants. What I'm seeing here in Australia is that you eat a lot of meat, but not enough vegetables, and that's really important," he said.

"Food has a big impact on your body, because it is the only basis of your health."

Before taking over Koppert Cress, Mr Baan worked for several years in the seed industry. During this time he learnt that although we look completely different from the species of humans who walked the Earth thousands of years ago, internally, our genetic makeup and digestive system is actually still very much the same. But, even though humans have hardly changed, we are now eating things that our bodies are not made for.

"We are still all hunter-collectors. The human genome has changed a maximum 0.2 per cent in one million years. Our whole digestive system is exactly the same as 170 thousand years ago, and that's amazing because we feed ourselves

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Rob Baan presents at the 2014 AUSVEG National Convention in Cairns on June 20.

Photographs by John McRae.

with things that were not invented 170 thousand years ago, so we're getting all kinds of strange diseases and that's not good," he said.

Promoting health

Mr Baan acknowledged that keeping fresh and healthy food at the centre of peoples' minds is a universal challenge. Nowadays, multi-national companies have brands that dominate the food sector, with budgets for marketing and advertising that exceed the value of whole health food industries.

"These guys (in reference to large confectionary companies) have an advertising budget in Europe as big as the whole promotional budget for vegetables and fruit in Europe. This is our competition."

Mr Baan's take-home message for the attendees of the Seminar was that vegetable growers need to work together with a whole-industry approach to better promote the many health benefits of vegetables.

"If somehow the veggie growers and the health organisations could come together, that would really help Australian vegetable growers and the population too. It is said in the book, *The Hungry City* by Caroline Myers: 'If you don't feed your city well, the city dies.' Many people in the city are sick; sick without knowing. Diabetes is a sleeping monster. It is a big problem in Australia – you are one of the thickest countries in the world. There needs to be more communication between the city and the countryside," he explained.

"We (vegetable growers) are producing health. Not just bulk broccoli, but bulk health. That's interesting; it's adding value and it's the future."

Creating a name for Australian veggies

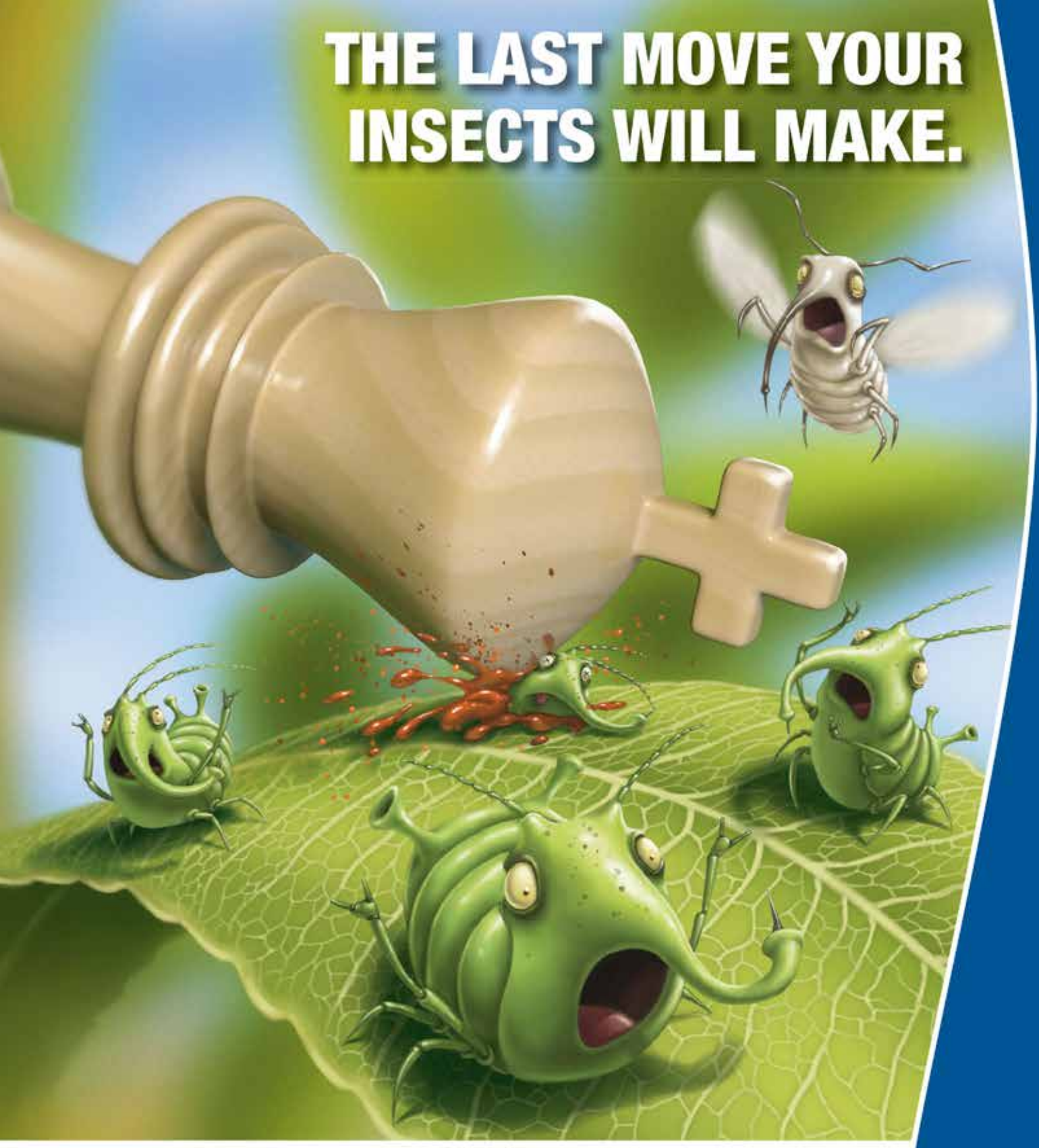
In line with other speakers at the Convention, Mr Baan also reiterated that growers need to sell the "story" behind their produce.

"It's a challenge because you must know who your customer is. And the customer is not the person paying your bill.

"If you realise that, you're already 20 steps further. This link we have to get better at. The farmers who release something into the market should also ask: would I feed this to my children, or my grandchildren, or my mother?

"The connection or the intimacy of this product is so important."

> "Food has a big impact on your body, because it is the only basis of your health."
>
> - Rob Baan



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Biosecurity brief

with Dr Kevin Clayton-Greene

R&D
Farm Productivity, Resource Use & Management

THE FEDERAL DEPARTMENT OF AGRICULTURE RECENTLY ALERTED INDUSTRY REPRESENTATIVES TO A POTENTIAL NEW RISK IN IMPORTED CARROT SEED FOR SOWING AND ANNOUNCED THAT IT IS LOOKING TO REGULATE FUTURE IMPORTS OF THE PRODUCT. IN THIS EDITION OF *BIOSECURITY BRIEF*, AUSVEG BIOSECURITY ADVISER DR KEVIN CLAYTON-GREENE EXPLAINS WHAT THIS POTENTIAL THREAT MEANS FOR AUSTRALIA'S VEGETABLE GROWERS.

Why is the Department of Agriculture regulating imported carrot seed?

A scientific paper released by a group of European scientists in May this year indicates that carrot seed could carry and transmit the bacterial pathogen *Candidatus* Liberibacter solanacearum (carrot seed liberibacter) to seedlings at reported rates of up to 40 per cent, increasing to 100 per cent in some cases when Psyllids (small, plant-feeding insects) are present in fields.

The liberibacter was first detected in Spain in 2008 following economic losses in carrot production for the fresh market. Following this initial detection, the liberibacter was also detected in Finland in 2010, as well as Sweden and Norway two years later, and in carrot fields used for production in France.

What is carrot seed liberibacter?

Carrot seed liberibacter is a bacterial pathogen that has the potential to significantly reduce yield. This bacterium is very similar to the one that causes Zebra chip disease in potatoes. No information is available on seed transmission of this bacterium on other vegetable crops to date, but celery seed has also been tested and found not to transmit this pathogen through seed.

What impact does it have on carrot plants?

As the liberibacter bacterium multiplies, it chokes off the supply of nutrients moving throughout the plant, weakening the plant and eventually killing it. Symptoms in affected plants include leaf curling, yellow and purple discoloration of leaves, stunted growth of shoots and roots, and proliferation of secondary roots.

What control measures is the government taking?

At present there are no controls on carrot seed importation to Australia. However, due to this potential new disease threat from seed, the Department of Agriculture is introducing regulation for future imports of carrot seed. The import protocols include testing the seed for liberibacter and heat treating infected seed.

As there have been no reports of this bacterium in Australia, the Department of Agriculture believes Australia can legitimately claim country freedom and impose emergency phytosanitary measures on imported carrot seed.

What does this mean for growers?

AUSVEG has indicated, in principle, its support for regulation of carrot seed imports. However, this is contingent on the vegetable industry playing a role in the development of protocols in order to avoid adverse economic impacts on the industry and impediments to the supply of seed.

Unfortunately, due to the fact that costs associated with testing and heat treating seed will be borne by seed importers, it is foreseeable that growers will experience an increase in the cost of seed. The shelf life of seed may also be impacted by heat treatment and the industry is looking at research to determine these impacts.

AUSVEG will continue to provide carrot growers with up-to-date information regarding development of protocols.

Seed importers are also involved in discussions with the Commonwealth to ensure that earlier mistakes associated with changes in seed import regulations are not repeated.

For more information contact
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R&D
Farm Productivity, Resource Use & Management

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Soil Wealth
NURTURING CROPS

Healthy soil is the lifeblood of Australian vegetable producers. While there is a large amount of research available on the most effective ways of managing soil, it is critical to be able to apply this information to specific crops and regions across Australia and realise the economic implications of any changes to practices.

In a recent survey, growers identified management of soil-borne diseases, biofumigation, interpretation of soil test reports, training in soil biology and the use of organic amendments as key areas where they would like to improve their skills. Growers also want information to be easily accessible, practical and relevant to individual commercial farming operations.

To address these concerns, a new three-year project run jointly by RMCG and Applied Horticultural Research (AHR), funded by Horticulture Australia Limited and matched funds from the Australian Government, has been introduced to help growers achieve long-term returns by effectively using existing soil management information on their farms, rather than generating new information.

"People have questions and the information is out there, but it's not very easy to find all the details and make a judgement about the best options for a production system," RMCG Consultant and Joint Project Leader Dr Doris Blaesing said.

"A lot of research has been done on soils, but we want to know, what does it do to a crop if you have certain soil conditions? What does it do to profitability? That's the missing link, really. We'd like to work on the profitability of healthy soils."

Project outline

The project, dubbed "Soil Wealth" has three main goals.

The first is that by 2017, 50 per cent of advisers to vegetable growers will use advanced soil skills and knowledge to deliver farm level support to 200 growers. This initial step will map out crop-specific regional priorities and identify whether different businesses or segments have different needs in regards to soil management improvements, related knowledge and technologies, and how they would like to hear about and try these.

"We're going to check that we've actually reached this target, which is often not done in projects. We will do that to keep an eye on ourselves and learn from feedback," Dr Blaesing said.

The second goal is to have 200 growers adopting, trialling or intending to adopt management practices which improve soil condition and farm profitability. This will be achieved by using three main extension tools in the form of farm-based soil improvement plans, benchmarking sites and demonstration sites (focus farms) to showcase and create information and resources that can ultimately be used by all within the vegetable industry.

"We've analysed the major growing regions and the major crops and production systems in these regions, as well as some of the key growers. We will have field days, crop walks and discussion groups on demonstration farms to show good practices. We will also select quite a few reference farms where we work with the growers and their advisers on making change happen. These will be used for benchmarking. Then we will measure the

Field peas and annual rye in Cowra, NSW.

An example of healthy soil with worms.

changes to see if skills, practices, and the soils have improved or not," Dr Blaesing said.

The third and final goal is to develop an innovation system that connects growers, the information and technology supply chain and the research community so that all parts of the vegetable industry and its support system work together to ensure continuous improvements in soil management.

"We're going to compile the information so people can access and use it easily. This could initially look up tables about fertilisers, or green and biofumigation crops that are there to nurture the soil. It will help growers to decide which management approaches are good for which soil-related problems. We will compile information on what growers ask us for."

Building knowledge

The project team will work closely with growers, commercial agronomists, independent advisers and on-farm agronomists, as well as linking with organisations and individuals interested in the information or wanting to contribute to it. As a result, there are several opportunities available to those who are interested in being involved in the Soil Wealth project.

Dr Blaesing will be overseeing developments in the southern states of Australia (Victoria, Tasmania, South Australia and southern Western Australia) while Dr Gordon Rogers of AHR will be looking after the northern states (Queensland, New South Wales, Northern Territory and northern Western Australia). Both project leaders have teams supporting them.

"Growers are very interested because it's a project that talks to them about soil health, which is something really essential. If you don't nurture your soil as a vegetable grower, your costs are going to go up," Dr Blaesing said.

"It's similar if you look at people's health. We can't all eat the same thing or do the same exercise, but if we understand what makes us healthy or sick, then we can make our own decisions. It's the same for vegetable producers – if they understand what is good and bad for the soil, then they can make better decisions on their farm."

For more information on the Soil Wealth project, contact Dr Gordon Rogers on (02) 9527 0826 and gordon@ahr.com.au, or Dr Doris Blaesing on (03) 6437 2264 and dorisb@rmcg.com.au.
Project Number: VG13076
The Soil Wealth project is being run in conjunction with the Integrated Crop Protection extension project.
Project Number: VG13078

Q&A Young grower profile

Name: Con Laftsis
Age: 32
Location: Virginia, South Australia
Works: Laftsis Fresh Produce
Grows: Greenhouse capsicum and eggplant

Photographs by Iain Bond.

How did you first become involved in the vegetable industry?

I first became involved in the vegetable industry as a young boy before and after school. It's a family owned business. I started full time at the age of 17. We grew 50,000 capsicum plants in greenhouses then. Now we grow 150,000 capsicum plants and 60,000 eggplants, all in greenhouses.

What is your role in the business?

My main role in the business is the sales. I also run the packing shed and organise what needs to be done the following day.

How would you describe your average day at work?

An average day starts at 12.30am where we load the truck and go to market. We start making orders around 2am and wait for the retailers to start coming in to do their buying.

Once market is over I go back to the farm for a full day of work, organising pallets for interstate markets and, in the meantime, also receiving and making numerous phone calls to market agents. I also organise staff to pick and pack the correct amount of boxes. After lunch I do my crop scouting and check what needs to be sprayed and watered. Often it's a 12-15 hour work day, but it doesn't really bother me because I enjoy what I do best.

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

The most enjoyable thing about the vegetable industry to me is watching a plant grow from a seedling to a full mature plant. The more you put in to your plants, the more they are going to perform for you.

What are the biggest challenges that you face?

The biggest challenges in our industry are prices and diseases. Prices tend to fluctuate up and down weekly. Supply and demand controls the markets. In greenhouse growing, thrips and two spotted mites have been a threat.

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

Government should be giving growers subsidies to employ and teach young Australians who are willing to work and learn.

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

Accountant.

Where do you see yourself in five years?

Still working at Laftsis Fresh Produce. Expanding again and setting up a farm in Queensland.

Broccolini seedlings bitten off by rabbits in the Lockyer Valley, 2014. Image courtesy of the Darling Downs-Moreton Rabbit Board.

Pests nibble at veggie growers' bottom lines

R&D Farm Productivity, Resource Use & Management

Plant Health Australia

THE EUROPEAN RABBIT *(ORYCTOLAGUS CUNICULUS)* HAS WREAKED HAVOC IN AUSTRALIA FOR MORE THAN 150 YEARS AND PRESENTLY CAUSES MORE THAN $600 MILLION DAMAGE ANNUALLY. THIS EDITION OF *THE FRONT LINE* OUTLINES THE GROWING RISK POSED BY RABBIT INFESTATIONS IN THE LOCKYER VALLEY REGION OF SOUTH-EAST QUEENSLAND, AND THE STEPS VEGETABLE GROWERS NATIONWIDE CAN TAKE TO MINIMISE RABBIT ISSUES.

The Lockyer Valley, commonly referred to as south-east Queensland's 'Salad Bowl', supports a $160 million-a-year vegetable industry. However, according to Darling Downs-Moreton Rabbit Board (DDMRB) Chairman Ross Bartley, an escalating rabbit infestation poses a significant threat to much of this region.

"We first became aware of crop damage in the Lockyer Valley caused by rabbits in 2012. We have seen damage to lettuce, broccolini and beans," Mr Bartley said.

"Typically damage has occurred at the edge of crops that are next to infested creek banks and newly planted seedlings are eaten off. Many crops are at risk."

The DDMRB was established to provide advice and expertise on rabbit control. Mr Bartley said rabbit populations in the Lockyer appear to be growing and spreading, particularly along major corridors such as creek lines.

Many vegetable growers in the region believe that rabbits first arrived on their properties following severe flooding in January 2011.

"Vegetable growers first reported crop damage in 2012. In total the Board is aware of about six properties that have incurred losses. We suspect that other properties are impacted that we are not aware of," he said.

Rabbit management

The basis of effective rabbit management is the warren, which provides protection from weather and predators, and enables rabbits to inhabit harsh environments. Mr Bartley said destroying warren networks is the most effective form of long-term control, as rabbits do not dig new warrens readily.

"Integrated control (the use of several methods) is usually necessary," he added. "These methods include removal or burning of log piles and rubbish piles, physical destruction of warrens or burrows, burning of overgrown areas, netting off haysheds, raising containers above ground, baiting, fumigation of burrows, weed control, cage trapping and soft-jaw trapping."

Eliminating piles of timber, corrugated iron and mounds of soil, particularly within the vicinity of creek lines, minimises the risk of infestation. Watching for tell-tale signs of rabbit infestation, such as damage to newly planted seedlings, dung heaps and active warrens, can assist in determining population density.

"Overgrown and often inaccessible creek banks can also pose a major problem, as we suspect that rabbits have warrens in the sandy banks in pockets along creeks; however they are difficult to detect. The DDMRB, with support from the

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4 Metre Fixed King Power Harrow	(SU:3715)	$33,568	$10,070	$2,359	**$25,848**
7.2Metre Ercules Folding Rotary Hoe (400hp)	(SU:4167)	$75,659	$22,698	$5,296	**$58,257**
4.7Metre Ercules Folding Rotary Hoe (400hp)	(SU:4921)	$67,434	$20,230	$4,720	**$51,924**
4.2M Maxi Squalo Folding Rotary Hoe (300hp)	(SU:5182)	$55,997	$16,799	$3,920	**$43,118**

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ONE ONLY - 6200 Two Row Potato Harvester with 6 Ton Bunker	$279,000	$41,850	$23,715	$260,865 incl gst

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The European rabbit (*Oryctolagus cuniculus*).

Lockyer Valley Regional Council, plan to survey along major creek lines in October this year in an effort to locate outbreaks of rabbits," Mr Bartley said.

Viral control

CSIRO researcher Dr Tanja Strive specialises in the development of viral controls for rabbits. According to Dr Strive, rabbit management is much like weed management: if performed regularly, rabbit populations are unlikely to get out of hand, keeping the overall costs of management lower in the long-term.

"More than one method will have to be applied to get on top of any rabbit problem. Liaising and co-ordinating with neighbours and local and state pest control officers will enable a strategic and broad-scale approach. We recommend that communities develop a pest management plan," Dr Strive suggested.

Physical rabbit management is supported by the establishment of viral controls in Australia, including the myxoma virus, first released in 1950, and the introduction of the Rabbit Haemorrhagic Disease Virus (RHDV) in 1995. The spread of these bio-controls led to a dramatic reduction in Australia's rabbit population. However, recent work shows that rabbits in certain areas of Australia are beginning to develop partial resistance to infection with RHDV.

"In 2009 an endemic benign calicivirus was identified in Australian rabbits. This benign virus partially protects rabbits from infection with the lethal RHDV and occurs in the high rainfall, cool climate areas; the peak agricultural regions of Australia," Dr Strive said.

In an effort to further reduce rabbit populations and avoid resistance issues, Dr Strive is currently developing an improved strain of RHDV. While this new strain is not likely to reset the clock and cause a devastating impact like when RHDV was first released in 1995, it is likely to result in improved reduction of rabbit numbers.

"The successful management of rabbits is only achieved through the use of multiple control methods. Bio-controls are best used to initially reduce the population; however long-term control of rabbits is achieved by utilising conventional control methods such as warren ripping to 'mop up' the remaining rabbits after a bio-control has been used," she said.

> "The successful management of rabbits is only achieved through the use of multiple control methods."
>
> - Dr Tanja Strive

Future control

The cumulative benefits to Australia's rabbit control initiatives over 60 years is estimated to be in excess of $70 billion. With the exception of Australia's dense coastal forests and wet tropic regions, rabbits can be found across the continent. Experts say Australian vegetable growers must remain vigilant of rabbit infestations to prevent intensification.

Lockyer Valley vegetable growers can contact the Darling Downs-Moreton Rabbit Board on (07) 4661 4076, or the Lockyer Valley Regional Council on 1300 005 872 for more information or to report rabbit issues.

For vegetable growers living in other regions, please contact your local council if you experience any rabbit issues.

For further information, contact AUSVEG Biosecurity Officer Dean Schrieke on (03) 9882 0277 or at dean.schrieke@ausveg.com.au

Key carrot facts and figures

TO ENABLE DEEPER INSIGHTS INTO THE FINANCIAL, PRODUCTION AND EXPORTING PERFORMANCE OF KEY AUSTRALIAN VEGETABLE PRODUCTS, WE HAVE DEVELOPED A SERIES OF SIX CROP-SPECIFIC VEGGIE STATS PROFILES. THE SECOND INSTALMENT OF THIS SERIES WILL FOCUS ON CARROT 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 carrots. Veggie Stats utilises data from the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) and the Global Trade Atlas, funded by Horticulture Australia Limited (HAL) using the National Vegetable Levy and matched funds from the Australian Government.

It is important to note the data itself provides a broad indication of the performance of carrot 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.

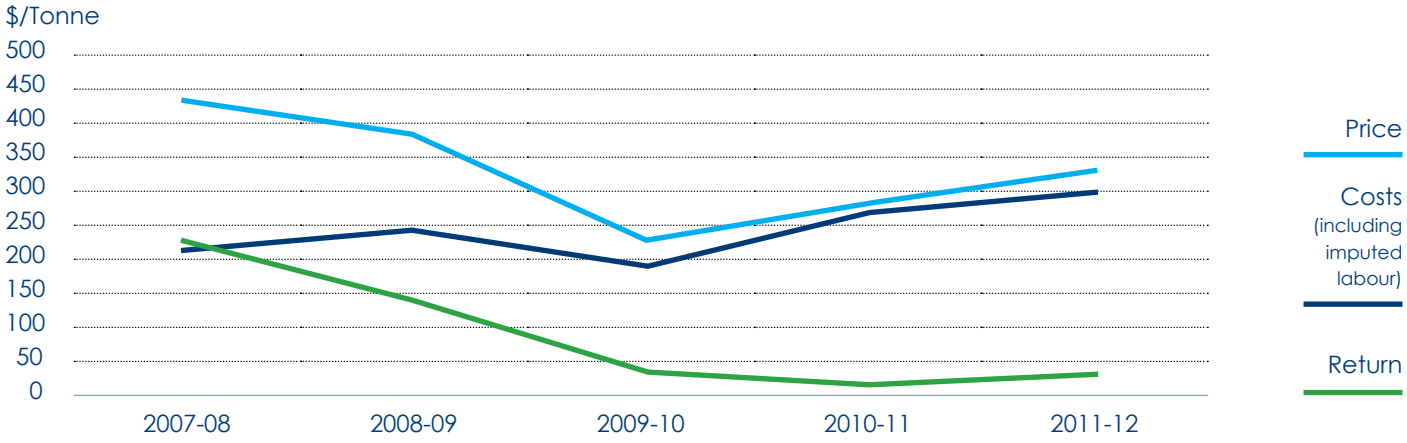
The data is presented at the national level and therefore does not account for differences among jurisdictions.

VEGGIE STATS: CARROT

Carrot Production – Key facts and figures

- Carrot growers' returns, on average, have been falling since 2007-08, despite marginally increasing in 2011-12.
- Since 2007-08, average domestic carrot prices have fallen by 24%, whilst average costs have increased by 42%.
- Carrot production has fallen on average by 80% since reaching its record high levels in 2008-09.
- Fresh carrot and turnip exports are Australia's largest vegetable exported commodity, representing over 20% of all vegetable exports in 2012-13.
- The value of Australian carrot and turnip exports has remained stable over the last four years, totalling $51 million in 2012-13.

Australian Carrot Growers' Financial Performance (average per farm)



Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 71
Returns: The difference between price and costs (including imputed labour).

Current Financial Performance

Australian carrot growers' returns on average totalled $35 per tonne in 2011-12, up 133% on the previous year.

In 2011-12, the average price received per tonne of carrots was $331, whereas the average cost to produce a tonne of carrots was $296.

Long Term Trends

Carrot growers' returns, on average, have been falling since 2007-08, despite marginally increasing in 2011-12.

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

HAL Horticulture Australia

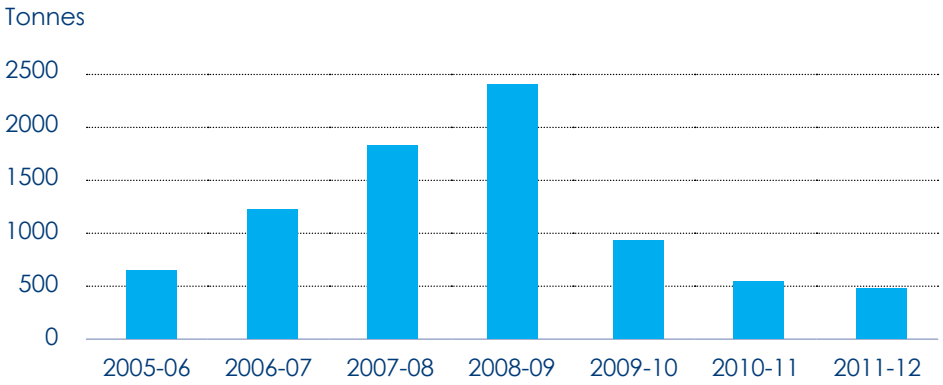
AUSVEG

Australian Carrot Growers' Production (average per farm)

Australian Carrot Production

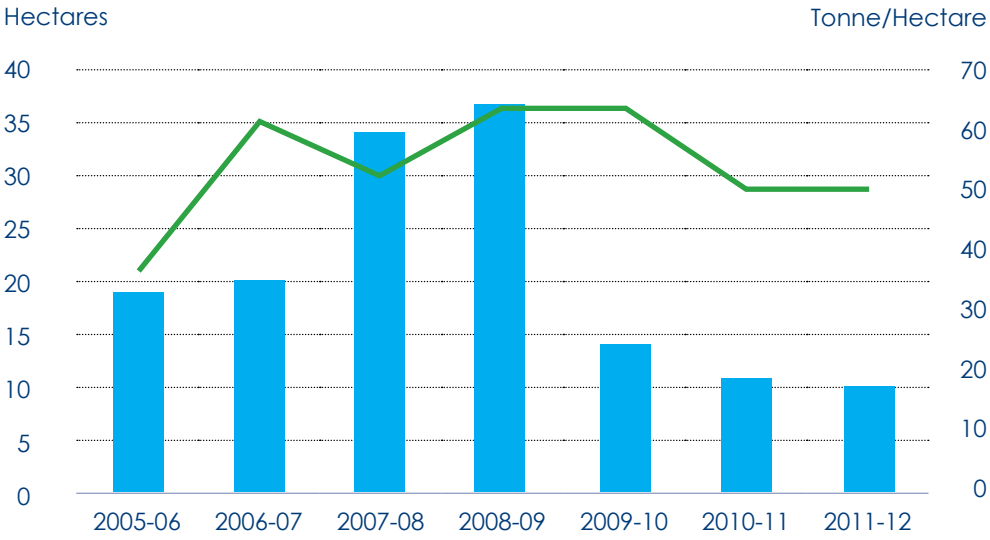
Australian carrot production per farm averaged 481 tonnes in 2011-12, down 11% on the previous year.

Average carrot production has fallen by 80% since reaching its record high levels in 2008-09.



Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 71

Area Planted v Yield (average per farm)



Australian Carrot Production

The average area planted in 2011-12 is well below its peak in 2008-09.

In 2011-12, carrot growers' average yields were 50 tonnes per hectare, lower than the five year average of 56 tonnes per hectare.

Area Planted

Yield

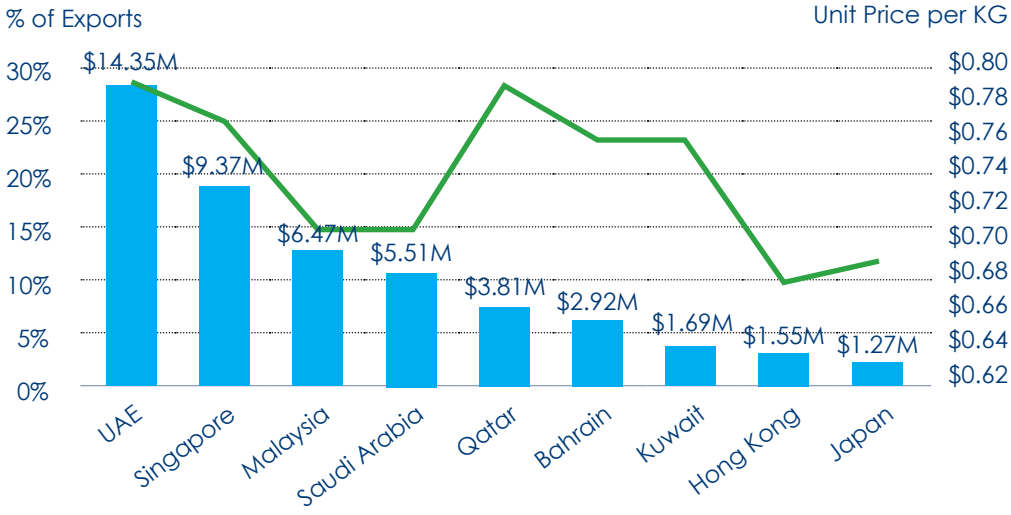
Source: ABARES vegetable farm survey 2011-12 and 2012-13, page 71

Destination of Australian Carrot and Turnip Exports and Export Prices Received

Exports

The majority of Australia's carrot and turnip exports were sent to the Middle East and Asia in 2012-13.

Australia's carrot and turnip exports received the highest export price from both the UAE and Qatar at $0.79 per kg, whilst the lowest export price was Hong Kong at $0.68 per kg.



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

Vegetable exports:
Capitalising on the dining boom

VEGETABLE EXPORTS OFFER AUSTRALIAN GROWERS AN ALTERNATIVE MARKET TO SELL THEIR PRODUCE, WITH THE POTENTIAL TO IMPROVE RETURNS. AUSVEG ECONOMIST SHAUN MUSCAT EXAMINES THE CURRENT FIGURES SURROUNDING VEGETABLE EXPORTS AND EXPLAINS THE TRENDS FOR GROWERS TO KEEP IN MIND.

In recent years, Australia's vegetable exports have been relatively stagnant, which could be attributed to the historically high Australian dollar and limited market access, particularly in Asia. Moving forward, vegetable trade opportunities are expected to become more viable, with the signing of Free Trade Agreements (FTAs) with South Korea and Japan and the possibility of finalising an agreement with China by the end of 2014. These agreements, coupled with the predicted devaluation of the Australian dollar, are expected to provide Australian vegetable growers with unprecedented export opportunities.

This article will identify the major destinations for Australian vegetable exports and highlight any trends with particular countries or commodities. This analysis is underpinned by the latest international trade data sourced from the Australian Bureau of Statistics.

The figures

In 2013-14, Australian vegetable exports totalled $256 million in value, a 3 per cent increase from the previous year (which equates to $7.6 million). Fresh vegetables continue to be Australia's largest export category by a significant margin, accounting for 62 per cent of the total value of vegetable exports in 2013-14 (see Figure 1). The market share of the remaining exports were processed (14 per cent), other (14 per cent) and frozen (9 per cent).

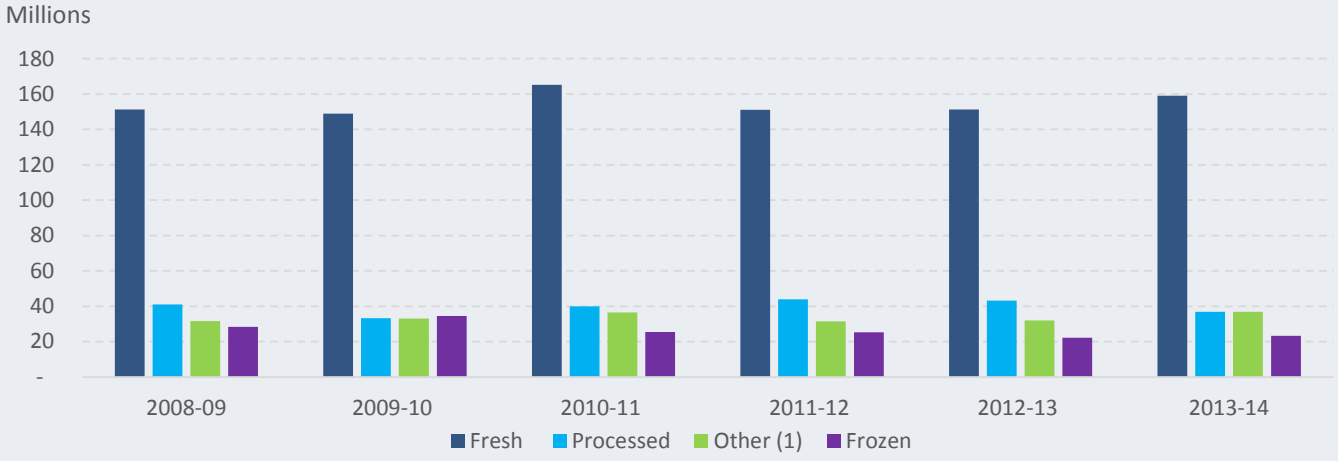
Within these four major categories of vegetable exports, processed exports experienced the most significant percentage fall (15 per cent) in 2013-14; however this was offset by increases in fresh (3 per cent), other (15 per cent) and frozen (5 per cent) vegetables.

Top markets

New Zealand, Japan and Singapore have been the top three vegetable export destinations, for all vegetables, in the last nine years. In 2013-14, Australian vegetable exports to Japan and New Zealand fell by 9 per cent and 4 per cent respectively. However, vegetable exports to Singapore increased by 11 per cent.

Japan continues to be Australia's leading export destination, occupying 18

Figure 1: Australian vegetable exports by category, value.



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

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Figure 2: Australia's top 12 vegetable exporting destinations, (value, $ millions).

Country	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Total	$252.4	$249.9	$267.3	$252.0	$248.7	$256.3
Japan	$47.8	$32.6	$45.5	$43.8	$51.1	$46.6
New Zealand	$53.9	$63.7	$56.5	$50.6	$32.2	$31.0
Singapore	$24.0	$24.8	$23.7	$24.4	$23.2	$25.7
United Arab Emirates	$14.8	$15.4	$17.0	$16.9	$18.7	$23.3
Malaysia	$12.2	$13.4	$12.9	$12.5	$13.2	$15.1
Netherlands	$8.6	$8.4	$10.9	$11.4	$11.04	$11.5
Indonesia	$7.2	$13.2	$13.8	$10.7	$12.2	$10.9
Thailand	$3.4	$2.9	$4.4	$3.2	$8.1	$9.1
France	$2.5	$2.1	$1.6	$2.4	$4.2	$8.7
Germany	$5.3	$8.3	$8.2	$8.6	$12.0	$8.6
Hong Kong	$7.5	$6.7	$6.7	$5.8	$7.2	$7.7
Saudi Arabia	$4.9	$5.6	$7.0	$7.5	$5.7	$7.1

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

per cent of the total market. More broadly, a promising story among the main export destinations has been the continual rise in exports to both the Asian and Middle Eastern regions.

Commodities

Australia's largest export group, fresh vegetables, grew to $159 million in 2013-14, which was approximately a 5 per cent increase from the previous year. As shown in Figure 3, carrot and turnips are the major fresh vegetable export commodity and grew to $56 million in 2013-14. Australia's carrot and turnip exports are predominantly sent to the United Arab Emirates ($17 million), Singapore ($9 million) and Saudi Arabia ($7 million).

Furthermore, Australia's fresh or chilled cauliflower and headed broccoli exports have grown considerably in the past three years, around 175 per cent. Similarly beans have been a strong vegetable exporting commodity, increasing by 19 per cent in 2013-14 to $4.5 million. New Zealand received 99 per cent of Australia's fresh bean exports.

Conclusion

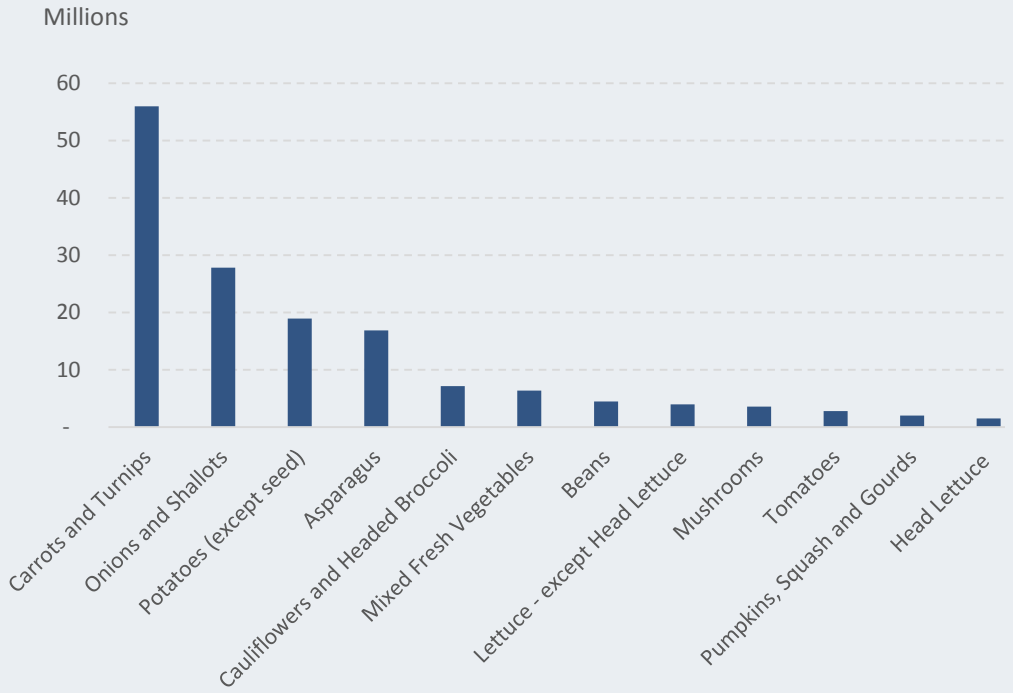
The main story being presented from this data is that Australian vegetable exports are largely being sent to either Asian or Middle Eastern countries. For example, 10 of Australia's 12 largest fresh vegetable exporting destinations, in terms of value, were either in the Middle East or Asia in 2013-14.

The conclusion of the FTAs and the Trans-Pacific Partnership Agreement is expected to provide unprecedented opportunities for Australia's vegetable exports. In the medium to long-term, Asia's rising population and affluence is expected to further increase Asia's demand for premium produce, with Australia potentially benefiting from this situation.

Not to go unnoticed is the recent surge in vegetable exports to both the United Arab Emirates and Saudi Arabia. These markets are further developed financially than a number of Asian countries, particularly in terms of income and economy size. This means that the Middle East has the potential to provide Australian vegetable growers with more immediate returns.

However, Australian vegetable growers cannot be complacent and assume these opportunities are easy and profits are achieved immediately. Realising the benefits that exports can provide requires ongoing effort, including relationship-building and continuous improvements and amendments to products and packaging. Growers must realise that vegetable exports are a long-term venture and must begin to make inroads immediately to fully capitalise on the demand for Australia's premium produce when it is at its highest.

Figure 3: Australia's fresh vegetable exports, value, 2013-14.



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

THE BOTTOM LINE

- Fresh vegetables continue to be Australia's largest export category by a significant margin, accounting for 62 per cent of the total value of vegetable exports in 2013-14.
- Australian vegetable exports are largely being sent to either Asian or Middle Eastern countries including Singapore, the United Arab Emirates and Saudi Arabia.
- Carrot and turnips are the major fresh vegetable export commodity and grew to $56 million in 2013-14.

AUSVEG: (03) 9882 0277
This project has been funded by HAL using the National Vegetable Levy and matched funds from the Australian Government. Project Number: VG12078

Conference brings focus to northern Australian food production

The inaugural Northern Australia Food Futures Conference will kick off this November, bringing together agricultural companies, successful producers, government and research organisations from across northern Australia (Northern Territory, Queensland and Western Australia) to discuss opportunities to grow the cropping and horticulture industries.

Conference Convenor and retired mango farmer, Ian Baker, said the idea for the conference was driven by a group of farmers from the Northern Territory Farmers Association and is now starting to generate significant interest and excitement.

"This will be the first time in 30 years that the northern Australian agriculture industry has come together to discuss our future. There's been a lot of focus and talk about the Asian century and the opportunities it presents for Australia. We're hoping the conference will help us to explore the opportunities and influence thinking and decision-making around the market and economic drivers for growth, rather than just simply looking at resources. We need to ensure the right policy settings, so we can turn some of these opportunities into reality."

The Conference will focus on broad sector issues and involve commodity sessions with an emphasis on cotton, sugar, horticulture, grains, fodder and niche crops. Discussions will also centre on the markets that present the best opportunities for northern Australian agriculture.

A high profile line-up of guest speakers will include John Howard (Peanut Company of Australia), Gavin Scurr (Pinata Marketing), Bob Del Alba (Queensland Cotton), David Anthony Auscott, Noel Pearson (Cape York Institute), Federal Minister for Agriculture Barnaby Joyce and the three state Ministers for Agriculture from the Queensland, Northern Territory and West Australian Governments.

The Northern Australia Food Futures Conference will be held from 3-5 November 2014 at the Darwin Convention Centre. For more information go to http://foodfutures.ntfarmers.org.au.

AUSVEG Board farewells Mark Napper

After four years of service on the AUSVEG Board of Directors, Mark Napper was given a formal farewell at the 2014 AUSVEG National Convention, Trade Show and Awards for Excellence in Cairns.

AUSVEG Chairman Geoff Moar (pictured left) presented Mr Napper (pictured right) with a plaque to honour his outstanding efforts during his time on the AUSVEG Board.

With over 25 years of experience in Australian agribusiness – 17 of which in horticulture – Mr Napper will no doubt bring a wealth of knowledge and experience to his new position on the Board of Directors of Horticulture Australia Limited (HAL).

AUSVEG would like to thank Mr Napper for being such an invaluable member of its Board and wishes him the best in his new position.

Croft's carrots bring flavour to the table

ORGANIC FARMING MAY SEEM LIKE A STRAIGHTFORWARD PROPOSITION, BUT IT TAKES A LOT OF HARD WORK TO PRODUCE A GOOD QUALITY PRODUCT. DIMI KYRIAKOU SPEAKS TO ARAHURA FARMS MARKETING MANAGER SEAN CROFT ABOUT HOW A SMALL FAMILY BUSINESS DEVELOPED INTO ONE OF THE LARGEST CERTIFIED ORGANIC CARROT GROWERS IN THE COUNTRY.

Established in 2000, Arahura Farms specialises in growing 100 per cent certified organic carrots, beetroot and onions. However, it may not have been so successful if the business managers stuck with their original plan to grow organic lavender.

"Mum and Dad did a bit of market research and realised that organic lavender was not commercially viable," Arahura Farms Marketing Manager Sean Croft explains.

"So they opened up an organic book and found the biggest wholesale agent and rang them up and said, 'We want to grow organics, what do you want?' And they said, 'Carrots.' That's how we started growing carrots basically," he laughs.

Based in Nyah West near Swan Hill in Victoria, the family business prides itself on being able to supply its customers with high quality produce all year round. According to Sean, this continuity of supply, in addition to tasty produce, is what sets Arahura Farms apart from its competitors.

"We're in an organic world, and there's a conventional world, and the two are completely different. Consumers have a choice between organic and conventional; with organic the consumers know the farming method is sustainable and chemical-free. Our edge is that we invest heavily in trying to grow good carrots – our motto is: Bringing flavour to the table," he says.

"If the carrots don't taste good, they don't leave the farm. The most satisfaction I get is driving a B-Double load of carrots to the market and knowing that they're going to sell out in a week. That's what I love the most; packing out good carrots."

The organic edge

You could say that organic farming runs in the blood of the Croft family – whether the end product was carrots or lavender, this particular method of farming was always going to be their preferred choice.

"We're not hippies," Sean laughs, "but I would never farm any other way. I personally have always farmed organically. I grew up on the farm and I wanted my kids to grow up on a farm because I think it's the best childhood you could ever have.

"If you can make money and not use chemicals and have a safe place to live, why wouldn't you do it? I don't have to go home and tell my wife to take the sheets off the clothesline because the boys are going to go past with a sprayer."

The process is made easier given the farm's location in north-west Victoria. Sean admits it's a good climate to grow carrots throughout the year, and there are also limited pest and disease pressures to deal with.

"You hear people say that if you get organics right, you don't need to do anything. We use a lot of compost and invest a lot of money in getting our soils right to grow a good carrot. We don't try to correct problems as they come up. Our philosophy is that if you get everything right from the very start, the rest will look after itself," he says.

However, things haven't always been smooth farming.

Photographs by Jo Sheldrick.

A three-year bout of disasters – a locust plague, drought, government changes to water allocations, a second locust plague and then floods – should have, logically, shut down the operation completely. But, as Sean explains, surviving these hardships forced the family to re-think its business structure.

"Dad is a numbers man and he has a spreadsheet for everything. He was on the front foot with the banks during that time and the only reason we survived was because we run a good business – we're not just farmers," he says.

"I left the farm for six months and went to work in WA in the mining area. When I came back we took a bit more of a corporate approach to running the business. We have meetings every week so issues are brought up before they get too bad."

These days, Sean's father, Tony, takes care of the planting schedule which is then passed on to the Production Manager, Russell Jones, who also looks after the 50 plus workers per week who are employed to hand-weed the fields. Then Sean manages the packing shed and company branding.

"The current structure is working really well and has taken the business to another level – from a family business to a proper business. We run on really tight crop rotations, sometimes 12 months, and our yields have been increasing by 25 per cent every year on average," he says.

Challenges

Sean stresses that organic farming may seem simple on the surface, but it comes with many challenges and hurdles. There are higher costs associated with organics – Sean estimates it is around 15 times the cost of conventional farming.

"You've got to want to be organic. You can't just do it for financial reasons because it's a lot of hard work and the cost of production is more expensive than you think. A lot of people say that organic produce is expensive, but I think conventional is too cheap," he says.

There are some challenges that are obviously standard across the vegetable growing sector. This includes ensuring wholesalers give an accurate indication of demand so you know how much produce to plant and grow. However, Sean admits that the organic name is met with scepticism from some input suppliers and agronomists, especially seed suppliers.

"We struggle to get inputs. We sit down with supply companies and plan our requirements for the year but they just never seem to deliver. In the past, companies have not given the industry enough respect," he says.

"We now work with E.E. Muir & Sons and they go a long way in addressing that problem."

Looking ahead

While Arahura Farms currently services the Melbourne, Sydney, Brisbane and Perth markets, Sean is confident that further opportunities lie in exports, particularly to Asia.

"We want 50 per cent of our business to be export in the long-term. We've learnt a lot of lessons from watching what happens in the conventional markets, because we're so far behind them in terms of volume and the number of growers. I want to approach the supermarkets with the attitude that they have the opportunity to sell my carrots, not the other way around," he says.

"We want to grow a lot bigger, but we don't want to lose that quality and become a machine that produces orange sticks. We want to continue producing beautiful-tasting carrots."

Tony Croft, Jennie Croft, Russell Jones and Sean Croft.

Saving energy on vegetable farms

Energy is precious. Perhaps more so than it has ever been in the past.

In light of this, Dr John Cumming of InfoTech Research has been working with vegetable growers around the country to get a glimpse of how energy is used on their farms, as part of VG13054 – *Economic evaluation of farm energy audits and benchmarking of energy use on vegetable farms*.

While the project is yet to be completed, so far the research findings show that growers appear to be very switched on when it comes to switching off. However, there are some areas where growers could be doing much better, especially when it comes to properly maintained cool storage and variable speed drives (VSDs) on pumps. Data from comprehensive 'level 2' energy audits expect to uncover opportunities for growers to save at least 10 per cent on their energy costs in many cases. For growers, these initial findings will be the source of new tips and hints that will be published specifically for the vegetable industry.

The project has three primary objectives: to benchmark energy use in the vegetable industry; to demonstrate and exemplify targeted improvements that can save money and energy and; to generate a database of 'opportunities', or a list of actions, that growers can implement in their business.

What's exciting about this project is that growers, whether large or small, can start making changes without necessarily having to put-up for an energy audit.

Dr Cumming said the "hierarchy of waste management" is simple: avoid, reduce, reuse and recycle. It's also the basic approach to energy management.

"Energy waste is like any other physical waste – it's something you want to minimise! If you can avoid using energy in the first place, do it. The next step is to make the process more efficient; then you can look at excess energy loss and alternate forms of energy. The final step is either safe disposal of the waste or even using it as another energy source."

EnviroNews will keep readers updated on this research project as it progresses.

Energy efficiency in protected cropping

A recent study was conducted to help greenhouse growers increase the energy efficiency of their heating systems.

As Australia bursts into spring following a chilly winter, many family homes would hope to see a drop in their heating bills – but imagine if you had to heat an entire greenhouse.

A recent study funded by Horticulture Australia Limited (HAL) using the National Vegetable Levy and matched funds from the Australian Government was conducted to make it easier for greenhouse growers to identify inefficiencies and maximise their investments in heating systems.

The project, undertaken by NSW Department of Primary Industries (DPI), stated that "alternate energy technologies and improved energy management are expected to be able to reduce energy demands of the greenhouse industry of 30-60 per cent", representing significant cost-savings for growers.

Possible solutions

The study looked at technologies including geothermal heat pumps (using the ground beneath the greenhouse to deliver or extract heat), and phase change materials (material that can absorb or lose a large amount of heat before it melts or freezes). Both of these alternate energy options showed potential for use in Australian protected cropping operations.

Looking at geothermal heat pumps, the study concluded that they were "an important development opportunity for the greenhouse vegetable industry" whereas the phase change materials, while showing potential, required more investigation to overcome the primary constraints of practicality (how to fit large quantities of material in the greenhouse) and the larger upfront costs.

Overall, the heat pump with either a horizontal ground source or surface water loop offered the best investment. A dollar invested in a ground source (surface water) heat pump system could return almost $1.90 at present energy levels.

While this project provides great insights into where to start, growers should further investigate what might be suitable for their operation.

For more information, see the report: *Increasing energy efficiency and assessing an alternate energy option for Australian Protected Cropping* by Joshua Jarvis, NSW Department of Primary Industries.
Project Number: VG09124

IPM and the use of biological control agents

BIOLOGICAL CONTROL AGENTS, IN PARTICULAR BENEFICIAL INSECTS, PLAY A CRITICAL ROLE IN SUSTAINABLE INTEGRATED PEST MANAGEMENT (IPM) PROGRAMS IN COMBINATION WITH STRATEGIC CHEMICAL USE, WRITES BAYER HEAD OF NEW BUSINESS DEVELOPMENT RICHARD DICKMANN.

The targeted use of softer chemicals in an Integrated Pest Management (IPM) program that is focused on biological control agents is steadily growing in popularity. The role and ranges of beneficial insects and biological agents has reached a point where Australian growers have more tools available to them than ever before.

Biological Services Managing Director, James Altmann, talks about the role of beneficial insects and how bio-control focused IPM programs function alongside targeted spaying. Since James joined the company in the 1970s, Biological Services has grown its product line to 16 different bio-control agents within Australia, mainly targeting thrips, whiteflies and aphids.

"Until a few years ago, we didn't have all the tools we needed to control most of the major pests that can cause problems for growers, but now we have a pretty good range of bio-control agents, such as parasitic wasps and predatory mites," James said.

Effective control

It is critical to prevent the build-up of resistant pest populations so growers continue to have access to a range of effective pest and disease control options in the future. Bio-control agents contribute to preserving chemicals and using them less often, reducing resistance build-up and allowing them to be more effective over longer periods of time.

"A good IPM program should have a focus on naturally occurring or introduced bio-control agents so that the non-chemical means of control are amplified and we don't get overuse of chemicals and resistance issues. We're not against chemical control; in fact, we need to use chemicals to run our programs."

Growing popularity

In South Australia, Biological Services has seen the uptake of this technology spread from just a handful to over 50 different growers in one region. Word of mouth about the success of bio-control focused IPM strategies has spread rapidly.

"We are focused on educating growers to have good hygiene practices and to start their crop as clean as possible," James said. However, he noted that one of the challenges is helping growers shift away from their old habits of regular spraying, to only spraying when they need to in order to conserve chemical effectiveness.

"There's not a crop where we don't use chemicals, but we only use them when they're necessary, and we use them by selecting products that are specific to the pest we're targeting."

Biological control agents within IPM have proven to be a cost-effective tool for pest and disease management, while also protecting the effectiveness of important synthetic chemistries. Through education about bio-control agents, the uptake of IPM programs is likely to continue to grow, helping to maintain effective chemistries for longer.

EnviroVeg

A golden opportunity

ANDREW CRAIGIE IS GOING FOR GOLD – ENVIROVEG GOLD, THAT IS. WHILE THE TASMANIAN GROWER HAS BEEN INVOLVED WITH ENVIROVEG FOR A FEW YEARS, HE HAS NOW DECIDED TO TAKE THE NEXT STEP UP IN THE PROGRAM. HE SPEAKS TO *VEGETABLES AUSTRALIA* ABOUT THE MERIT OF HIS DECISION.

It's easy to develop an old-fashioned mindset when you come from a farming family that has worked the land for 100 years or more. Andrew Craigie may be a fifth generation vegetable grower from Latrobe, Tasmania, but his strategies for the future of his farming operation are anything but old-fashioned.

Working alongside his uncle Peter and brother Rodney, Andrew understands the value in learning from the past, as well as embracing the future. This is clearly evident not only in his passion for the land and involvement in the industry – he is Chair of the Tasmanian Farmers and Graziers Association Vegetable Council and a member of the Farm Productivity, Resource Use and Management Design Team – but also his determination to ensure the business remains viable in the toughest of times.

"The holding of Craigie Brothers has grown over the generations and basically every generation has added to it. That's the only way we could actually survive," he says.

"We've got to be resilient because we only have limited cropping ground and we have to run a rotation. We normally grow peas, beans, carrots, onions, potatoes and a little bit of broccoli on a lease arrangement."

Being based in northern Tasmania, where his property faces the Bass Strait to one side and Mt Roland and the Western Tiers to the other, means that he understands, better than most, the need to preserve the surrounding environment. For him, taking part in the EnviroVeg program in its infancy was an easy way to show his dedication to environmental best practice.

"I was originally a test case and I also went through the program to see what it was like. For 20 years we've been running QA programs so this wasn't a big burden. It's inexpensive and you can do it at your leisure. Growers could knock off their environmental self-assessment – a basic environmental action plan – in about half an hour," he says.

"My personal opinion is that anybody who is doing anything in agriculture should have some sort of QA program. If the wheels fall off and everything turns to custard, and you've got 20 years'

worth of externally audited QA, you have a signed document that proves you didn't do the wrong thing."

The jump to Gold

EnviroVeg Gold is the second tier of the program, being a step below Platinum certification. This middle step means that Andrew, along with other interested vegetable levy-paying growers, can schedule an appointment to meet with the AUSVEG Environment Coordinator at any time to be walked through the process, which is quite simple.

"For someone starting the QA process, rather than getting thrown in the deep end, you actually get somebody experienced in the industry to go through it with you. I think that's good preparation, especially for smaller businesses where it's a fairly daunting thing to go through that first audit," he says.

"There is good support from the EnviroVeg program. You do the first lot, then go to Gold and you know what to expect of the program."

Environmental practice

As Andrew explains, Tasmania is fortunate enough to have definite seasons and a fairly consistent seasonal rotation. On his land in particular, remnant vegetation means that there is limited land available for cropping.

"We've got remnant areas of vegetation that we maintain. It's a bit of native habitat that's disappeared from a lot of the area. Especially where it runs into native regrowth, it creates its own little atmosphere," he says.

"For our livestock and cattle it's important, but we've virtually got a wetland and that's our litmus test, if you like. As soon as you get any sort of chemical contamination, or nitrogen levels lifting, you'll lose all of the diversity within that little ecosystem. It's a very noticeable indicator."

He goes on to say that while each generation of the Craigie family has played a small part in implementing specific management strategies on the farm, these changes combined have made a substantial difference to the farm over its 150-year history. That said, green tape and regulation are some of the main problems that growers in the area have faced in the last four years.

"We use a management regime that doesn't degrade our waterways too much. We're also a control site for the Sassafras Wesley Vale irrigation scheme. They come in and test the water regularly, looking at water quality, biodiversity, even the number of fish and platypi.

"Managing runoff and soil erosion are also big issues on some of the ground because it's so steep, so there's a lot of contour ripping. We try to minimise all of our runoff."

Long-term vision

Farming and the Craigie name go hand in hand, so it's no surprise that the family sees Craigie Brothers as a perpetual business. While Andrew is aware that things may have to change and diversify in the future, he is confident that it can remain as a sustainable business, both economically and environmentally.

"I think that's pretty important to all of us involved in the business. The whole family in one way or the other is very much sustainable. We don't go out to destroy the environment; we go out to maintain it and utilise it without actually destroying it," he explains.

"My hopes for the future of the farm is that it does remain sustainable and the next generation can further develop its potential as they see fit. If you're going to be complacent and do exactly the same as your father did, and your grandparents did, then the business is going to fail.

"It's the ultimate job satisfaction, being a farmer. Because at the end of the day, no matter whether you've done everything right or the wheels have fallen off in every direction, you can be content because you did the best possible job with what you had available."

Photographs by Belle Young.

Ask the industry

with Scott Mathew

SCOTT MATHEW, TECHNICAL SERVICES LEAD AT SYNGENTA, COVERS SOME OF THE MORE COMMONLY ASKED QUESTIONS REGARDING THE EFFECTIVE CONTROL OF DOWNY MILDEW.

In my travels meeting with growers of a wide variety of crops, one common topic has been the effective control of Downy Mildew. This is no doubt driven by the significant impact the disease can have on crops when wet weather prevails. Following is a selection of the most frequently asked questions on the topic.

Why do early curative fungicide labels often suggest two consecutive applications 10-14 days apart?

When you apply a curative fungicide to a crop it is usually in high disease pressure situations when your protectant fungicide program has failed. In these situations, a significant amount of active ingredient – for example Metalaxyl-M – is used to stop the disease attacking the leaf tissue, thus reducing the forward protection period to perhaps seven days. A second application is therefore required to top up the reservoir of active ingredient inside the leaf and extend the total length of protection up to 21 days.

If the early curative fungicide product (Metalaxyl-M) application is made prior to disease infection occurring, the forward protection may last 10-14 days. A second application would then extend protection to 20-28 days depending on weather conditions.

Is it better to apply an early curative fungicide before or after a Downy Mildew infection has occurred?

In all situations, when an early curative fungicide (such as RIDOMIL GOLD®) is applied before infection, less of the active ingredient is used fighting the disease giving the maximum amount of forward protection from the fungicide. In most situations, if the weather conditions that are conducive to Downy Mildew can be predicted, then it is always best to apply a curative fungicide immediately prior to infection occurring. This will achieve excellent control, full residual activity, no plant tissue damage and efficient plant energy usage.

What is the best way to manage Downy Mildew?

Good Downy Mildew control is achieved through a combination of:

- Minimising the amount of over wintering disease inoculum.
- Introducing a protectant fungicide program (e.g. BRAVO WEATHERSTIK®, Mancozeb or copper) early in the season.
- Crop management to facilitate airflow and reduce the length of time that leaves are wet.
- Crop management to allow the best coverage of spray applications.
- If using a curative fungicide (such as Metalaxyl-M or RIDOMIL GOLD® MZ) for a Downy Mildew infection, apply them as soon as possible after the infection has occurred.
- Applying any fungicide at the correct rate.

What is the difference between curative and eradicant timings?

It is important to understand that a *curative* fungicide application is an application applied after infection but before visual symptoms appear. An *eradicant* fungicide application is an application of a fungicide after the disease symptoms become visible and is never preferred application timing. However, where possible all fungicide should be applied prior to a disease infection event.

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. Please note that your questions may be published.

Photographs by Stefan Daniljchenko.

Local vegetable industry represented at IHC 2014

More than 3,000 delegates from over 100 countries attended the International Horticultural Congress in Brisbane.

AUSVEG, along with a contingent of Australian vegetable growers and industry members, recently attended the 2014 International Horticultural Congress (IHC) in Brisbane.

The event was held at the Brisbane Exhibition and Convention Centre from 18-22 August and attracted over 3,000 delegates from more than 100 countries. It is only the second time the Congress has been held in the southern hemisphere in its 150-year existence.

A diverse group of 25 industry members was selected to represent the Australian vegetable industry at the event and consisted of growers through to agronomists, a student and members of the supply chain. The delegation was formed as part of a project funded by Horticulture Australia Limited (HAL) using the National Vegetable Levy and matched funds from the Australian Government (Project Number: VG13707).

Throughout the week, the group attended a range of symposia, workshops and other events that fell in line with the theme of the Congress: Sustaining Lives, Livelihoods and Landscapes. The delegates listened to presentations and research from some of the world's leading experts in horticultural fields and discussed potential topics that could be used for future R&D projects in Australia. Delegate feedback and key points were also collected.

AUSVEG would like to thank the enthusiastic group of industry members for taking the time to attend the Congress and participate in the many discussions that were held throughout the week.

Customers seek out natural-looking veggies on the shelf

A PROJECT FUNDED BY HAL USING THE NATIONAL VEGETABLE LEVY AND MATCHED FUNDS FROM THE AUSTRALIAN GOVERNMENT ON THE OPTIMUM VEGETABLE PORTION SIZE FOR CONSUMER NEEDS, SOUGHT TO EXPLORE THE POTENTIAL FOR INCREASED PURCHASE AND CONSUMPTION OF FRESH VEGETABLES. THE RESEARCH FOCUSED ON SIX VEGETABLES INCLUDING CARROTS, PUMPKIN, CABBAGE, CAULIFLOWER, CELERY AND BROCCOLI.

Consumers, in general, do not like wasting vegetables. According to research, at an emotional level, they feel guilty for paying for what they do not use. At a rational level, they do not like paying for vegetables that don't stay fresh for as long as anticipated, as well as purchasing too much of the vegetable due to the limited sizes available, or paying for parts of the vegetable that cannot be eaten.

The research found that consumers would rather pay more per kilo if it meant wasting less of the vegetable product. As a result, they have consciously adapted their behaviour to avoid vegetable wastage, with 81 per cent of consumers trying to purchase the right amount of vegetables for their needs.

In a recent study, it was found that half of the participants often limit or never purchase cabbage or cauliflower due to wastage concerns, with both vegetables being too big for many households. Purchase limitation of broccoli, pumpkin, celery and carrots is also evident, however less pronounced. Ultimately, there is a natural level of wastage due to the way

some vegetables are structured. Consumers dislike buying the 'surplus' parts of vegetables, and want to know how to use them. This can result in in-store tampering to avoid paying for what will not be used, such as pulling the leaves off broccoli stems.

Analysis

While there is not necessarily one optimum or preferred portion size for each vegetable, it is hypothesised that offering a wide range of alternatives will result in an overall uplift in consumption. Also, consumers would welcome a consistent availability of the 'standard' vegetable options.

Georgina Woodley, Project Leader at market consultant company BDRC Jones Donald, said the most surprising finding from the research was that consumers, despite the focus on convenience and packaging available at the retail level, still look for fresh and naturally presented vegetables, rather than a greater level of pre-packaging and processing.

The researchers provided four recommendations to industry, all of which could lead to increased purchase and consumption of different vegetables:

- Retailers will benefit from offering more of the same standard portion options.
- Removing 'excess parts' of the vegetable will enhance perceived value.
- Smaller versions of vegetables should be considered.
- Industry should provide greater inspiration about how to store and prepare vegetables.

Practical application

So what do the findings of this report mean for growers?

Ms Woodley said the best approach to implementation will depend on the scale of the grower and the nature of their relationships with retailers.

"Those supplying to the larger retailers would certainly have scope to engage directly in conversations about their appetite for alternative vegetable portion sizes. Those supplying at a smaller scale could consider banding together and look at supplying alternative portion sizes," she said.

For more information, see the report: *Optimum vegetable portion size to meet consumer needs* by Tony Jones of BDRC Jones Donald.
Project Number: VG12094

Hong Kong market overview

IN THE WAKE OF THE SUCCESSFUL ASIA FRUIT LOGISTICA TRADE SHOW, *VEGETABLES AUSTRALIA* EXAMINES THE HONG KONG MARKET AND PROVIDES SOME DETAIL ON ITS KEY TRENDS FOR THOSE INTERESTED IN EXPORTING THEIR PRODUCE TO THIS LUCRATIVE MARKET.

In 2013, Hong Kong imported $443 million worth of vegetables from around the world. In particular, Australian vegetable exports to Hong Kong have risen by 13 per cent from 2007/08. Australia is a key supplier of fresh vegetables to Hong Kong and is the number one supplier of carrots and potatoes.

Key commodities that are exported to Hong Kong, in addition to carrots and potatoes, are lettuce, cabbage, onion and celery. There are significant opportunities in the Hong Kong market for leafy vegetables; in particular pre-packed lettuce and pre-packed mixed salads.

Per capita consumption of fresh fruit and vegetables in Hong Kong is thought to be among the highest in the world, leading a high level of demand for fresh produce among consumers in Hong Kong.

Further, Hong Kong relies strongly on imported fresh produce to fill this demand.

Other significant market trends in Hong Kong are a strong focus on food safety and the promotion of a healthy lifestyle. Australian vegetables enjoy a competitive advantage in this market, given their reputation as a high quality, fresh and safe product. Consumers in Hong Kong also have a high

Market	Total imports	AU market share #	AU value share	Overall key imports	AU key exports
Hong Kong	$443m	4	2.2%	Cabbages, mushrooms, lettuce, tomatoes, potatoes, onions, sweet corn, celery, carrots, spinach, asparagus	Carrots, lettuce, potatoes, onions, cauliflowers, cabbage, asparagus

disposable income, meaning there are groups of consumers who are willing to purchase premium products.

Despite this high level of demand, Hong Kong is an open market and therefore competition among suppliers is high. Vegetable imports to Hong Kong from Australia do not require an importing permit or a phytosanitary certificate. There are also no prohibited vegetable imports from Australia, so all commodities from Australia can be exported.

In order to be competitive in Hong Kong, Australian exporters need to be aware of the high level of competition particularly on price in the market.

Australian vegetable products will also compete on product traits such as quality, safety and freshness rather than purely competing on price.

More information is available from:
The Australian Trade Commission (Austrade) www.austrade.com.au
Hong Kong Trade Development Council www.hktdc.com/en-buyer/

Export Events Calendar

Upcoming International Trade Shows

15-17 October 2014:
Agritech Japan, Japan

9-11 November 2014:
World of Perishables, Dubai

Tackling green peach aphid infestation

THE DESTRUCTION THAT CAN BE CAUSED BY GREEN PEACH APHID IS NOTHING NEW TO VEGETABLE GROWERS. HOWEVER, NOW THAT THE PEST HAS BUILT UP SOME RESISTANCE TO COMMONLY USED CHEMISTRIES, A NEW ALTERNATIVE HAS BEEN MADE AVAILABLE FROM DOW AGROSCIENCES.

Vegetable growers in South Australia, in particular, will no doubt be aware of the issues that have beset canola crops in the mid-north of the state this winter.

A wet summer followed by mild autumn conditions led to an explosion of green peach aphid in crops. Canola has been particularly hard hit, but the aphids also invaded pulse crops such as faba beans, field peas and lentils.

In high numbers, green peach aphids deprive plants of nutrients and cause ill-thrift. This year, to exacerbate matters, they were loaded with the debilitating beet western yellows virus (BWYV) – also called the turnip yellows virus – which stops infected canola in its tracks.

As green peach aphids aren't particularly fussy what they feed on, it means that broccoli, cabbage, cauliflower and sprout crops are all on the menu as well.

Pest management

Usually, during a plague of insects, there is a range of products available to manage infestation. However, green peach aphid is different.

Through repeated use of the same old chemistry, the pest has developed resistance to almost every product that is available on the market to vegetable growers and canola growers.

Years of reliance on neonicotinoids (Group 4A) as seed treatments in canola and as seedling box applications in vegetables, followed by foliar applications of pirimicarb (Group 1A) and/or organophosphates such as dimethoate (Group 1B) and synthetic pyrethroids (Group 3A), has resulted in widespread resistance to the foliar products and incipient resistance to the neonicotinoids.

So, what lessons can we take from the green peach aphid experience in 2014?

Short-term actions

- Remove 'green bridges' – control weeds that the aphids breed up on, before they invade the crop.
- Identify the aphids – only green peach aphid is multi-resistant. Other species are still controlled by a range of products.

The green peach aphid can cause serious problems for vegetable growers.

- Control aphids before they get out of hand, especially if they are virus-vectors.
- Apply for permits for new mode of action chemistries which are known to be effective on green peach aphid.
- Rotate chemistries – sticking with the same product is the fastest way to get resistance.
- Follow product labels – pay special attention to product use rates, water rates, maximum allowed number of applications and harvest withholding periods.
- Post-harvest crop hygiene – get rid of crop waste and weeds that aphids can survive on.

Long-term solutions

- Use predictive models for aphid infestation to allow better preparation.
- Consider new aphicides which are IPM-compatible and to which green peach aphids are not resistant.
- Plant virus-resistant crops.

New option

The introduction of a new mode of action product, Transform™ insecticide, containing Isoclast™ active, gives vegetable growers another weapon to use in the war on sap-feeding pests.

The product acts rapidly once it has been applied directly to insects or once ingested via feeding on the target plant. It is systemic, moving upwards in the xylem of the plant, and is an outstanding aphicide with useful activity on a number of other sap-feeding pests (consult the label for more information). Early trial work has shown that the rapid activity of Transform™ on sap-feeding pests can significantly slow the spread of viruses in susceptible crops.

With this in mind, if aphid populations are high and there are concerns about virus spread, Dow AgroSciences recommends that Transform™ should be applied early in the life of the infestation to knock the aphid population down and severely restrict the spread of debilitating viruses.

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

For more information, contact Dow AgroSciences: www.dowagro.com/au/

Industry in the media

AUSVEG continues to advocate for the interests of the nation's vegetable growers throughout all avenues of the Australian media landscape. AUSVEG was mentioned in 573 media stories in July, reaching an audience of 1.8 million. These figures build on the industry's strong media presence following the success of the AUSVEG National Convention, held in June. August has also seen solid, nationwide media coverage for many issues important to the Australian vegetable industry and AUSVEG will continue to represent Australian vegetable growers into the future.

Woolworths' marketing campaign

AUSVEG has continued to be vocal in its disapproval of Woolworths' decision to ask growers to contribute 40c a crate to fund its Jamie Oliver marketing campaign. Communications Manager Andrew MacDonald appeared nationally on broadcast media and in print noting that Woolworths had failed to heed public backlash against the campaign.

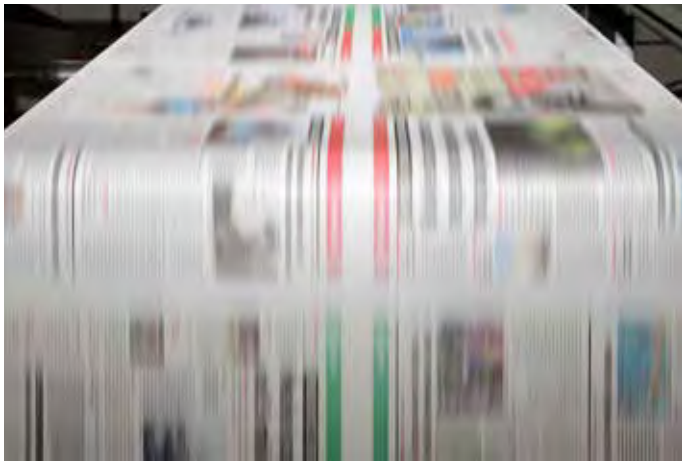
Mr MacDonald also questioned whether the same campaign had been used to promote imported Mexican garlic and queried whether Mexican growers had been asked to contribute their "hard-earned pesos" to be involved in the campaign.

Health Star Rating system

AUSVEG Manager of Industry Development and Communications (Government and Parliamentary) Andrew White voiced his concerns over revelations that some vegetables were not given the maximum five stars under the new Health Star Rating system, which gives food products a rating out of five based on their health benefits. Mr White claimed vegetables should automatically be given five stars to send the right message to consumers, especially considering the large amount of people not eating the required daily intake of vegetables.

Coles appoints Kennett as arbiter

News that Coles had hired former Victorian Premier Jeff Kennett as an independent arbiter to resolve disputes between the retailer and its suppliers was met with cautious optimism by AUSVEG.



Mr White appeared on national radio and television broadcasts and in newspaper articles stressing the importance of the arbiter's independence in resolving disputes, with AUSVEG vowing to closely monitor the relationship.

Mr White also said this appointment does not stop growers and suppliers from taking any complaints they have to the ACCC directly.

Key topics for the July/ August period:

- AUSVEG continues its disapproval of Woolworths' Jamie Oliver marketing campaign.
- Health Star Rating system should award vegetables the maximum five stars.
- AUSVEG cautiously welcomes Coles' appointment of Jeff Kennett as independent arbiter.

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Produce on display at the Kalfresh Carrot Field Day and Eat Local Week

Thousands of visitors descended on Aratula for the Winter Harvest Festival, which marked the culmination of Eat Local Week celebrations.

Attendees at the Kalfresh Carrot Field Day were invited to tour the farm's state-of-the-art packing facility.

On 5 July 2014, hundreds of people came together for the Kalfresh Carrot Field Day, held during Scenic Rim Eat Local Week, which ran from 28 June to 6 July throughout the region.

AUSVEG representatives took part in the south-east Queensland Field Day, which was also visited by the ABC's *Landline* program.

The Field Day was an opportunity for locals and city-dwellers alike to experience the workings of a large-scale farm. Visitors had the chance to find out more about the ways in which carrots are grown, harvested and packed all on the one site.

The Kalfresh facility houses a state-of-the-art packing facility, which interested visitors were welcome to check out on the Field Day.

Carrots are taken straight from the field and washed with water. The grading machine takes thousands of images as carrots pass through the machine, ensuring they are sent to the correct line – for supermarkets, juicing companies or food manufacturers. After this, they are bagged, packed and chilled, to be sent to stores and supermarkets around the country within 6-10 hours, ensuring they are as fresh as possible.

Beginning as a small family farm over 20 years ago, Kalfresh is now a multi-million dollar operation producing onions, beans, potatoes and pumpkins. Carrots are its main focus and are sent throughout the Eastern Seaboard of Australia, including Tasmania, as well as parts of Asia such as Singapore and Hong Kong.

The Fassifern Valley, in which the Kalfresh farm is based, is one of Queensland's most fertile valleys, due to its alluvial soil and temperate climate. It is responsible for the production of about 60 per cent of Australia's carrot supply between June and December each year.

Following the Kalfresh Field Day thousands of visitors packed the nearby Aratula Community Sports Centre for the Winter Harvest Festival, which marked the end of Eat Local Week celebrations.

A South Australian company that leads the world in developing new applications for polymers in aerial fire fighting and unsealed road stabilisation now has a range of exciting water conservation products for all aspects of agriculture.

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Boost Vegetable Production

Yield and Crop Quality Improvement

Improves:	Fertiliser efficacy
	Vegetable yields
	Size consistency
	Vegetative growth
Reduces:	Irrigation water use
	Crop power use
	Plant sodium uptake
	Mortality & Transplant shock

Saves water
AquaBoost changes the soil hydraulics and slows the infiltration of moisture through the soil. This change of action has been trial proven to benefit the grower with a 25% reduction in the amount of water normally applied to a crop.

Energy Savings
The reductions in water applied provide carry-over benefits in a reduction of energy required to irrigate.

Increased Moisture Availability
The wetting and drying cycle associated with normal irrigation patterns is reduced. The drying phase can cause stress to developing plants and increase soil sodium levels.

Improved Fertiliser Efficacy
AquaBoost ensures nutrients are present during critical growth stages.

Reduced Sodium Uptake
AquaBoost has been repeatedly trial proven to significantly reduce the sodium and chloride intake by plants.

Reduces Plant Stress
Stress is significantly reduced by maintaining available moisture to the crop prior to expected periods of weather that could cause plant stress.

Reduce Mortality and Transplant Shock
For instant growth, wet up speedlings with AG30FB at 2ml to 1 litre of water prior to planting into moist soil.

Moisture Monitoring
The use of moisture monitoring systems provides an indication of the movement of moisture through the soil profile and shows clearly that the use of AquaBoost in an irrigation regime will significantly slow the movement of moisture and reduce the leaching of nutrients.

Colin Freeman, carrot grower at Peebinga South Australia, has used AquaBoost for two years on pivot-grown carrots commented;
"The use of AquaBoost has resulted in reduced power and diesel costs and increased crop uniformity."

Alistair Walmsley-Cotham, potato grower from Peebinga has been using AquaBoost on pivot-grown potatoes said;
"We have noted better wet-up and moisture retention and more uniform pack-out."

Richard Wheaton, onion grower from Tailem Bend, commented;
"I use the AquaBoost range of products for seed coat, soil wet-up pre-plant and subsequent irrigation through the growing season. AquaBoost is easy to use and has many benefits – especially in my hard-to-wet mallee sands."

www.aquaboost.com.au

Senator backs effective Grocery Code of Conduct

Victorian Senator John Madigan told attendees of the Kalfresh Panel at the 2014 AUSVEG National Convention, Trade Show and Awards for Excellence that he was optimistic the new Senate crossbench would fight for the rights of Australian farmers and food processors.

Senator Madigan said he hoped the new Grocery Code of Conduct would lead to a more ethical and sustainable farming and food processing sector.

He welcomed the "increasing gene pool" in the Senate from 1 July but recognised diminishing returns for farmers and food processors were putting the sector under pressure.

"If we want to have a sustainable and viable farming and food processing sector, we have to make a commitment to that," he said.

"There are a lot of people who feed off the misery of our farmers and food processors. Year after year, we read in the paper some pretty scathing articles and not much happens.

"I want to see a vibrant and strong Australian retail sector owned by Australians, but with our retail duopoly, I believe they have a responsibility to act in an ethical manner.

"If our farmers and food processors don't get a reasonable return on their investment and are not treated in an ethical manner, there will be no Australian farmers and food processors."

Senator Madigan called on the new Senate to work for the common good and to not forget the people "who haven't got a voice".

Left to right: Victorian Senator John Madigan presents at the 2014 AUSVEG National Convention while AFGC's Christopher Preston and Coles' Chris Mara look on.

Senator Madigan was deputy chair of the Senate Select Committee into Australia's food processing sector.

Recommendations

One of the committee's 35 recommendations was that the government initiate an independent review of the competition provisions of the *Competition and Consumer Act 2010*. The committee recommended the review should include consideration of the misuse of market power, creeping acquisitions, predatory pricing and unconscionable conduct.

Mills Oakley Lawyers Partner Warren Scott, Coles Supermarkets Government and Regulatory Affairs Manager Chris Mara and Australian Food and Grocery Council (AFGC) Legal and Regulatory Director Christopher Preston also took part in the Kalfresh Forum. The Forum was moderated by Laurie Wilson, President of the National Press Club of Australia.

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Further information: Contact (02) 8627 1040 or email liam@ahr.com.au

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What: Expressions of interest to attend this tour are now open.

Further information: Contact AUSVEG on (03) 9882 0277 or email info@ausveg.com.au

15-17 October 2014

Agritech Japan

Where: Japan

What: Agritech Japan attracts Asian industry members looking for suppliers.

Further information: AUSVEG on (03) 9882 0277 or email info@ausveg.com.au

20 October – 1 November 2014

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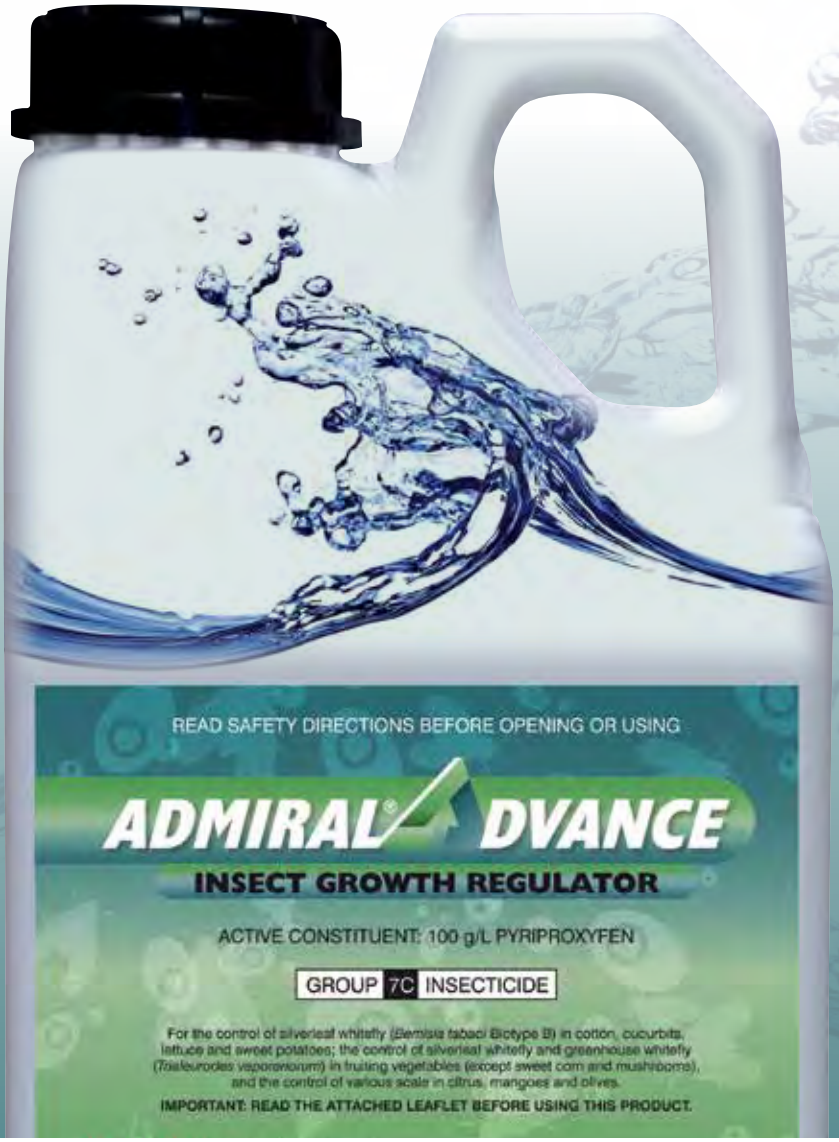

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Around the states

Queensland

As part of Growcom's Carbon Farming Extension and Outreach program, workshops are being delivered across the state to enhance growers' and the supply chain's understanding of carbon mitigation in the horticultural industry.

This project has been developed to help Queensland horticultural growers reduce greenhouse gas emissions and sequester carbon in the landscape. It will provide information and tools to pursue carbon farming activities in farming and packing enterprises via a specially developed website while also looking at the adoption of successful novel technologies and practices.

The project is being assisted by the Queensland Department of Agriculture Fisheries and Forestry (QDAFF) with expert technical input from Senior Principal Horticulturist Peter Deuter and Senior Horticulturist David Carey.

The workshops aim to deliver information on case studies and successful projects while demonstrating the project specific Carbon Mitigation Wiki. The Wiki is a web-based tool that is currently being developed by Growcom. Put simply, it is a platform for growers to share their thoughts, ideas and experiences with carbon farming and is to be the focal point of the project. It will also present a series of fact sheets developed under the project and articles relevant to carbon farming.

To date the first round of workshops has been completed and these were received with great interest with attendance numbers very encouraging.

The first series of workshops were held in the Lockyer Valley, Granite Belt, Bundaberg-Wide Bay, Bowen-Gumlu and wet tropics regions. Topics included latest news in variable rate technology, on farm energy efficiency solutions and climate impacts, adaption and opportunities.

The next series of workshops is set to commence in October with the focus on carbon management in soils. Topics that are currently on the table for these workshops are soil texture, structure and soil water relationship, soil chemistry, plant nutrition and soil biology. Dates and venues are currently being finalised and will be publicised through Growcom's own publications and the media.

You will find the project description, fact sheets and links to further information about the Carbon Farming Initiative on Growcom's website or please contact Growcom on (07) 3620 3844 and ask for Lene Knudsen, Climate Change Project Officer.

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South Australia

The South Australian Government has placed food production as one of its key pillars to drive the South Australian economy in the face of the anticipated withdrawal of Holden from the state. It seems like every day we are hearing of businesses leaving the state; however, we firmly believe that investments in the area of agriculture will pay dividends if government is able to get its policy settings right.

It is still early days, but the South Australian government has shown willingness to engage with industry through measures such as community cabinets and other forums. It has also earmarked funding specifically for regional development in the recently-released budget. This includes working with exporters to access new markets, funding regional programs to promote South Australian food and wine, and investments in key infrastructure. While at this stage specific projects are yet to be finalised, it is encouraging that the government is now looking to invest in industries such as horticulture as a key part of its economic strategy.

In industry news, there are two considerable biosecurity challenges facing the South Australian vegetable industry in the form of the Tomato Red Spider Mite and the Green Snail. The Tomato Red Spider Mite (*Tetranychus evansi*) was first detected at Sydney Airport in August last year and has recently spread to the Sydney Basin in New South Wales, with the pest being found in tomato and volunteer potato plants. At the time of discovery, there were no chemical treatments available.

In recognition of this threat, my national colleagues at AUSVEG developed applications for a number of additional permits for the treatment of Tomato Red Spider Mite in a range of vegetable commodities currently undergoing assessment with the Australian Pesticides and Veterinary Medicines Authority (APVMA). Meanwhile, there have been infestations of Green Snail found in northern Victoria and production areas have been quarantined.

AUSVEG SA has been involved in ongoing consultations with BiosecuritySA on both of these threats to ensure that appropriate management procedures are put in place. If growers would like to discuss industry views and responses to these threats they can call the State Manager – South Australia at the AUSVEG SA office.

In other news, South Australia played host to two potato levy payers' seminars in September. These events offered an excellent opportunity for growers to learn more about recent investments in potato industry R&D and provided the opportunity to discuss future opportunities with representatives from Horticulture Australia Limited, AUSVEG senior management and the potato industry advisory committees. These events were held in Hahndorf on Wednesday 17 September and in Mount Gambier on Thursday 18 September. I would encourage our South Australian potato growers to consider attending such important workshops in the future.

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Western Australia

The availability of productive legal workers continues as a key issue for the WA vegetable industry. A recent survey of WA growers demonstrated that 96 per cent are experiencing shortages and the same percentage believed the situation has worsened over time. Most of this problem relates to picking and processing positions rather than higher level agronomy or management. There are generally very low numbers of Australian nationals employed in these positions because recruiting and retaining citizens is well-nigh impossible.

However, growers need to ensure they're fulfilling their legal obligations in employing staff with the correct visa status while vegetablesWA works on longer-term policy change and investigates other potential solutions. If growers are using labour hire companies they should also be sure that their contracts with those companies places the onus on them to ensure workers have the correct visa status. Contact vegetablesWA for more information or the Department of Immigration directly.

In many ways WA is lucky to be a resource-rich state, although it is not all upside as it also presents some challenges. The prospect of a drill rig in the middle of your garden is one of them. We have certainly made some strong policy representation to government in this area. vegetablesWA is also working with the Australian Petroleum Production and Exploration Association (APPEA), West Australian Farmers Federation (WAFF) and the Pastoralists and Graziers Association to try developing some fair terms where a petrochemical company seeks to explore oil and gas reserves underneath grower property. We have also developed legal advice about rights and responsibilities for growers finding themselves in this position – please contact me for a copy.

It has also been interesting to see a number of West Australian growers either individually or as a group investigate opportunities in export markets. Work so far has identified opportunities in a range of markets across a range of lines. Having some eggs in other baskets beyond the domestic market could be a good business strategy for a range of different growers. I encourage anyone interested in exploring these opportunities to contact our Export Development Manager, Gavin Foord, on (08) 9481 0934 or 0435 018 189.

I would like to recognise the contribution of our recently departed Field Extension Officer, Sarah Houston, who has served our industry with distinction in this role over the last few years. Her abilities and professionalism were as appreciated in the office as they were by growers in the field. At the time of writing we are in the process of recruiting a new Officer who I'm sure growers will continue to rely upon as a great source of assistance with their business.

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Tasmania

We are about to see some major planning reform in Tasmania and it's not before time. This place is legend for its planning complexities, bureaucratic overlap, red tape and delays that have driven many investors to give up and take their enterprises elsewhere. Farmers, though, have no option but to work their way through the bizarre machinations of the planning system – they can't pick up and move!

A new planning regime does not have to relax environmental standards, for instance, but it does have to result in simpler and more consistent outcomes. And these outcomes have to pass the common-sense test – something it seems is all too rare at the moment.

Planning becomes complicated on the fringes of urban settlements where housing sub-divisions, roads and services encroach on what is still traditional farming land. The challenges of the peri-urban sprawl are an important part of any review of planning.

The reasons people move from the cities to live in urban fringe areas are varied. The most often-stated one though is an appreciation of the perceived lifestyle benefits of semi-rural areas. However, newer residents moving into these areas often have little experience with agriculture; and many farmers have little experience with non-rural neighbours. Conflict situations usually arise through lack of understanding of the different needs of various land users.

This is reflected in planning decisions which have alienated agricultural buffer zones and approved residential subdivisions in the midst of productive farming operations. There seems to be little appreciation of the two-way impacts of this changing settlement landscape. All attention is given to the impact of agriculture on the incoming residential land users, but little thought is given to the impact of urban residents on existing agricultural holdings.

A rural landscape may provide a nice view for new residents, but it also carries with it the smells, noises and dawn-to-dusk activities of modern farming operations. However, non-rural land uses also have adverse impacts on farming operations too. Just a few examples we hear of every day include dogs attacking and killing livestock; vandals breaking down fences and damaging property; and burnt-out cars dumped in paddocks.

Farmers need some security of tenure – they cannot operate their businesses if they live in fear of being "re-zoned" out of their livelihood.

If, after consideration and consultation, the local community decides it does not want a particular farming activity to continue in a given area and the local council makes farming impossible, then farmers are entitled to compensation and it is likely to be substantial – loss of future income, loss of capital appreciation, the financial cost of a fire-sale of assets, the costs of relocation and re-establishment.

All farmers want is a fair go – to be allowed to carry out their businesses within reasonable parameters. Surely that's not a big ask?

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New South Wales

Whilst most labour hire contractors operate legally and ethically, there have been ongoing discussions and meetings regarding industry concerns about rogue labour hire companies and growers being unable to obtain access to efficient workers. Workers have alleged in the past months that they have been underpaid or not paid at all, experienced visa breaches, intimidation and standover tactics. NSW Farmers has met with other industry representatives to discuss these concerns with the Department of Immigration. It was raised that the Federal Government is currently developing various response options to labour hire companies and issues with these companies exploiting workers. It was noted that the Federal Government's review of the 457 visas may address the problems industry has raised and that they are also trying to devise an education campaign surrounding labour issues. It is important to ensure that Australia maintains a good working relationship with seasonal workers and that dishonest labour hire companies do not tarnish that reputation.

NSW Farmers has been working closely with the National Farmers Federation into the government's Competition and Consumer Law review. The review addressed weaknesses in Australia's competition policy and was much sought after by industry. Since the release of a proposed draft Code last November, it is with much anticipation that the Food and Grocery Code of Conduct has finally been released. The Code will help address the competition discrepancies in the supermarket sector.

Industry has been seeking an enforceable document which would ensure grocery stores comply with their stated supply agreements, especially around fresh produce. The Code currently is aiming to enable suppliers and grocery stores to conduct dealings in good faith and ensure a fair outcome for both parties. The Code will be aligned with the Competition and Consumer Act to make it more enforceable, with any disgruntled parties being able to seek a number of dispute resolution techniques. NSW Farmers is currently reviewing the exposure draft Code and will be liaising with its members to address the questions set out in the consultation paper.

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Victoria

The Melbourne Market relocation is first and foremost in many growers' minds as they have finally been allocated stands in the new Epping Market. However, a proposed Amendment Bill to the Melbourne Market Authority Bill threatens to remove standholders' rights to claim compensation once the government sets the date for relocation.

The recent short supply of broccoli and cauliflowers in Melbourne sparked a great deal of interest from the media with prices in supermarkets reaching as much as $8/head of either vegetable. The few growers that had supplies were inundated with orders, however supplies should return to normal pretty quickly.

The Fresh Produce Safety Centre should be congratulated on their Conference on Food Safety held in early August. Speakers from the USA, New Zealand and Australia presented topics from the latest information on food safety to current research. There were also panel discussions and a discussion session on future research priorities for the Australian horticultural industry.

The Vegetable Growers Association of Victoria will be holding its Annual General Meeting on 10 October 2014 at the Crowne Plaza Hotel in Melbourne. All Members are invited to attend the AGM and Dinner.

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