

# vegetables australia

July/August 2011

## AUSVEG National Convention Spotlight on Hobart 2012

**Peter Ward**

Having faith in horticulture

**Ed Fagan**

Moving with the times

**Melbourne Markets**

A spectacular sight to behold

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## FRONT COVER:

Wrest Point Hotel Casino

Photo supplied by Wrest Point Hotel Casino

## John Brent AUSVEG Chairman

I am very excited to announce that the AUSVEG 2012 National Convention, Trade Show and Awards for Excellence is to take place in Tasmania.

The beautiful city of Hobart will host the three-day event, which will be held at the impressive Wrest Point Hotel Casino from 10–12 May 2012.

We were delighted to be joined by the Minister for Tourism, The Hon Scott Bacon MHA, in Hobart to reveal the location of the Convention—which is expected to generate approximately \$1million in expenditure for Tasmania.

AUSVEG hopes to build on the staggering success of the 2011 National Convention in Brisbane, which attracted close to 1,000 delegates, and

create a program that exceeds expectations even further and offers a valuable networking opportunity.

While it is still some time away yet, we would urge you to save the date and support this important industry event—which has become the largest of its kind on the Australian horticulture calendar.

In other exciting news, a group of young growers are set to embark on a special trip to New Zealand from 21–31 July 2011. The AUSVEG-led 2011 Young Growers' Study Tour will visit Auckland, Hamilton, Gisborne, Napier and Palmerston North, giving participants the opportunity to see first-hand how a number of leading vegetable farms operate

and speak to growers.

The group will also attend the Horticulture New Zealand Conference in Rotorua as part of the tour, which will be led by AUSVEG Communications and Public Affairs Manager William Churchill.

We are also pleased to report that a series of grower meetings have been taking place throughout Australia, as part of the second phase of consultations on the Strategic Investment Plan (SIP). These meetings have provided a valuable opportunity for a number of growers to put forward suggestions on how they would like to see the vegetable industry levy money spent.

The outcomes of the consultation process will be

presented in the SIP White Paper, which will be made available to growers for comment in the coming months. For more details turn to page 21.




John Brent  
Chairman  
AUSVEG

## Richard Mulcahy AUSVEG Chief Executive Officer

It has been a busy few months for AUSVEG, with planning well underway for the 2012 National Convention, the Strategic Investment Plan (SIP) consultations being rolled out across the country and the vegetable industry making national headlines.

Ever since the devastating floods swept through regions of Australia, the media spotlight has been increasingly focused on vegetable prices. That is why AUSVEG has been keen to dispel the claims about inflation in the fruit and vegetable sector, including those advanced by the Reserve Bank of Australia, and point to substantial data that proves prices are now stabilising.

AUSVEG was pleased to report to the media that broccoli, cauliflower, pumpkin and lettuce prices in particular were at similar wholesale pricing levels as before the floods, and to highlight the fact that wholesale markets were brimming with

enormous amounts of high quality Australian produce.

The news that vegetable prices have currently returned to pre-flood levels will provide a positive boost to the industry, with consumers being encouraged to put more fresh vegetables in their baskets.

While we know many growers will continue to feel the impact of the floods for months to come, this latest development will go some way to helping the industry along the road to recovery.

Over the past few months, AUSVEG has been working to promote the Vegetable Industry Development Program (VIDP) Knowledge Management System as an important tool for agronomists and agricultural re-sellers.

The online database contains cutting-edge information about issues such as pests and diseases, climate change and business development, and is updated constantly with the

latest R&D reports relating to the industry.

While growers are intended as the main users of this central access point, we are finding that many don't have the time to sit down at their computer and read through all the research.

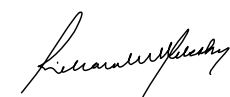
This is why we want to encourage agronomists and agricultural re-sellers to utilise the online research tool and we believe both they and the grower will benefit from the information when it comes to finding solutions to issues on and off-farm.

AUSVEG staff, including myself, have been pleased to deliver presentations about the Knowledge Management System to industry leaders, including agronomists, at recent conferences around Australia. We look forward to getting more agronomists and key members of the supply chain on board and using this valuable tool.

Registration for the Knowledge Management

System is free for growers and agronomists at [www.ausveg.com.au](http://www.ausveg.com.au).

The wheels are well and truly in motion for the 2012 National Convention in Hobart, and we look forward to bringing you all the exciting announcements about this event over the coming months.

Richard J Mulcahy  
Chief Executive Officer  
AUSVEG

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# Editorial

While the dust is only just settling on the 2011 AUSVEG National Convention, Trade Show and Awards for Excellence, plans are already afoot for the 2012 event.

AUSVEG is excited to announce that Tasmania will be the host state for next year's Convention, which will take place from 10–12 May at Wrest Point Hotel Casino in Hobart.

Preparations are now underway and the team is busy ensuring the event continues to exceed expectations and offer delegates a valuable experience.

Continuing to celebrate the 2011 National Convention is Tom Hunt, from Boonah, Queensland, who received the Rising Star of the Year accolade at the AUSVEG Awards for Excellence. He talks to *Vegetables Australia* about his experiences of being a young member of the vegetable

industry in our Young Grower Feature (page 20).

Meanwhile, New South Wales grower Peter Ward offers an insight into the history of his 100-year-old farm and reveals how he took a risk on vegetable growing in our inspirational Grower Feature (page 14).

Staying in New South Wales, we also visit grower Ed

Fagan to talk about all things environmental and hear how the EnviroVeg Program is assisting with his sustainable practices (page 32).

Members of the AUSVEG team had the privilege of being invited on a tour of the Melbourne Wholesale Fruit, Vegetable and Flower Market to experience the operation first

hand. To discover a flavour of the market, turn to our special feature (page 8).

There has been no shortage of R&D reports to feature in this edition of *Vegetables Australia* and we have chosen a thought-provoking selection that covers a number of areas of the industry.

These include Asian vegetables, precision agriculture, vegetable washing chemicals, the uptake of careers in horticulture, Ian James' economic outlook and a special four-page Vegetable Industry Development Program (VIDP) feature on new data relating to carrots.

This edition of *Vegetables Australia* also brings you the latest industry news, with articles focused on food irradiation, innovative products for growers and the Pacific Seasonal Worker Pilot Scheme (PSWPS).



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# A spectacular

Members of the AUSVEG team jumped at a unique chance to visit Melbourne Flower Market. Undeterred by the early start, the team relished the opportunity swing and see for themselves the astounding amount of produce that passes

It would be fascinating to see what the early settlers of the 1800s would make of Melbourne Market today.

For it is certainly a world apart from the first official fruit and vegetable market they established in Melbourne—the Western Market—in 1841 on a site bounded by Market, Collins and William Streets and Flinders Lane.

Of course we have moved on more than 150 years, but the staggering size of the current market and the plethora of produce it houses is still enough to impress anyone who graces

its doorway.

The purpose-built wholesale facility on Footscray Road was opened in 1969, when it was predominantly occupied by growers selling their produce on the trading floor.

Today, the market is used by around 3,000 grower, wholesaler and retail businesses and has an estimated annual wholesale turnover of \$1.8 billion.

Walking bleary-eyed into the bright lights of the market at 5am on a weekday morning is like walking into another world.

A buzz of busyness fills the air and with around 6,000 people

a day accessing the 33-hectare site, it is easy to see why.

While it is a sight to behold, you cannot stand and stare for too long—as alertness is key when there are 848 produce-laden forklift trucks zipping around the floor. The market is, after all, home to the largest concentration of forklifts in any industrial organisation in the Southern Hemisphere.

And it certainly needs them.

Standing in the heart of the fruit and vegetable trading area, the sheer amount of produce is simply staggering. Everywhere you turn there is a colourful abundance of fresh fruit; box after box of apples, oranges, melons, berries, mangoes, persimmons, raspberries and much more.

Meanwhile, the volume of vegetables being showcased from stand to stand is nothing short of spectacular. As well as the traditional lines, there are also sections offering increasingly popular Asian varieties, specialist Vietnamese produce, bio-dynamic lines and organic vegetables.

President of the Vegetable

Growers' Association of Victoria, and supplier Luis Gazzola, of Gazzola Farms, explained: "We could feed five million people a day out of this market, but we just can't move it all. The volume of product at the market is incredible. There is certainly no shortage of produce to go around."

"When we started years ago, there was a big passing trade here. Now orders are done overnight and collected and it's very different. We know what it costs to produce the product but we can't demand it."

Mr Gazzola added: "Customers are very valuable. My products need to be available 12 months of the year, otherwise they will walk. The only way to survive is through consistency, presentation and quality."

After talking to traders, it becomes evident that there is an oversupply of many of the 50 or so lines of produce that pass through the market, especially in the fruit sector, and that it is proving difficult to shift.

And with the market's sheds, stands and cool-rooms bursting with fresh Australian-grown







“ We could feed five million people a day out of this market, but we just can’t move it all. The volume of product at the market is incredible. ”



# sight to behold

Wholesale Fruit, Vegetable and to experience the vibrant site in full through the doors daily.

produce, the mention of imports is met with horror on the faces of the traders we spoke to.

Melbourne Market Authority Marketing Manager David Fussell explained that while there was clearly a lot of produce passing through the market, there was no way of recording the official volume.

“Because all the businesses are independently operated, we don’t have any control and we don’t have any right to ask what the quantity or turnover of each stand is,” he said.

“That is pretty much the same case across all the central markets.”

Mindful of the wastage that comes with oversupply, Melbourne Market Authority contributes fruit and vegetables that are no longer sellable to a Food Bank that supplies the needy around the city.

Mr Fussell explained: “Fruit and vegetables for the Food Bank are collected three times a week from the market. They get over-ripe produce that is still edible, but is just not sellable and it is distributed to city missions, the homeless and

charities.”

“Around 700,000 kilos of food went to the food bank last year from the market. Instead of just going to landfill and creating greenhouse gasses and the wholesalers picking up a cost, they actually get a tax donation for it through the Food Bank, so it’s not a dead product.”

“It’s a good scheme and good for the community.”

Beyond the market walls, Melbourne Market Authority is also keen to promote the importance of eating fruit and vegetables as part of a healthy diet and to educate youngsters in this area.

As part of this endorsement, the authority has established the Marketfresh Schools Program, which has been rolled out to 30,000 children in schools across the area.

The initiative targets children aged between five and 13-years-old and involves going in to schools and teaching interactive classes about how fruit and vegetables are produced, why they should be eaten, how they taste and how they can be cooked.

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# Awards honour

## state-of-the-art seed technology

A new product that enables growers to accurately identify seeds right down to their individual batch number has been recognised at the 2010/2011 DuPont Australia and New Zealand Innovation Awards.

A prestigious awards ceremony has celebrated inspiring advances in agricultural technology.

The biennial 2010/2011 DuPont Australia and New Zealand Innovation Awards, held in Melbourne, recognised the commercialisation of outstanding science and technology across a number of industries, including the agricultural sector.

Sponsored by Simplot, the Agriculture and Food Production award aimed to honour innovation in the development and implementation of sustainable agricultural production techniques and practices in Australia and/or New Zealand.

Winning the award was a pioneering product from AgTechnix called IntelliSeed™, which has been designed to enable seed, grain and other bulk commodities to be identified accurately and cost effectively right down to an individual batch number.

The technology works by applying IntelliSeed™ coating compounds in the same manner as other seed coating materials. Discrete batch identifiers are then applied as a topical application in the last phase of treatment in the form of DataDots, which enable a seed batch to be identified within seconds using a field tool kit.

IntelliSeed™ also contains

invisible covert identifiers that are required to be read via a reader and—providing growers can locate the coating on the seed—they can be read in the field.

Managing Director of AgTechnix Neil Mulcahy said: “The benefit for the farmer is that if they buy a branded product and have concerns over the origin of the seed then they can identify the seed in the field or prior to sowing.”

Mr Mulcahy said that for growers wanting to use the technology, AgTechnix could licence their current coating service provider or use existing coating technology that they might have access to.

AgTechnix also provides a comprehensive range of technology that allows for component materials to be supplied to seed coaters, seed owners and in some cases growers.

Mr Mulcahy explained that the cost of the process in most situations would only be a few cents (per kg seed) more than current material costs and that rates of application would vary based on seed size and type of treatment.

He said there was also a license fee to access the technology by species and an annual cost to hire the reader.

Finalists in the DuPont Innovation Awards' Agriculture and Food Production category also included Boomaroo

Nurseries with an innovative Seedling Chemical Delivery System.

The fully automated technology is described as boasting increased efficiency, minimised chemical waste and pollution and its speed and accuracy is said to enable the company to deliver seedlings treated to growers' needs on demand.

The third finalist in the category was Industrial Research Ltd with a world first SuperEx portable supercritical fluid processing plant.

As well as Agriculture and Food Production, the award categories consisted of Building Innovation, Performance Materials, Design for a Sustainable Future, Medical and Healthcare and CSIRO Young Innovator.

DuPont Australia and New Zealand Managing Director Graeme Longe said: “It is a pleasure for DuPont (Australia) Ltd to once again recognise the home-grown innovation that is helping to provide solutions to some of the big challenges facing our growing population.”

“This year's award winners include companies whose work is helping to make air travel safer; generating greater crop yields; providing protection, comfort and dignity to the ill and disabled; producing cleaner and less carbon-intensive sources of energy and revolutionising the face of modern architecture and construction.”



Terry O'Brien, Managing Director of Simplot Australia, Agriculture and Food Production category sponsor, with Neil Mulcahy, Managing Director of AgTechnix. Photograph ©Cynthia Sciberras

# Vegetables on the menu for a **HEALTHY** heart

AUSVEG has backed a national campaign to encourage Australians to put vegetables on their plate in a bid to stay healthy.

Joining forces with the Heart Foundation and the NSW Government, AUSVEG travelled to Sydney on the first day of winter (1 June) to launch the Heart Foundation's Healthy Heart Challenge, as part of the Go Red for Women Campaign.

Heart disease is the number one killer of women in Australia and the campaign encourages females of all ages to embark on a 10-week challenge to take control of their heart health by choosing six goals that will help improve their lifestyle.

One of the key goals highlighted by the campaign is improving everyday nutrition and AUSVEG is supporting the Heart Foundation's drive to encourage people to enjoy the

health benefits of vegetables as part of a balanced diet.

AUSVEG Communications and Public Affairs Manager William Churchill attended the launch of the campaign at Sydney Markets, together with the Minister for Healthy Lifestyles, Kevin Humphries, and NSW Heart Foundation CEO Tony Thirlwell.

Mr Churchill said: "Vegetables are a key component of a healthy lifestyle and offer a host of nutritional benefits that help to build a strong immune system and keep us fit and well."

Mr Churchill explained that the cold winter months provided the perfect opportunity to enjoy a variety of vegetables in

warming soups, stews and stir-frys and consumers could take their pick from a plethora of seasonal produce grown locally in Australia.

"The health benefits of high quality and great tasting Australian-grown vegetables are

enormous and should be a part of every healthy diet," he added.

NSW Heart Foundation CEO Tony Thirlwell said: "We would urge people to try eating five different types of vegetables each day and keep saturated fat and salt to a minimum."



Minister for Healthy Lifestyles Kevin Humphries, NSW Heart Foundation CEO Tony Thirlwell and AUSVEG Public Affairs Manager William Churchill

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Dow AgroSciences Senior Scientist Paul Downard with Success™ NEO treated chillies



Growers and agronomists inspect the treated chillies

# New product provides secret weapon for growers

A revolutionary insecticide that has been 20 years in the making is finally at the fingertips of growers.

It has taken the time of hundreds of scientists and an investment of many millions of dollars for Dow AgroSciences to create the ground-breaking new product, Success™ NEO Insecticide.

Hailed as a new generation insecticide for chewing caterpillars, the product has been designed to bring relief to growers who suffer extensive damage to crops and economic losses from chewing insects.

Success™ NEO—which was unveiled at the 2011 AUSVEG National Convention in Brisbane—is said to be more effective and longer-lasting than its predecessor Success<sup>2</sup> Naturalyte™.

“Chewing insects cause millions of dollars worth of damage on farms throughout Australia,” said John Gilmour, Dow AgroSciences Business Manager for Horticulture.

“Without efficient Integrated Pest Management products, Australia’s fruit and vegetable production could decrease dramatically.”

It was a chance discovery by a Dow AgroSciences research scientist on holiday in the Caribbean that led to the discovery of the key active ingredient in Success<sup>2</sup>—spinosad—in the 1980s. The bacterium was found during a visit to an abandoned rum

distillery on a tiny tropical island, where the scientist found sudden relief from the incessant buzz of insect drone heard everywhere else. Intrigued, he took some soil samples back for testing and discovered a bacterium that has, since that first discovery, never again been found.

Dow AgroSciences was able to breed the bacteria and isolate its effective insecticidal metabolites.

“It provides outstanding control of the key chewing caterpillar pests, while still providing unmatched safety for the main beneficial mites and insects.”

Mr Gilmour explained that to enhance the Success product even further, scientists had not simply increased the amount of spinosad or added extra ingredients, but had actually redesigned the original molecule.

The new molecule, called spinetoram, is described as the secret weapon inside the Success™ NEO formulation.

“The result is an insecticide that contains an active ingredient that is at least twice

as effective as that in Success<sup>2</sup>. It provides outstanding control of the key chewing caterpillar pests, while still providing unmatched safety for the main beneficial mites and insects,” said Mr Gilmour.

“While Success™ NEO (containing 120 g/L spinetoram) has only half the active ingredient loading of Success<sup>2</sup> (containing 240 g/L spinosad), the two times efficacy means that the rate of formulated

product used does not change.”

“This means that if the old rate for control of a pest was 200 mL/ha with Success<sup>2</sup> then the rate for the new product, Success™ NEO, will also be 200 mL/ha. The result is that there is going to be even less active ingredient in the food chain and environment than before.”

Mr Gilmour added: “Success™ NEO has improved photo stability, which means it

does not break down as easily in sunlight, and this increases its residual effectiveness.”

“Withholding periods are still short—three days for most fruit and vegetables and only one day for tomatoes and celery. Most importantly, it is extremely effective against western flower thrip, a key pest in many crops.”

The official launch of Success™ NEO took place in June at Austchilli, in Bundaberg, Queensland, followed by a presentation at the nearby offices of Hortus.

Dow AgroSciences Territory Sales Manager Nick Koch said: “Austchilli, one of Australia’s largest chilli producers, was experiencing a significant problem with western flower thrip. So we set up a demonstration area at the farm, treating half the crop with Success™ NEO and leaving the other half untreated.”

“You can clearly see the pronounced scarring and bending on the untreated fruit where the thrip had free range. By contrast, the chillies that were treated with Success™ NEO are of a far better, saleable quality because Success™ NEO so comprehensively controlled the pests.”

Further information about Success™ NEO visit [www.dowagrosciences.com.au](http://www.dowagrosciences.com.au)



# Spotlight on 2012

The 2012 AUSVEG National Convention, Trade Show and Awards for Excellence is to take place at Wrest Point Hotel Casino in Hobart from 10–12 May.

Just months after the resounding success of the 2011 National Convention in Brisbane—which attracted close to 1,000 delegates—anticipation is growing again following the announcement by AUSVEG and Minister for Tourism The Hon Scott Bacon MHA that Hobart is to host the 2012 event.

All eyes will be on Tasmania from 10–12 May, when the National Convention, Trade Show and Awards for Excellence returns to raise the bar for a third year with yet another impressive program of events, speaker sessions and entertainment.

The vibrant city of Hobart—with its historic wharf, calm waters and inspiring scenery—will provide the perfect setting for the National Convention, which will bring growers together with members from all areas of the industry supply chain for an invaluable networking experience.

AUSVEG National Marketing Manager Simon Coburn said: “AUSVEG is very excited to be taking the 2012 National Convention to Hobart. It is undeniably one of the most beautiful cities in Australia and Wrest Point Hotel Casino—set against the stunning backdrop of the River Derwent—is the perfect venue to host the event.”

“The Convention will run for three days, but we are encouraging our delegates to bring their families, make a holiday of it and enjoy all Hobart has to offer.”

The Trade Show will once again form an integral part of the National Convention and promises to be packed with important industry players from the supply and services sectors, as well as key figures involved in research and development.

The event will also showcase a series of high-profile and influential speakers, as well as industry experts, who will share their knowledge with delegates through a timetable of speaker sessions.

The 2012 social program is set to be one of the best yet, with a range of events being organised to entertain and inform delegates of all ages.

As the curtain closes on the 2012 National Convention, the coveted AUSVEG Awards for Excellence and Gala Dinner will return to honour the achievements of some of the vegetable industry’s most valued members during an evening of celebration.

AUSVEG is set to make more exciting announcements about the 2012 National Convention during the coming months as plans take shape. Meanwhile, growers and industry stakeholders are urged to save the date and support this influential event next year.

For more information contact AUSVEG on (03) 9822 0388 or email [convention@ausveg.com.au](mailto:convention@ausveg.com.au).



# *Having faith in* horticulture

Almost 20 years ago, Peter Ward returned to his roots and took a gamble on growing vegetables at his family's New South Wales farm, writes Lisa Higginson. Looking back at his journey, the respected grower talks to *Vegetables Australia* about taking risks, remaining vigilant and planning for the future.



Peter Ward planting at his Upper Colo farm with the help of his daughter Emily



“We started to grow cabbage and cauliflower in 1993 and that was the first time the farm had grown vegetables in 30 years.”

If there was one word to describe Peter Ward it would be determined.

It was with an inspiring resoluteness that the New South Wales grower took a leap of faith to breathe new life back into his family's 100-year-old farm—despite being warned that the future for horticulture looked bleak.

Almost two decades later and Peter's evident determination has clearly paid off, with his Upper Colo-based enterprise now producing a variety of vegetable crops, citrus fruits and the “odd bit of cereal maize”—and Peter himself being a respected member of the Vegetable Industry Advisory Committee (IAC).

Peter's grandparents bought the farm a century ago and built the house he now lives in just after the Second World War. His father Mervyn continued to run the farm with his two brothers and Peter and his siblings were all raised there.

But despite being born into the industry, Peter's pathway into horticulture took a few twists.

“I chose to study environmental management because my father didn't think there was a future in horticulture,” said Peter.

“He almost chased me away

from it. However, at that stage he had moved the farm from vegetables to almost all citrus only to see the onset of cheap imports almost devastate the business.”

“When I got married to my wife Sonia, we thought hard about where we wanted to be and what we wanted to do and that's when we decided to come back to the farm and give it a go.”

Ward Brothers Colo now produces a main crop of cabbages—red, plain and Savoy—and also yields cauliflowers, watermelons and citrus fruits across 30 hectares of land.

“We started to grow cabbage and cauliflower in 1993 and that was the first time the farm had grown vegetables in 30 years,” said Peter.

“We did feel like we were taking a risk. It's not an industry where you get a set price for the produce, so you become price takers and everyday is a gamble.”

“I knew the risks, but I chose vegetables because they yield quick returns on investment capital. You can turn a crop around quickly compared to other commodities. Growing vegetables also gives you the opportunity to change your crop lines reasonably quickly and easily if you need to.”

Mindful of the challenges that come with growing vegetables for a living and with a young family and his parents to support, Peter also decided to generate a second income by working off-farm.

When he wasn't planting, picking and priming his produce, Peter lectured in environmental management at the University of Western Sydney (UWS), as well as carrying out stints with local government and contracting.

“I still divide my time between growing and running workshops in environmental management with high school children and UWS,” he said.

Since his father Mervyn retired around five years ago, Peter has not had to look too far from home to find reliable labour to help cultivate his crops—for his children Emily, 18, Rebekah, 15, Patrick, 14 and Grace, 12, roll up their sleeves every weekend to help dad plant and pick.

“People say the reason I had four children was because I needed the help on the farm!” said Peter.

“They help me out at the weekends and my father also works on a voluntary basis. My two older girls are a bit over it now as they are both quite academic, but Patrick at this stage hopes to get a trade and then wants to come back to the

continued over page ►



Mervyn, Peter and Patrick Ward.

“ For me, I think that farmers markets and developing a niche with ‘pick your own’ and farm visits here are probably going to become an important mix in the future. ”

farm.”

“If he wants to work on the farm I will encourage him to be innovative and make changes, but I think he needs to get something to fall back on first.”

Peter sells his produce through Sydney Markets and, like many growers, has had to remain resilient amid trying times as a price taker.

“We take what we can get for the product,” said Peter.

“The supermarket duopoly really hurts growers of my size and scale. Recently, I was getting \$200 per tonne for pumpkins and they were being sold in the supermarket for \$2,000 per tonne. When you see something on the shelf for 10 times what you are paid for it, it is a little disheartening.”

“It is a struggle, but part of every year will be good enough to keep you doing it the next.”

Peter explained that despite the challenges, there were also positive outcomes in the industry such as a new water sharing plan for the Hawkesbury-Nepean River, which came into effect on 1 July.

“The plan means that water rights have now been separated from the total of the land you

can trade,” he said.

“It means we have more capital we can deal with, which is a very good outcome. It has taken about 10 years of hard work by a number of vegetable growers to get the issues across.”

As well as his own personal experiences at the coal face of farming, Peter is also made aware of the ongoing challenges confronted by Australian growers through his role as a member of the Vegetable IAC, which is instrumental in the process of deciding how Vegetable levy payers’ money is invested.

“It has been challenging, but I think the committee we have now is really determined to ensure the levy money is spent with growers’ interests right at the centre of it,” said Peter.

“All of us have the determination to get the most out of the levy for growers.”

“I would encourage growers who pay the levy to also read the Strategic Investment Plan (SIP) White Paper when it is published and make their comments about how they want the levy to be spent, as they will be listened to.”

Looking to the future, Peter







Peter and Grace Ward



cited the lack of young people engaging in horticulture, the increasing threat of urbanisation and the skinny margins with which growers operated on as some of the issues that the industry would continue to tackle.

"I think the profile of horticulture needs to grow and I think AUSVEG is doing a good job in that regard," he said.

"I think that one of the things with horticulture is that our needs are practically traded off against the needs of industries like mining. It seems the government fails to recognise how important vegetables are."

Armed with an infectious determination, it is clear that Peter is dedicated to being part of the future of horticulture.

"For me, I think that farmers

markets and developing a niche with 'pick your own' and farm visits here are probably going to become an important mix in the future."

"It's a small enterprise that I run. I know I am not going to influence market prices, I take what I'm given and I just have to find a way to carve out a niche, because I am determined to stay in the industry."



# Investing today for tomorrow's industry

Every day, growers, researchers and agronomists work tirelessly to tackle the challenges faced by the vegetable industry in a bid to safeguard it for generations to come. But while the seeds are being sown for the future of horticulture, the decline in young people coming into the industry is causing concern.

With research pointing to a 35 per cent gap between supply of agricultural graduates and demand for their qualifications within five years, the industry recognises that it is essential to encourage younger generations to explore the possible paths into horticulture and provide them with opportunities.

This issue has formed the basis of an across industry project that aims to increase the number of students pursuing undergraduate studies and subsequent careers in agriculture and horticulture.

The *Investing in Youth Undergraduate Studentship Program* was launched as a pilot in 2010 by the Rural Industries Research and Development Corporation (RIRDC) as a vehicle to increase the number of students choosing a career in the industry, while addressing the rural skills shortage.

Following the success of the pilot program, the scheme is being rolled out again in 2011.

One of the program's major objectives is to promote the dynamic and diversified career pathways that agriculture can

offer by utilising the students as ambassadors to the program and the industry.

RIRDC Research Manager Ken Moore said: "There was a major study by the Australian Council of Deans of Agriculture on the job demand for agricultural science students and the supply. It found that there is a big gap between the

industry organisations work in collaboration to fund and deliver the program.

These included the RIRDC, the Australian Egg Corporation Ltd, Australian Pork Ltd, Cotton Research and Development Corporation, Grains Research and Development Corporation, Grape and Wine Research and Development Corporation, Meat

Education and the Primary Industries Education Foundation.

Ten students entering undergraduate studies in areas of agriculture were selected for the pilot in 2010 and another eight have been selected for the 2011 program.

The successful students have been chosen on the basis of their leadership strengths, their commitment to agriculture and commitment to achieving and delivering through the program.

HAL's *Investing in Youth 2010* student was Bonnie Hargreaves, who commenced a Bachelor of Agricultural Science at the University of Western Australia, before extending to a double degree in Agricultural Science and Commerce this year.

Richard Stephens, Portfolio Manager-Industry Development at HAL, said: "HAL supports the long-term development of the horticulture industry by investing in people who will have input into our industries in the future."

"These programs allow that investment to take place and for individuals to be recognised by others and for themselves to become excited about a career in horticulture."

“HAL supports the long-term development of the horticulture industry by investing in people who will have input into our industries in the future.”

number of agriculture graduates and the actual demand in the industry.”

“A number of initiatives were put in place as a result of the study. We undertook the *Investing in Youth* program to attract school leavers into agricultural degrees.”

*Investing in Youth 2010* saw a number of government and

and Livestock Australia Ltd and Horticulture Australia Ltd (HAL).

The project has been funded by HAL as part of the across industry program. The Australian Government provides matched funds for all HAL's R&D activities.

The program was also supported by the Primary Industry Centre for Science

"Without good people we are not going to survive. The industry needs to invest in programs like this."

The scheme supports students through four key strategies; a financial scholarship, professional support in the form of mentoring, professional development and industry placement.

The students each receive a financial scholarship of \$5,000 per annum for the duration of their degree, which is binding to students participating fully in their studies and passing all examinations and assessments.

Each student is also matched up with a mentor from within their university to offer them support and advice on their studies and on their general career direction. Miss Hargreaves was mentored through the first year of her undergraduate studies by Dion Nicol, a post graduate student with the University's School of Plant Biology.

Industry placements are also organised for each student in a bid to provide them with the opportunity to test out different industries and fields of work, so

helping them to narrow down their career preferences.

Mr Stephens said: "Bonnie came and took a two-week placement at our head office in Sydney last year. She got involved in different project work, including the measuring and monitoring of air quality effects on indoor plants and carrying out some ecology work at The University of Sydney."

Another aspect of the program involves an RIRDC-facilitated two-day workshop in Canberra, which allows the students to support their professional development and provides the opportunity to enhance their connections with the program and meet with rural industry leaders.

The *Investing in Youth Undergraduate Studentship Program 2010* milestone report, published by HAL, states that the participating students have demonstrated a stronger commitment to their studies and to pursuing a career in agriculture as a result of the program.

It highlights that the students' commitment has been demonstrated through completing assessments at

well above satisfactory levels and taking seriously their commitment to making the most of the opportunities and connections that the program provided them.

Mr Stephens said: "It's not just the individuals involved in the program who are getting the benefits. They are used as case studies for other students and people to see the multitude and variety of opportunities that exist in horticulture."

"This project aims to show that horticulture is an exciting and dynamic place to work. Not enough people know that, but it's through programs like this that we can change that."

The RIRDC has been successful in securing eight sponsors for the 2011 program, including HAL, Woolworths and Agrig 8, and hopes to build on the success of the 2010 pilot.

It aims to raise the awareness of the program, increase ambassadorial opportunities for students and improve upon the relationships with potential corporate sponsors to ensure the critical mass of students is achieved.

HAL's *Investing in Youth 2011* student will be Sam

Adams, who is studying a Bachelor of Agricultural Science at the University of Queensland.

## THE BOTTOM LINE

- Research has identified a substantial gap between the supply of agricultural graduates and the demand for their skills within related areas of the industry.
- The issue is being addressed through the *Investing in Youth Undergraduate Studentship Program*, which aims to increase the number of students choosing a career in the industry, while promoting the dynamic and diversified opportunities on offer.
- The first year of the 2010 pilot program has resulted in students demonstrating a stronger commitment to their studies and to pursuing a career in agriculture, and the program has subsequently been rolled out to 2011.



For more information:  
Ken Moore—RIRDC Research Manager  
Phone: (02) 6271 4127  
Project number: AH09027



*Investing in Youth 2010* visit to Parliament House in Canberra

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# Young Grower Tom Hunt

Boonah,  
Queensland

**Name:** Tom Hunt

**Age:** 24

**Role:** General Manager at Kallium Pty Ltd. Coordinates all aspects of the onion season, which includes planting, picking and packing onions; distribution of the final product and planning for future seasons.

**Location:** Boonah, Queensland

## How did you first get involved in the vegetable industry?

I first became involved in the industry when I was 15-years-old and worked weekends in a local fruit shop. After I finished Year 12, I worked in the Brisbane Markets as a labourer and forklift driver for two years, not really knowing what I wanted for the future.

I then worked a season in a mango packing shed in Townsville and then moved on to South Australia to work on a strawberry farm for six months, before moving back to Brisbane to be a distribution manager for a lychee marketing company.

I was then offered a position as a produce buyer for a large company based at Brisbane Markets and I suppose that

was where I grabbed my big opportunity to make a real future in the industry. In 2008, I realised that I missed the farming side and the lifestyle, and that's when I was offered the opportunity of moving to Boonah and managing Kallium—which is the partner company to Kalfresh, a major carrot and bean facility in the Fassifern Valley.

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

Working in this industry is very rewarding and there is so much opportunity for the young people in Australia to get involved. It is hard work and long hours, but the satisfaction you get at the end of the day is not comparable with any other industry. It's about creating something special and sustainable.

In my first year at Kallium, we grew around 3,000 tonnes of onions and over the past four years, we have increased our

volumes to 10,000 tonnes per season. By redeveloping our plans to grow the business by linking ourselves with a variety of different customers and marketing groups, we have basically gone from a small onion packing company, to a quality operation, supplying onions to Brisbane, Sydney, Melbourne and Adelaide.

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

I know I'll be in this industry for a long time to come. I couldn't imagine working in any other areas of employment—unless U2 is looking for a new frontman!

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

We need to sell the industry better. We need to highlight the level of responsibility required,

the earning capacity and the variety of jobs on offer such as logistics, marketing, production and agronomy.

Australia needs young people to want to work in horticulture. There are more farms up for sale these days because there is no one to keep them going down the generations.

## You recently won the Landmark-sponsored Rising Star of the Year Award at the 2011 AUSVEG National Awards for Excellence. What did it mean to you to receive the accolade?

Winning the Rising Star of the Year Award this year was a big shock to me. I understand that it is a big honour and I am grateful to be offered this opportunity by Richard Gorman and Robert Hinrichsen at Kalfresh.

I see myself here for many years to come. I enjoy the pressure and the responsibility here and the future looks exciting.

# Be in the know

The vegetable industry is moving forward

The Strategic Investment Plan (SIP) White Paper will be released in late August 2011 and will be available to view online at [www.ausveg.com.au](http://www.ausveg.com.au)

If you would like to order a hard copy of this document, please fill out this form and fax it back to AUSVEG on (03) 9822 0688 or email to [courtney.burger@ausveg.com.au](mailto:courtney.burger@ausveg.com.au)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

Role (Grower, Agronomist etc): \_\_\_\_\_



For any further enquires please call AUSVEG on (03) 9822 0388.

## A rich source of information about vegetable growing regions in Australia

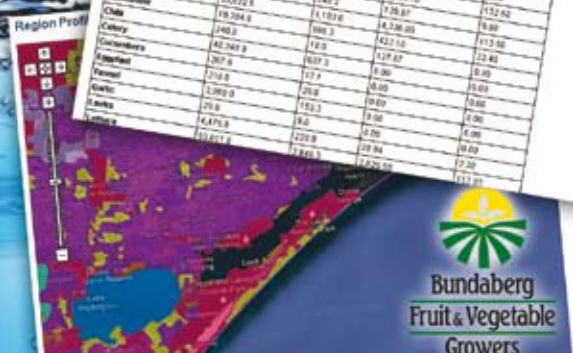
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Vegetable	Victoria Prod (Tons)	Area Sown (ha)	Production Prod (Tons)	Area Sown (ha)
Asparagus	217.8	45.7	0.00	0.00
Beetroot	118.8	1,455.9	84.29	11.02
Broccoli	2,254.9	914.4	118.48	69.30
Brussels Sprouts	1,008.8	918.7	2,119.50	108.23
Cabbage	15,410.6	176.8	0.00	19.00
Carrots	1,750.6	2,708.3	2,783.79	0.00
Cauliflower	6,574.2	873.0	8.00	107.00
Chickpeas	28,889.7	95.8	432.16	22.40
Cucumbers	19,322.8	1,749.2	3,756.87	132.60
Onions	19,304.8	1,183.6	0.00	0.00
Peas	240.8	180.3	4,326.89	8.90
Spinach	42,749.8	18.0	432.16	113.56
Tomatoes	267.8	637.0	1,217.67	22.40
Winter	218.8	17.1	0.00	0.00
Summer	2,980.8	218.0	0.00	0.00
Winter	29.8	153.3	0.00	0.00
Summer	4,475.8	8.0	0.00	0.00
Winter	10,011.8	120.8	29.84	0.00
Summer	10,011.8	120.8	1,420.10	17.20



# A partnership for the future

Landmark recently announced a strategic partnership with AUSVEG aimed at developing products and programs to help ensure the future sustainability of Australia's horticulture sector.

**B**rett Morris, newly appointed National Horticulture Manager for Landmark, has been given the responsibility of delivering a strategy that will make both the grower and Landmark successful for the next generation.

Mr Morris has been charged with working closely with AUSVEG to grow knowledge of the horticultural industry and develop a meaningful response in terms of product development and service provision.

"Landmark is a big Australian agribusiness and with our acquisition by international company Agrium in January, we have become even bigger," explained Mr Morris.

"That gives us access to an expertise base that includes some of the best agronomists in the world. We want to use those resources in the most efficient way to create a better, more profitable future for Australia's horticultural growers."

"Landmark's history in supporting Australian farmers stretches back 150 years. We're keen to make sure the next 150 years are sustainable. That means collaborating to find new

and innovative ways to farm. We need to do things smarter."

Mr Morris said AUSVEG was a natural strategic partner for that objective.

In mid-June, AUSVEG CEO Richard Mulcahy presented at the Landmark Horticulture Conference in Mandurah, Western Australia.

He met with Mr Morris and other representatives from Landmark's Horticulture division

"Match that with our parent company's track record in developing fertilisers, herbicides, pesticides and seeds for a variety of international markets and sectors and there's plenty of potential."

"But we have to be smart about it. We're looking at how we can best focus our resources into products and services that will specifically boost Australian

"Ideally we want to see more vegetables grown more profitably on Australian farms so that there is less and less reliance on overseas imports to meet our future food needs."

Landmark has always had an interest in supporting farmers with innovative, safe and beneficial products.

"We know the key is working with the new dynamic generation of farmers," said Mr Morris.

"That's where the future of horticulture is. It's the youthful movers and shakers like Tom Hunt and his peers who we need to engage with and exchange knowledge and resources."

Tom Hunt, 24, is General Manager at Queensland onion packers, Kallium Pty Ltd. At April's AUSVEG National Awards for Excellence, he won the Landmark-sponsored Rising Star of the Year Award.

Mr Morris summed up: "Landmark's sponsorship of the Rising Star Award is just one small part of our plan. It's a signal of our commitment to working strategically with AUSVEG and the Australian growers towards a better future."

“Landmark's history in supporting Australian farmers stretches back 150 years.”

to discuss an agenda for future planning.

"Some of that discussion was around training our people to have a better understanding of the sector and how the research and development framework operates," said Mr Morris.

"Landmark has a comprehensive Australian-based product development team and invests extensively in R&D."

horticultural outcomes."

"We're still very much in the early planning stages but expect to see some tangible activity rolling out over the next 12 months or so."

Mr Morris added: "AUSVEG, which is so in touch with its national grower membership, is best positioned to provide us with direction on where to focus our efforts."



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# Irradiation as a practical tool for the horticulture sector

Leading sterilisation company Steritech believes irradiation could have an important role to play in helping the Australian horticulture sector manage biosecurity risks and meet quarantine requirements in the future.

Irradiation is commonly used as a means to sterilise and decontaminate products.

The process involves exposing a product to a source of ionising energy (either gamma or X-rays) in order to sterilise insects and eliminate bacteria and other pathogens. Irradiation is highly effective without the use of chemicals and without a significant change in the temperature of the treated product.

With plants operating in Melbourne, Sydney and north of Brisbane, Steritech is Australia's leading provider of irradiation sterilisation services.

According to Steritech's Chief Executive Officer Murray Lynch, a range of industries rely on irradiation to treat their products.

"Over the past 30 years, our biggest customers are from the pharmaceutical, medical, cosmetics and animal feed industries," said Mr Lynch.

"Recently however, the fresh food sector has been a growing part of our business."

## Growing use of irradiation

More than 50 countries allow the use of food irradiation and international bodies such as the World Health Organisation recognise that irradiation at approved levels is a safe

process.

Many countries, including the United States, have approved the use of irradiation of vegetables for quarantine purposes and/or to extend shelf-life as a food class (i.e. any vegetable can be irradiated).

"In Australia there is no such blanket approval, rather Food Standards Australia New Zealand (FSANZ) assess each product on a case-by-case basis," said Mr Lynch.

"Currently in Australia, irradiation can be used to treat herbs, spices, certain teas and a range of tropical fruits, including mangoes, papaya, custard apple and litchi."

It is expected that in the future there will be applications to expand the number of fruits and vegetables approved for irradiation, and an application for the irradiation of persimmons is already under consideration.

## An alternative to chemicals

Steritech believes irradiation is a potentially important tool for managing pests at a time when current practices, in particular fumigation using chemicals such as Methyl Bromide, Dimethoate and Fenthion, face increased restrictions.

Methyl Bromide is classified as an ozone-depleting substance and is restricted under the

Montreal Protocol.

Several countries, including the European Union, have already banned the use of the chemical as a quarantine measure and its use in Australia is coming under question due to increasing costs and environmental concerns.

The Australian Agriculture Pesticides and Veterinary Medicines Authority (APVMA) is also reviewing the use of Dimethoate and Fenthion, with an announcement on the outcome of this review expected shortly.

The impact of any new restrictions on these chemicals would be felt across horticulture, especially in fruit fly areas such as Queensland.

According to Mr Lynch, there is a range of alternatives to chemical fumigants, such as refrigeration, hot water and steam treatments-as well as irradiation.

"No single treatment option will replace chemicals, but rather it will be a combination of methods, of which we believe one will be irradiation," he said.

## Tropical fruits to New Zealand

The case of Australian mango exports to New Zealand is one example of where the irradiation process has proven itself as technologically and

commercially viable.

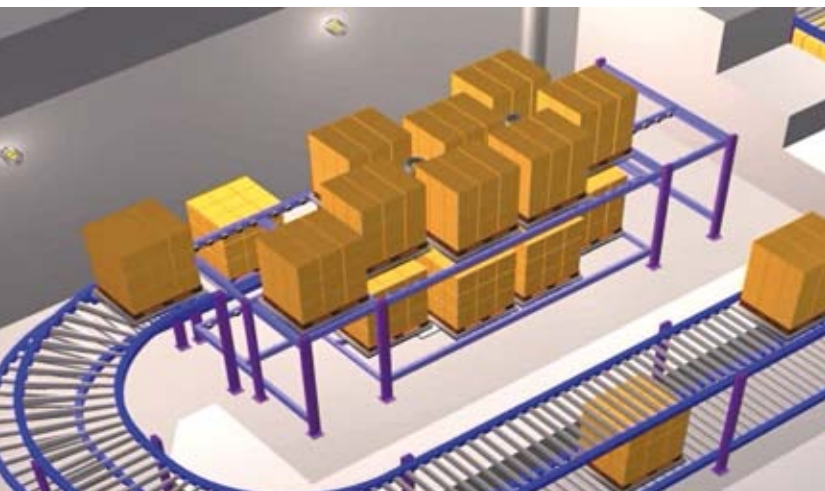
New Zealand has strict quarantine measures in relation to fruit fly, which has limited imports of some Australian fruit and vegetables. However, regulatory approval of irradiation as a phytosanitary measure for tropical fruits has opened up trade between the two countries.

New Zealand is the fastest growing market for Australian mangoes and in 2010, New Zealand's imports of irradiated fruit from Australia totalled more than 1,000 tonnes.

"Steritech irradiates all the mangoes destined for export to New Zealand on behalf of the trade," said Mr Lynch.

"The reports from New Zealand are consumer acceptance of irradiated mangoes is high. Irradiated mangoes are now considered a mainstream product sold successfully in supermarkets and other retail channels."

It is clear that an important opportunity exists to utilise the chemical-free process of food irradiation in the horticulture industry, although two key issues that will determine the success of irradiation are regulatory approvals and consumer acceptance. To address these issues, a significant process of education and consultation needs to occur with the horticulture supply chain.



Diagrams of the Steritech irradiation facility





Dr Peter Roberts speaking at the 2011 AUSVEG National Convention in Brisbane

# Energy expert spreads knowledge

New Zealand-based Radiation Biologist Dr Peter Roberts shares his knowledge of food irradiation with *Vegetables Australia*.

Ionising energy and irradiation processes are not the typical phrases that spring to mind when referring to the vegetable industry.

However, such words could be heard circling among many growers at the recent 2011 AUSVEG National Convention following an informative presentation by Radiation Biologist Dr Peter Roberts.

Based in Wellington, New Zealand, Dr Roberts is an advisor to the New Zealand Food Safety Authority and Biosecurity New Zealand on irradiation matters.

Specialising in the uses and effects of ionising radiation, Dr Roberts has been using his expertise to advise the industry on how the process of food irradiation can assist with managing Australia's biosecurity risks and how it can play an important role in horticulture.

Speaking to *Vegetables Australia*, Dr Roberts explained: "Food irradiation is a process a bit like pasteurisation, but there is no heat. It uses ionising radiation, which is a very high energy form of radiation that brings about chemical change

through a process."

"The whole idea is to bring benefits to the food."

Dr Roberts said that radiation could be used to bring about changes to the rates of maturation and growth control in produce, as well as to sterilise insects and eradicate harmful bacteria.

Globally, it is understood that irradiation is commonly used to kill pathogenic bacteria.

"Irradiation has been used for 40 years to kill bacteria in herbs and spices, and almost half of the spices used in the world today have been irradiated to clean them up," said Dr Roberts.

"In the developing world, they use it more as a means of overcoming food wastage, which is a terrible problem in the tropical countries."

Closer to home, Dr Roberts explained that the interest in Australia and New Zealand had been in using irradiation as a potential quarantine treatment for trading fresh produce between countries.

"Although food irradiation has been around for about 40 years, it's only in the last five or

six years that it's really become practical as a means of helping trade between countries," he said.

"The first international trade in irradiated fresh produce was between Australia and New Zealand with mangoes in 2004. Since then, New Zealand has accepted more tropical fruits."

"In the United States, they have now cleared irradiation of spinach and lettuce to take care of any pathogenic bacteria they find."

Dr Roberts said that food irradiation could be used effectively by growers as an alternative to some chemicals, especially when forecasted tighter controls were imposed.

He highlighted two key chemicals, Dimethoate and Fenthion, which he said were expected to face increased restrictions that would affect growers in fruit fly areas.

According to Dr Roberts, the technology potentially has a broad application in horticulture, as many different types of fruit and vegetables can be treated with irradiation without impacting product quality or nutritional value.

"Sometimes people think the process means that the food is going to become radioactive, but it is just not possible. Nothing is left behind in the food at all," said Dr Roberts.

"Irradiation doesn't depend on temperature or pressure and it can be done when the produce is in its final packaging. There is a source of radiation that floods a chamber and the food is conveyed past it. It is the speed of the conveyor that determines the dose."

With nine tropical fruits already approved for irradiation by Food Standards Australia New Zealand (FSANZ), Dr Roberts said there was likely to be an increase of the process in the fruit and vegetable industries.

"Food irradiation has been around for 40 years, so the research has been done," said Dr Roberts.

"In terms of the vegetable industry, it's really just about identifying a need and a market and then taking it to market. There is a need in Australia, especially because of the trade between states."

# The cutting edge of clean



When it comes to on-farm washing of vegetables, Australia's food safety and auditing standards are among the best in the world, writes Karen Shaw. A new research project aims to assist growers in finding the smartest sanitisers to suit their crop.



Salad leaves in the washing process

A major research project is currently underway to help growers maintain their edge on food safety in vegetables.

The project, entitled *Evaluation of vegetable washing chemicals*, has been funded by Horticulture Australia Limited (HAL) using the vegetable industry levy with matched funds from the Australian Government. It aims to evaluate at least six existing and innovative vegetable

Supermarkets, wholesalers and processors are demanding high levels of food safety, which is increasingly the grower's responsibility.

"Right now farmers don't have the latest information about new sanitisers on the market and how they compare with existing products," Dr Premier said.

He explained that most growers used chlorine solution (either in liquid form as Sodium hypochlorite or as the granular

“As an industry we need to be proactive. Food safety is a really important issue that's not going away, as we've seen recently with the nasty E-coli outbreaks in Europe.”

washing or sanitation products on the market.

The on-farm trials, in Victoria's Mornington Peninsula, started in June and Principal Investigator Dr Robert Premier is scheduled to present the findings in about six months.

Dr Premier said vegetable washing standards in Australia were among the best in the world because of stringent auditing procedures.

Fresh produce such as leafy greens and root vegetables are washed immediately after harvest to remove dirt, help control plant disease, prolong storage life and remove potentially harmful pathogens before human consumption.

Calcium hypochlorite) in the washing process, because it reduced bacteria levels on the leaf surface and stopped further contamination by killing any bacteria that remained in the tank washing solution.

"Some countries have already reported a backlash to chlorine and its use by organic growers in Australia is not permitted," Dr Premier said.

"These farmers rely on potable water, which is not as effective even if the produce is washed in a continually running potable water supply, and that's not always possible."

Dr Premier said pathogens were often present in small pockets in a batch of vegetables.

“All you need is a small amount of animal or bird faeces from the leaves to go into the tank solution without a sanitiser and cross-contamination will occur as each batch is washed,” he said.

“If this happens then we run the risk of causing food-borne illness.”

“Other washing products might be better than chlorine but, at this stage, we don’t know because little scientific research is available. As an industry we need to be proactive. Food safety is a really important issue that’s not going away, as we’ve seen recently with the nasty E-coli outbreaks in Europe.”

Preliminary research has uncovered six alternative sanitisers to trial on-farm and under laboratory conditions. Each will be scientifically tested to evaluate how they perform against chlorine.

Dr Premier is keen to trial an Electrified Water (EW) system. An Australian technology company has patented a unit, which it claims will generate disinfectants from water to make pathogens inactive.

“The company has agreed to modify a unit for the trials,” Dr Premier said.

“Although this method might have high start-up costs, it will pay for itself quickly, is easy

to use and requires no other chemicals to kill pathogens.”

Another alternative to chlorine is Peracetic acid, which is made by reacting Acetic acid with Hydrogen peroxide.

Dr Premier explained: “It’s known to be effective for washing vegetables, functions well under cold conditions and is environmentally friendly,

“We also want to test stabilised chlorine dioxide, already registered in Australia as a washing aid and known to be effective against bacteria and viruses.”

degrading to Acetic acid, water and oxygen. However, it’s expensive and difficult to monitor for accurate application levels.”

“We will also test CitroX®, a formulation of soluble bioflavonoids obtained from citrus fruits. It’s non-toxic, has well-documented antimicrobial properties and could have potential for use washing

vegetables. But it’s costly and difficult to measure accurately.”

Aussan™ is a new generation antibacterial sanitiser made from natural, organic ingredients and manufactured in Australia. Dr Premier said it was already used as an alternative to chlorine for washing fruit and vegetables during processing.

“It’s not toxic and is not

deactivated by soil, which means solutions last longer,” he said.

The use of Acetic acid to remove bacteria from leafy vegetables has been widely studied, but the trial will re-examine its effectiveness.

“We also want to test stabilised Chlorine dioxide, already registered in Australia as a washing aid and known to

be effective against bacteria and viruses,” Dr Premier said.

“Food safety will continue to be an important issue in the horticultural industry. Growers need constant information about the best and most cost effective ways to wash their fresh vegetables on-farm to maintain our high industry standard.”

“The results from these trials will go a long way toward achieving that goal.”

#### THE BOTTOM LINE

- A major research project is examining vegetable washing sanitisers and their ability to remove harmful pathogens before fresh produce leaves the farm.
- Many growers use chlorine solution for washing vegetables. Until now, little research has been done on alternative products on the market and assessed their cost effectiveness.
- Australian standards for food safety in the vegetable industry are among the best in the world and results of the six-month trial should help maintain that record.

**i** For more information:  
Dr Robert Premier  
Global F.S.  
Email: <robert.premier@consultant.com>  
Project number: VG09086



## Minor-use permits

Permit Number	Permit Description (pesticide/crop/pest)	Date Issued	Expiry Date	States Covered
PER12882	Chess (pymetrozine) / snow and sugar snap peas / aphids	11-May-11	30-Jun-13	Valid for all states (other than Vic)
PER12863	Chlorothalonil / radish / White blister	9-Jun-11	30-Jun-16	Valid for all states (other than Vic)
PER12823	trifluralin / chillies, paprika and eggplant / broadleaf and grass weeds	11-May-11	30-Jun-21	Valid for all states (other than Vic)

These permits have had their additional data requirements changed.

Full details of all permits are available on the APVMA website: [www.apvma.gov.au/permits](http://www.apvma.gov.au/permits)

# Growers urged to utilise labour scheme

Vegetable growers in need of reliable labour on their farms are being encouraged to adopt the Pacific Seasonal Worker Pilot Scheme (PSWPS).

The three-year PSWPS has been designed to establish whether a seasonal labour program will meet horticulturalists' needs, while contributing to Australia's economic development objectives in the Pacific.

Australian growers report that they are finding it increasingly difficult to get local workers, who are less and less keen on seasonal work in rural areas, especially when there are other options available. The lack of accommodation and transport, coupled with a nomadic lifestyle, also makes it especially difficult for those with families.

However, under the Scheme, horticulturalists who cannot meet their labour needs locally have the option to offer workers from Kiribati, Papua New Guinea, Tonga and Vanuatu contracts for four, five or six months of work.

The Scheme enables growers to benefit from a stable, motivated and trained labour force that is available for the whole season. Growers also

have the advantage of using the same workforce the following season.

AUSVEG Chief Executive Officer Richard Mulcahy said: "I think vegetable growers could really benefit from the Scheme and I would encourage them to look at adopting it. I

in Mildura, Victoria, is an Approved Employer under the Scheme and known nationally for operating the National Harvest Labour Information Service. MADEC has placed workers with growers in New South Wales, Victoria and Western Australia, including

has 95 workers, 13 of whom have returned for a third time and 10 for a second time. He is thrilled with the productivity and reliability of his workers."

The Scheme has been designed to both protect Australian jobs and benefit the Pacific Islands, in which there are limited opportunities for paid employment. As a result, employers wanting to participate in the scheme must first undertake labour market testing to confirm labour shortages.

Workers are recruited through Approved Employers, who may be agencies that have been approved by government to recruit workers on behalf of growers under this scheme or growers who have been approved to recruit directly.

Approved Employers must ensure that workers employed in the Scheme are employed at award rates and conditions, have private health insurance and personal protection equipment.

They must also pay return airfares upfront (with a portion to be recouped from the worker),

“I understand every grower who has used Pacific seasonal labour has continued to engage the workers for second and subsequent seasons.”

understand that every grower who has used Pacific seasonal labour has continued to engage the workers for second and subsequent seasons."

Employment and registered training agency MADEC, based

with Tomato Exchange in Guyra (pictured).

Robert Cameron of MADEC said he was impressed by how well the scheme was working.

"One employer now in his third year with the scheme



Workers employed by Tomato Exchange in their Guyra greenhouses where they grow Blush tomatoes



Sam Tupoumalohi working at Ironbark citrus and grape orchard in Mudubberra, QLD



Workers participating in last year's annual Guyra Christmas Parade

assist with initial establishment costs (also recoverable) and ensure workers have appropriate affordable accommodation and transportation to and from the worksite, as well as access to shopping, social interaction and places of worship. There are also monthly reporting obligations.

The PSWPS has proved hugely successful for Sue and Allen Jenkin, who own Ironbark—a boutique producer of mandarins and table grapes at Mundubbera in Queensland.

The couple sourced their first Pacific workers through the Scheme in April 2010, and have since employed a total of 59 workers—all from Tonga—to work at their farms.

Mrs Jenkin said: “We were introduced to the Scheme by a resident in our area who was originally from Tonga and put us in touch with a recruiting firm. We didn’t have a labour shortage as such, as we have a lot of backpackers that work on the farm, but this was a chance to have secure, reliable labour.”

“I had no idea whether the Scheme would work for us or not, but we gave it a go.”

“We find the workers excellent. They are productive, they are reliable and they are motivated. They settle in very well and they do the job well.”

Mrs Jenkin explained that she used a government-approved third party labour hire firm to source the workers through the PSWPS, before completing the process of becoming

“ We find the workers excellent. They are productive, they are reliable and they are motivated . They settle in very well and they do the job well. ”

an Approved Employer and sourcing workers directly.

“We use the labour pool in Tonga and we have been very, very happy with the quality of the people we have got,” said Mrs Jenkin, who also visited Tonga to see where her workers came from.

“We still advertise the work

to Australians first and anyone suitable will get the job. We still employ backpackers during the busy seasons as well, but the PSWPS gives us that security and reliability. We need so many workers that no one is losing out.”

While there are restrictions on the length of time workers can be employed for and an

around the farm and who are reliable.”

“We have not found it to be more expensive at all when we work it out, especially when you look at the productivity benefits.”

Mrs Jenkin urged vegetable growers to look at adopting the PSWPS and said it was a good thing for the Australian horticulture industry as a whole.

“I think the scheme would suit vegetable growers well and they could really benefit from having reliable workers returning to their farms,” she said.

“It’s a matter of getting people to try it the first time. I would be pretty confident that anyone who tries it will keep doing it.”

*Growers interested in participating in the Scheme should contact the Department of Education, Employment and Workplace Relations (DEEWR), which is the lead agency responsible for administering PSWPS.*

extra level of pastoral care that PSWPS workers require, Mrs Jenkin believes the extra considerations are worth it.

“The extra effort we put in is more than paid back,” she said.

“We are getting the same people returning to us who have been trained the way we want them, who know their way

**i** Further information is available from DEEWR website [www.deewr.gov.au/Employment/Programs/PSWPS](http://www.deewr.gov.au/Employment/Programs/PSWPS)



Australian Government



## Pacific Seasonal Worker Pilot Scheme Conference 2011



**Do you find it difficult to attract reliable labour?**

**Are you interested in finding out more about labour options in the horticulture industry?**

The Department of Education, Employment and Workplace Relations is holding a conference from the 3-5 August 2011 at the Sofitel Hotel, Gold Coast on the Pacific Seasonal Worker Pilot Scheme and other labour options for the horticulture industry.

The Conference will include presentations from peak industry representatives, information about a range of labour options, an open forum on the Pilot and the opportunity to contribute feedback and ideas to Government on the future of the Pilot.

Emceed by well known radio broadcaster Philip Adams, speakers also include representatives of AusVeg, the Victorian Farmers Federation and Citrus Australia, key growers participating in the Pilot, and leaders of the horticultural industry.

There is no cost to register for the conference. If you would like to attend please email [seasonalworker@deewr.gov.au](mailto:seasonalworker@deewr.gov.au) or call the PSWPS information line on (02) 6240 5234.



Pacific Seasonal Worker  
Pilot Scheme

## Do you value the chicken manure you apply in your nutrition program?

Rohan Davies, Research and Product Development Manager at Incitec Pivot Fertilisers, discusses the soil nutrient effects of chicken manure.



Would you apply a conventional fertiliser with an analysis of 4% N, 1% P, 1.4% K and trace elements at 4 t/ha?

Vegetable growers may be surprised to realise that this is exactly what they are potentially doing when they apply 5 m<sup>3</sup> of chicken manure.

The chart below reflects an application rate of 5 m<sup>3</sup> in four samples of recently tested manure materials used in two Victorian Department of Primary Industries trials at Werribee and Rosebud.

These results are consistent with Dr Peter Keating's trials in Western Australia in 2004<sup>1</sup>.

In these trials conducted in sandy soils, Dr Keating concluded that chicken manure provided a very cost-effective and reliable means of supplying vegetable crops with nutrients-particularly nitrogen, phosphorus and potassium, but also calcium, magnesium and sulphur.

However, it is worth noting that in saline soil conditions, chicken manure may also provide an unwelcome supply of sodium and chloride.

Dr Keating also commented that when applied to soils, chicken manure broke down quite rapidly, as a result of microbial decay, and left little residue.

The majority of nutrients are mineralised within a week of application and there is little further release after two weeks. Chicken manure does not by itself promote the accumulation of organic carbon in soil.

Dr Keating found that the major contribution to increasing organic carbon in soils used for vegetable production was crop trash rather than chicken manure residue.

"The healthier and more productive the crop, the greater the soil carbon accumulation, irrespective of fertiliser used," said Dr Keating.

In this example of a broccoli

### Nutrient removal in broccoli

	N	P	K	S	Ca	Mg
(Kg/t FW)	5.4	0.82	4	0.81	0.37	0.18
Typical yield (8 t of heads)	43.2	6.6	32	6.5	3.0	1.4

Source: The Australian Soil Fertility Manual (2000) Appendix 1.

crop, if we assume we need to apply a similar volume of nutrients to grow the broccoli plant and harvested heads, the raw manures are more than capable of supplying the crop's entire requirements.

However, as Dr Keating concluded, the current usage method is inefficient and counter-productive, as under normal irrigation regimes, most of the applied nitrogen and potassium is lost before roots can absorb these nutrients, and incorporation breeds more rather than less flies.

"Growers should also be aware that the loss of mineral nutrients without plant uptake

has potentially undesirable environmental consequences—such as nitrous oxide emissions, ammonia volatilisation and nitrate leaching," Dr Keating said.

If you want to use chicken manure, get it tested at a NATA / ASPAC-accredited laboratory.

With these test results, you can be fully aware of the nutrient load you are applying to each crop.

This knowledge will assist you in taking steps to improve your nutrient use efficiency.

<sup>1</sup> Source : "Understanding the use of chicken manure in vegetable production on sandy soil", Dr Peter Keating, Bioscience Pty Ltd, July 2004.

### Total nutrient content of 5 m<sup>3</sup> of four different manure products

	Nitrogen (kg)	Phosphorus (kg)	Potassium (kg)	Sulphur (kg)	Calcium (kg)	Magnesium (kg)	Sodium (kg)	Chloride (kg)
Pine Gro compost	64	25.2	30	9.6	84	21.6	6.4	7.2
Chicken manure	144	44	68	19.2	80	20.8	14.8	18
Raw chicken manure & Gypsum	44	23.2	30.8	400	800	18.4	6	5.6
Raw chicken manure	180	60	76	22	440	22.8	13.6	16

Source: Data from Nutrient Advantage Laboratory Services, 2011, from material supplied by Dr Ian Porter, DPI Knoxfield, Victoria.

## Soil nutrition questions

Please send your soil nutrition questions to *Vegetables Australia* writer Lisa Higginson.

Email: [lisa.higginson@ausveg.com.au](mailto:lisa.higginson@ausveg.com.au)

Phone: (03) 9822 0388



“ The drought was severe for us because of our use of river water for the crops. For eight years we were reliant on ground water, so the capacity to irrigate was reduced. ”

Photograph: Justine McGregor



# Moving with the times

Ed Fagan is a third generation vegetable grower from New South Wales, where his family business, Mulyan Pty Ltd, has been farming since 1886. Expanding into vegetable growing in 1943, the farm has continually produced a variety of vegetables, including asparagus, tomatoes, sweet corn, beans, beetroot and more recently lettuce crops.

A four-hour drive west from Sydney finds Ed Fagan's family farm in Cowra.

Spanning more than 1,400 hectares and featuring a temperate climate, the area is fitting for numerous crops and horticultural products.

Mulyan farm sources the majority of its irrigation water from the local Wyangala Dam. While it is an environmentally sound venture, it can prove difficult at times, with droughts resulting in the inadequate irrigation of crops.

Mr Fagan said: "The drought was severe for us because of our use of river water for the crops. For eight years we were reliant on ground water, so the capacity to irrigate was reduced."

"We had to look at a crop that would be a temperate crop, so we weren't reliant on irrigating in the midst of a 40-degree summer in Cowra, which can be low humidity and high evaporation."

Planting vegetables that could grow from February right through to December became Mr Fagan's main priority. With environmental factors in mind, sourcing a crop that would be more temperate than sweet corn and tomatoes steered him into a new direction of growing.

"We looked at what parts of the market were growing and where the emphasis of food was going," said Mr Fagan.

This saw the introduction of salad crops to Mulyan farm, which now grows vegetables all year round.

Mr Fagan explained: "We started growing salad leaves,

which are essentially tempered crops. Today, the basis of our horticultural business is on salads. We grow Iceberg lettuce, Cos, spinach, coral and radicchio."

## Looking back

With such an expansive history of growing and producing vegetables, the reduced quality and productivity of the soil at Mulyan farm had become apparent.

With particular time periods and varieties of vegetables in mind, Mr Fagan described the farming processes from the past as being detrimental to the soil.

"The process that we were doing was the best practice of the day, but at the time it wasn't evident what we were doing in the long term to the soil," he said.

Mr Fagan explained that during the 1950s, 60s and 70s, soil management practices were not yet in place to sustain healthy and productive soil for the future.

"Growing asparagus was extremely hard on the soil, particularly white asparagus, so I ended up with a soil with basically no structure at all and that's followed through to tomatoes and other crops, which were quite hard on the soil as well," he said.

To overcome the difficulties which arose from attempting to grow with unhealthy soil, Mr Fagan adopted several approaches to revitalise and enhance its productivity.

Utilising machine compost, stimulating soil microbes, setting in place a drainage

management plan and liaising with the Lachlan Catchment Management Authority (CMA) in Cowra are among the initiatives Mr Fagan has undertaken.

*The Land Management Program* is a project headed by the Lachlan Catchment Management Authority in cooperation with land owners and growers. It is aimed at improving soil health by increasing soil organic carbon levels.

Mr Fagan explained that the Lachlan CMA supported landholders in recognising, planning and implementing natural resource change and sustainable farming projects.

Looking at the long term sustainability of the soil, Mr Fagan said was paramount in achieving higher yields not only now, but also in the future.

"We have taken an approach where we want to manage our soil better," he said.

"The soil is the biggest asset that we have and we have to look after it."

## EnviroVeg

Mr Fagan stated that the utilisation of the EnviroVeg Manual had been a good point of reference on his farm.

"The manual is helpful; we've been aware of environmental issues for a long time but we find it is a good reference tool for us."

With the implementation of the EnviroVeg Manual accompanied by other techniques, Mr Fagan has managed to adopt environmentally sustainable practices on to his farm.

He said that incorporating approaches from several different bodies that are trying to achieve the same thing was moving sustainability practices in the right direction.

## Environmental approaches for the future

With the future in mind, Mr Fagan believes that the environmental practices being implemented on farms will be diverse and ever-changing. He cites increasing organic matter and reducing issues with disease as some of the long-term goals of the farm.

At this point in time, Mr Fagan does not have the desire to be an organic farmer though he said he would like to be in a position where the farm was less reliant on artificial fertilisers and pesticides.

With Cowra experiencing one of the coolest autumns and one of the wettest summers in decades, the climate presents different challenges every year.

"It looks like this year it's going to be a cold winter and that's going to have challenges in itself with growing," said Mr Fagan.

"But on the plus side, the Wyangala Dam, which is the main reservoir for the Lachlan River, has been empty for the best part of 10 years and it is now full, so the opportunities are there to get back into some larger scale production that we haven't done in 11 years."

"There are opportunities that are presenting themselves to us and we are in a position now where hopefully we will be able to take them."

## Investing in the environment

Applications for Community Action Grants 2011-2012 are now open.

Around \$5 million of grant funding has been made available to help local community groups take action to conserve and protect the natural environment.

The Community Action Grants are a small grants component of the Australian Government's Caring for our Country initiative and are targeted towards established community-based organisations that are successfully delivering projects

to support sustainable farming and/or protect and enhance the natural environment.

Parliamentary Secretary for Agriculture, Fisheries and Forestry Dr Mike Kelly said: "Grants of between \$5,000 and \$20,000 are available to help local community groups undertake activities such as planting trees, revegetating landscapes, rehabilitating dunes, removing weeds, controlling pests, holding field

days, recording traditional ecological knowledge and improving sustainable land management practices."

Investment proposals are sought from environmental, Indigenous, landcare, coastcare and sustainable agriculture community groups for the grants to take action to help protect and conserve Australia's natural resources and environment.

Groups currently operating in the environmental and

sustainable land management arena are eligible for the grants. Individuals cannot apply.

Applications for the 2011-2012 Community Action Grants close at 5pm (EST) on Monday, 1 August 2011.

**i** For further information contact 1800 552 008 or email <communityactiongrants@nrm.gov.au>

## World Environment Day

Calls for action to ensure sustainable future for agriculture.

Sustainable agriculture was under the spotlight on World Environment Day 2011—the most widely celebrated day for positive environment action.

Marking the event on 5 June, CropLife Australia—the peak industry organisation representing the agricultural chemical and plant science sector—called on industry, government and the Australian community to recognise the increasing challenges of global food security and make a recommitment to sustainable agriculture.

Chief Executive Officer of CropLife Australia Matthew Cossey said: "World Environment Day comes at a time when global food prices are

at a record high and Australia has suffered a decade of drought followed by devastating natural disasters. Now is the time to ensure that all assistance and support is being provided to our farmers in their challenge to both sustainably supply food and protect the environment."

Mr Cossey said that the world's farmers needed access to tools that minimised impact on the environment.

"The ability to grow more food with less land and other resources is what it's all about."

"Australia's plant science industry produces valuable tools that help farmers tackle the challenges of drought, flood and salinity. It is the modern

farming tools of crop protection and genetic modification that will assist in supporting the sustainable production of safe, nutritious, abundant and affordable food, while protecting natural ecosystems."

Mr Cossey added: "Australia's plant science companies are dedicated to enhancing and safeguarding our natural environment. Globally, the plant science industry is one of the world's most innovative sectors, with the top 10 companies investing an estimated \$4.72 billion in research and development each year."

CropLife members have established stewardship programs to manage potential environmental impacts

associated with agricultural chemical use and the use of GM crops.

The stewardship programs include:

- DrumMUSTER, which has collected and recycled more than 17 million used pesticide containers;
- ChemClear®, which has collected and disposed of more than 150 tonnes of used and obsolete agricultural chemicals; and
- *The Excellence Through Stewardship Program* that provides responsible use guidelines and policies for managing GM crops at every stage of the lifecycle.



# Rewarding water savings

Companies who are savvy about water savings are being encouraged to put themselves forward for a national award.

Nominations are now open for the 2011 Prime Minister's Water Wise Award, which aims to recognise commercial and industrial companies that can demonstrate recent water savings.

Eligible water savings can be achieved through a variety of means, including metering and monitoring; installing efficient devices and implementing innovative technologies that reduce the need for water usage.

Parliamentary Secretary for Sustainability and Urban Water Senator Don Farrell, announced the opening of nominations for the award.

Senator Farrell said: "I encourage companies of all sizes that can demonstrate notable reductions of water use, in comparison to similar facilities, to

nominate for the award."

"Last year's award showed the extent to which Australian businesses are committed to improving their water use. Inghams Enterprises received the 2010 award for achieving a 70 per cent reduction in water use and a dedicated water-saving culture within the organisation."

The Prime Minister's Water Wise Award is part of the Water Efficiency Opportunities program, under the Australian Government's Water for the Future initiative.

AUSVEG believes that growers should be rewarded for their water efficiency.

According to the ABS: *Experimental Estimates of the Gross Value of Irrigated Agricultural Production*

2000-01 to 2007-08, in 2007-08 the value of production per megalitre of water used was \$6,901 for vegetables, compared to the average of all agricultural industries of \$1,959.

Ian James, Industry Economist and leader of the Vegetables Industry Development Program Economics sub-program, said that a late 2008 ABS publication titled *'Water and the Murray-Darling Basin-a Statistical Profile'* revealed that vegetable growers contributed 12 per cent of the total value of irrigated agriculture in the Basin, while

using only two per cent of agriculture water.

Mr James said vegetable growers were at the forefront in extracting the best economic returns per megalitre of water used, compared to other agriculture industries, and that this efficiency should be recognised.

Applications for the Prime Minister's Water Wise Award close at 5pm (AEST) on 8 August 2011 and the winners will be announced at a ceremony hosted by the savewater! Alliance in November 2011.



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# Shining the spotlight on carrots

The latest data released as part of the Consumers and Markets sub-program of the Vegetable Industry Development Program (VIDP) unveils key statistics about Australia's current most popular vegetable.

A new profile has been created to provide a summary of the key features and market dynamics of the Australian carrot category. Compiled by Freshlogic, as part of the Consumers and Markets sub-

program of the VIDP, it maps the volumes produced through all the pathways to market and provides detail on the drivers and household buying patterns of fresh carrots purchased through retail.

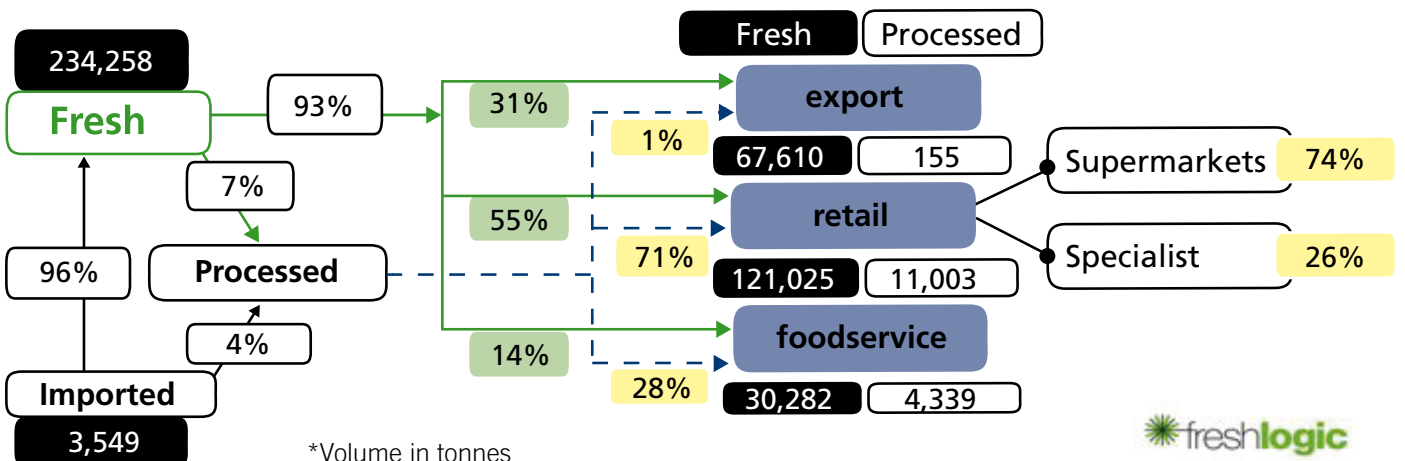
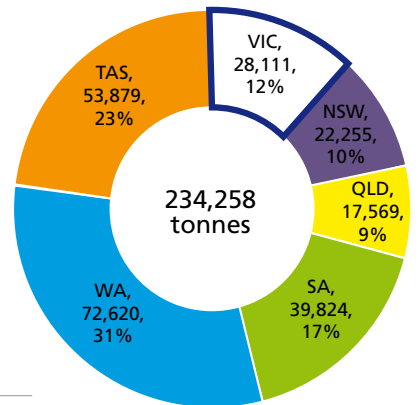
## Supply chain volumes and share

In 2009/10, Australian carrot production was 234,258 tonnes, with WA the leading producing state with 31% of the total, followed by SA at 27% and TAS at 23%. A further 3,549 tonnes was imported, and this imported product is all sold in a frozen processed form. Over half of the fresh carrots

are sold through retail channels, while 14% are sold through foodservice and a substantial 31% (67,610 tonnes) are exported. The retail channel buys a total of 132,028 tonnes and the annual retail market value of fresh carrots purchased by consumers is \$215m.

Supermarkets hold a 74% share of this retail fresh market and the specialists, which include greengrocers, fruiterers and fresh markets, hold the remaining 26%. The food service channel buys 34,621 tonnes of fresh and processed carrots.

Annual tonnes by state



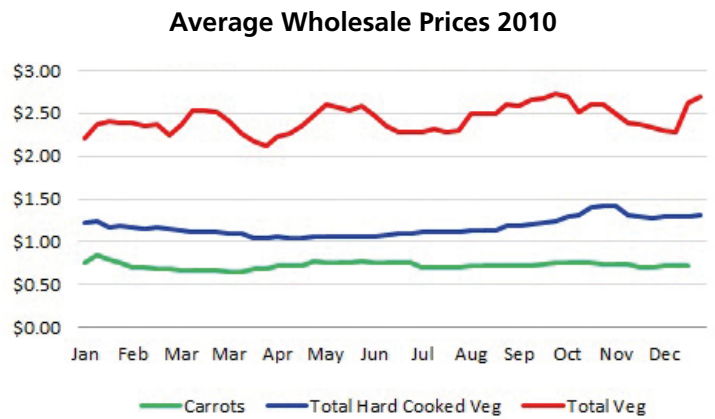
# Wholesale price patterns

In 2010, the wholesale price ranged from a low of \$0.65/kg (April) to a high of \$0.84/kg (January).

The average wholesale price of carrots in 2010 was \$0.72/kg, lower than total hard cooked vegetables (\$1.17/kg)

and total vegetables (\$2.43/kg).

These patterns are reflected in the chart pictured and combine to suggest that carrots provide strong consumer value per kilo when compared to other vegetables.



# Retail fresh sales

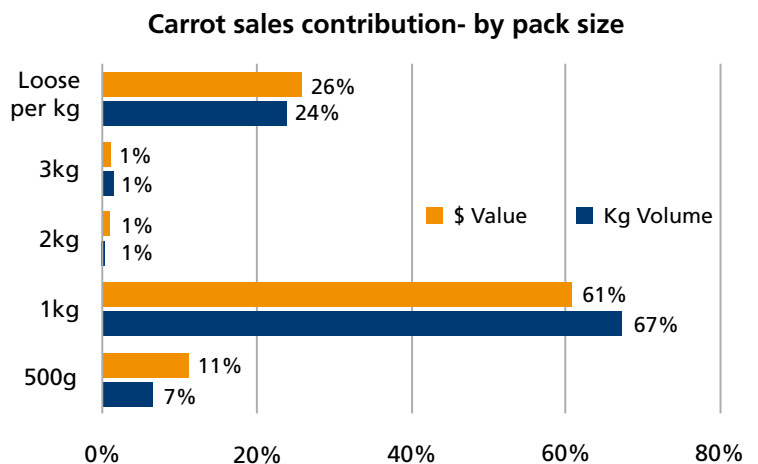
There are a number of retail product forms that make varying contributions to the kilo volume and dollar value of retail carrot sales. The 1kg pre-pack generates the largest volume share (67%), but with an average sale value of \$1.55/kg it contributes less (61%) value share.

The 500g pack earns the highest average sales value at \$2.91/kg, leading to the generation of a higher value

share (11%) than volume share (7%).

The loose product, which is selected by consumers from open loose displays, generates 24% of the volume and earns an average sale value of \$1.88/kg. The 2kg pre-pack generates a higher average sale value than the 1kg pack with \$1.77/kg.

The 3kg pre-pack generates the lowest average sale value at \$1.26/kg.



# Popularity compared to other vegetables

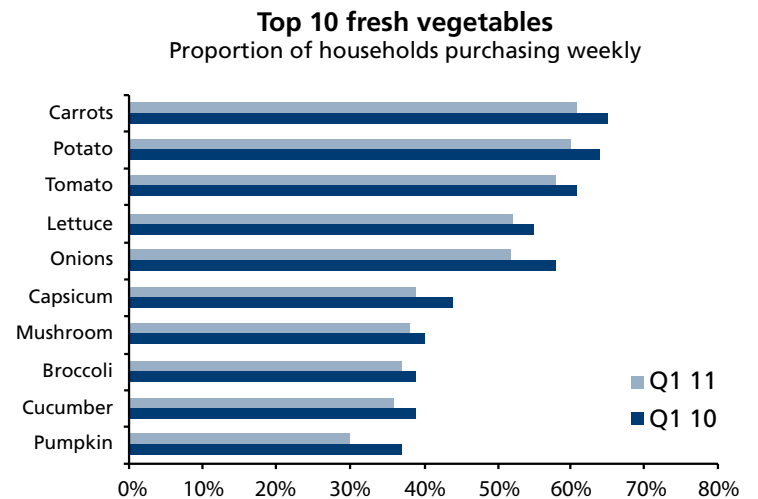
Carrots are the most frequently purchased vegetable on a weekly basis.

This is profiled in the adjacent chart that top lists the 10 vegetables for the last quarter of 2010 and the first quarter of 2011.

Carrot sales reflect mild seasonal influences, with higher weekly purchasing frequency in the cooler winter

weather. However, the demand in the summer months kept carrots ranking at the top of the vegetable products. This is attributed to the diverse array of raw and cooked home menu options that carrots provide.

These include roast vegetables, soups, snacks and more recently their expanded use in fresh salads.



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# Household participation

Consumers view carrots as a versatile vegetable that offers good value and has an ongoing role in domestic menus throughout the year.

The highest average weekly purchase frequency by household segments was with Established Families (70%), followed by Empty Nesters (65%).

Singles and Couples with high income and Empty Nesters have a greater degree of variation in weekly penetration levels, while Singles and Couples with lower income showed greater consistency, with a smaller range of 2% over the year.

Mealpulse Household Segments	Average Purchased Quantity (kg)	Purchased Weekly
Singles & Couples with lower income	0.859	61%-62%
Singles & Couples with higher income	0.755	55%-69%
Budgeting families	0.886	59%-66%
Established families	0.940	65%-73%
Empty Nesters	0.816	59%-71%

## What quantity do consumers buy

Based on the analysis of retail Docket data, provided as part of the Mealpulse™ panel, the average quantity of carrots Australian consumers purchase is **836 grams**. When loose and pre-packs are viewed separately, the average purchase quantity for loose product is **563 grams** and pre-pack selection is **985 grams**. The latter showing the influence of the high-volume sales of the 1kg pack.



## Retail promotional activity

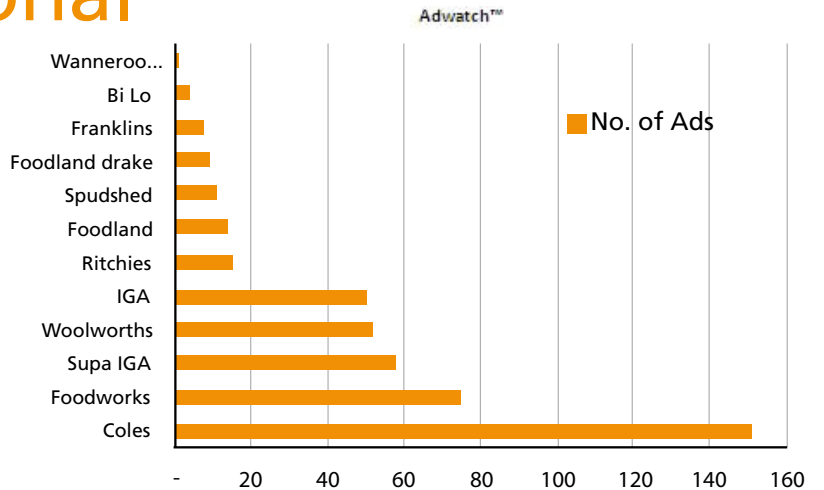
Retail promotional activity is the highest volume media communication to vegetable consumers. It influences choice and impacts the value of a product, as it invariably involves a level of price discount.

In 2010, there were 448 state-based carrot adverts from 12 different retailers, and some level of retail promotion activity in 51 of the 52 weeks in this calendar year.

For the period, carrots generated 7% of the total vegetable promotions.

Furthermore, 56% of the retail promotional activity for carrots was in autumn and winter, with 44% in spring and summer.

Carrot activity- Adverts by retailer



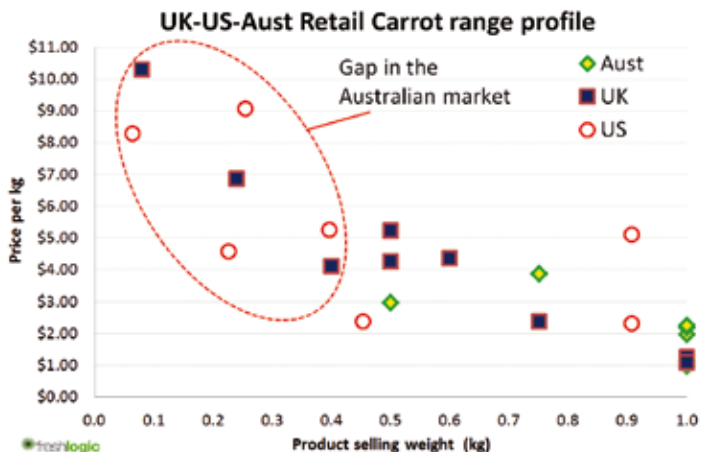
## US-UK and Australian retail carrot range analysis

This analysis has drawn on data gathered from Australia, UK and US retail and online offers. There is a clear pattern of a higher price being earned for smaller pack sizes.

While the Australian retail offer has some smaller pack sizes, all indications are that there is an absence of retail products

aimed at servicing snacking occasions. These products typically include carrot sticks and batons.

Considering the lack of smaller pack sizes in the Australian market, it appears that there are some additional range opportunities available.





**THE BOTTOM LINE**

- A new profile has been created as part of the Consumers and Markets sub-program of VIDP to provide a summary of key features and market dynamics of the Australian carrot industry.
- The data reveals that carrots are the most frequently purchased vegetable on a weekly basis by Australians, with the consumer buying an average of 836 grams.
- Key figures also show that Australia produced 234,258 tonnes of carrots in 2009/10 and that the average wholesale price of carrots in 2010 was \$0.72/kg.

**How do I get Veginsights regularly?**

Veginsights, like those featured in this article, are available to growers for free on a monthly and quarterly basis via email. Simply send your details to [info@ausveg.com.au](mailto:info@ausveg.com.au) asking to be added to the distribution list for Veginsights.

These reports can be a valuable resource for vegetable growers in their businesses. Contact AUSVEG to be added to the distribution list.

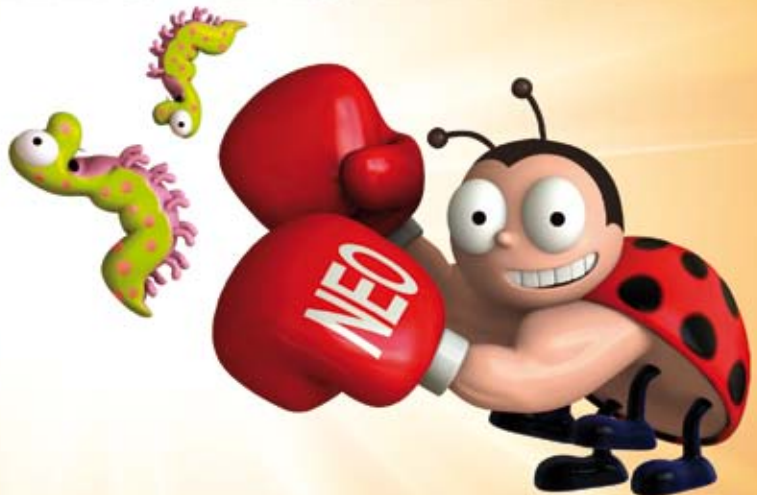
Veginsights is funded by the National Vegetable Levy with matched funds from the Australian Government.

**i** For more information:  
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 Project number (VIDP Consumers and Markets sub-program): VG09146



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# Ask the industry

with  
Scott Mathew

Scott Mathew, Technical Services Lead from Syngenta, answers questions on insecticide resistance-an increasing problem faced by many growers.

## Question: What is insecticide resistance?

Insecticide resistance refers to an inheritable change in the sensitivity of a pest population to a particular insecticide mode of action (MoA) group, resulting in the repeated failure of that insecticide MoA group to achieve an effective level of control when used according to the label recommendations.

Insects that are resistant to a particular MoA insecticide group may exist through normal genetic variability in any insect population. The use of that insecticide or others with the same mode of action will not control these individuals. Eventually, these resistant individuals will dominate the population if these compounds are used repeatedly.

## Question: What are some of the factors that impact on insecticide resistance management?

The following are considered to be the major factors that can impact on insecticide resistance:

- High initial insect pressure. Applying an insecticide to an insect population that has high numbers can speed up the development of resistance.
- Frequent and/or repeated use of crop protection products that have the same mode of action.
- Failure to alternate between crop protection products with different modes of action.
- Not utilising complementary control measures such as beneficial insects (the use of beneficial insects helps to reduce the initial pest pressure by keeping pest numbers down), and removing crop residues after harvest etc.
- Understanding of the life cycle of the pest, so that control methods can be effectively targeted. *Heliothis (Helicoverpa punctigera)*, for example, can have hatching times that vary from four to 21 days and vary according to temperature.



- Following the full label directions for the insecticide you choose to use. Always use the recommended label rates and spray volume and spray intervals.
- Applying the insecticide correctly. The majority of insecticides require good coverage of the target area to ensure the best possible chance of controlling the insect. Make sure spray equipment is properly maintained and calibrated before use.

## Question: Why is it a good idea to rotate between insecticide MoA groups?

It is essential to rotate between insecticides with different modes of action groups to reduce the risk of resistance. If a particular MoA compound group is used throughout the season, do not apply the same mode of action more than once to the same generation of any pest population. This can be done by limiting application to a designated 'window' in the crop growth cycle.

If a product is used only once per season, alternate between modes of action from crop to crop. Wherever possible, avoid treating consecutive generations of the target pest with the same mode of action.



Scott Mathew, Technical Services Lead from Syngenta

## Ask the industry

If you have a question that you would like addressed, please ring Syngenta on 1800 067 108 or email [Vegetables Australia: <lisa.higginson@ausveg.com.au>](mailto:Vegetables Australia: <lisa.higginson@ausveg.com.au>). Please note that your questions may be published.





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# Cost-saving solutions

Growers are faced with the constant challenge of reducing production costs. Research and development plays an integral part in overcoming these issues out to do just that.

The University of Tasmania (UTAS) and the Tasmanian Institute of Agricultural Research (TIAR) are conducting a project entitled *Design and demonstration of precision agriculture applied to different vegetable crops*.

The project has set out to investigate site-specific irrigation to improve water and energy consumption during vegetable production.

Taking place across three growing seasons (2009-2011), the project aims to provide growers with options that will allow them to improve water use efficiency, reduce energy costs and reduce environmental impact, as detailed in a recent Milestone Report published by Horticulture Australia Limited (HAL).

The project has been funded by HAL using the vegetable industry levy with matched funds from the Australian Government.

Two commonly used irrigation systems in Tasmanian vegetable production are being used in the project—a linear move irrigator and a big gun travelling irrigator.

Primary Investigator at

UTAS Dr Susan Lambert said: “Reducing energy consumption and improving water use on farms are key challenges for the vegetable industry.”

“There are two components to the project. One is testing site-specific irrigation by fitting variable rate technology to a linear move irrigator and the

Forthside, Tasmania, and the latest trial saw a commercial carrot crop planted in November 2010. An assessment of yield and quality was conducted within each irrigation regime and analysed statistically.

The report explained that although big gun travelling irrigators were considered

improve both energy and water efficiency.

Dr Lambert said: “The idea is to look at cost-effective retro-fit technology that can be fitted to existing systems that the grower may already have.”

Pressure control system components, developed by Seattle Services Pty Ltd, were fitted to a reliable hard hose irrigator and a prototype data logger was incorporated into the control box of the pressure control system of the travelling big gun, which enabled energy data to be collected during irrigation runs for both the conventional and modified runs.

The latest trial compared the modified and conventional traveller irrigator and results demonstrated that the modified traveller treatment achieved greater yield than the conventional traveller, equivalent to some 7.7 t/ha.

The yield increase within the modified traveller treatment resulted in an energy saving of 10-12 per cent and a water saving of five per cent compared to the conventional run.

The project is also assessing the outcome of retro-fitting

“The idea is to look at cost-effective retro-fit technology that can be fitted to existing systems that the grower may already have.”

other is looking at reducing energy consumption by fitting a pressure control system to a travelling big gun irrigator.”

“In the last two seasons we have had one paddock dedicated to the trials and both systems set up side by side.”

The trial site has established in a paddock at TIAR in

relatively inefficient in terms of energy and water consumption—and were generally older technology—they remained popular in the vegetable industry due to portability and low capital cost.

The project is investigating technology which may be fitted to big gun traveller irrigators to

Travelling big gun irrigator fitted with a pressure control system



Linear move irrigator fitted with variable rate technology



# for the future

and performing sustainable practices on their farms. and a new project being carried out in Tasmania has set

a linear move irrigator with new technology to enable communication with a network of soil moisture sensors across the field, provided by CSIRO ICT, and the foundation of a decision support system to enable site-specific irrigation.

Retro-fit equipment fitted to the irrigator included a computer system, custom software, GPS and flow control valves to provide variable irrigation to defined areas of the field.

Dr Lambert said: "The variable rate technology is applicable to sites where you would want to turn it on and off, for instance, if you have a large paddock where you would want to water part but not necessarily all of it."

"The latest trial also looked at the use of Flecks, which

is a wireless network system that monitors soil moisture content from sensors in the irrigation zone. The data is then accessible by a computer via the internet."

Dr Lambert added that the focus of the 2010/11 season had been to test the sensor array reliability and accuracy, which had proved to be suitably reliable.

Results from the trial comparing the conventional and variable rate linear irrigator showed a 15 per cent water saving for the variable rate span of the linear irrigator.

Dr Lambert explained: "The variable rate systems are on the market and are used a bit in the vegetable industry, but we wanted to find out if they were suitable for growers and in what

way."

The next stage of the project will involve integrating the Flecks with the variable rate irrigation system and further developing the basis of the decision support system to enable site-specific irrigation to suit crop requirements. This will include deployment of soil moisture monitoring sensors in trial plots and a weather station and the monitoring of energy and water use during the growing season.

A cost-benefit analysis will then be conducted to compare the technology to current irrigation practices.

"We want to be able to provide these costs to growers to see if it's going to be cost-effective for them to implement these types of systems on their farm," said Dr Lambert.

## THE BOTTOM LINE

- UTAS and TIAR are conducting a project to investigate site-specific irrigation to improve water and energy consumption during vegetable production.
- The project is being conducted over three growing seasons (2009-11) using a linear move irrigator fitted with variable rate technology and a travelling big gun irrigator fitted with a pressure control system.
- Results from the latest trials showed that the modified traveller made an energy saving of 10-12 per cent and a water saving of five per cent, while a 15 per cent water saving was made with the linear irrigator.

**i** For more information:  
 Dr Susan Lambert  
 Primary Investigator-UTAS  
 Email: <susan.lambert@utas.edu.au>  
 Project number: VG08029



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# The reality of

Industry Economist and leader of the Vegetable Industry Development Program's rate rises.

Since the beginning of the year, economists have confidently predicted that interest rate rises by the Reserve Bank of Australia would occur throughout the course of 2011. However, so far this year there has been no official interest rate rise.

There are of course changed circumstances, which can provide legitimate reasons why these increases have not occurred. The domestic climatic disasters, the earthquake in Japan, the ongoing European debt crisis, measures by the Chinese authorities to cool their booming economy and evidence of a slow recovery of the US economy from the economic downturn following the global financial crisis.

Economists have dwelt on every word from the Reserve Bank in order to be the ones to correctly predict the timing and extent of interest rate rises. After some procrastination in May, the Governor of the Reserve Bank, Glen Stephens, during a speech in Brisbane in mid-June

reiterated his faith in the need for restraint in the face of the economic consequences of the resources boom. Economists are now back on the interest rate increase bandwagon.

Economists working in the Reserve Bank believe that Australia is riding a wave of prosperity driven by a fundamental shift in the prices Australia receives for its resources on world markets.

Strong prices and strong demand for Australia's mineral resources will be an ongoing event, driven by rapid development of industrialisation in developing economies, especially in Asia. Rising population and living standards, together with alienation of agricultural land, will also underpin strong prices and demand for agricultural commodities.

Over time, this will generate considerable wealth. In the short term, the role of policy is to manage the boost to income descending on the Australian economy and the

huge investments that are being undertaken in Australian resources.

The problem for policy makers is that this is occurring at a time of near full employment, so the extra demands placed on the economy by the resources boom risk the danger of a wages and inflation breakout.

Economists outside the Reserve Bank believe that this version of the economic story will lead the Reserve Bank to raise interest rates. They differ in their forecasts of the extent and timing, varying from one to four 0.25% increases.

However, there are good reasons why the Reserve Bank board should be cautious about raising interest rates and take note of opinions outside the economic fraternity.

It is true that interest rate policy needs to be futuristic, as there is a delay between an interest rate rise and the actual impact on economic behaviour.

But the economic climate prevailing at the time of the announcement of an interest

rate rise is also important. And this is the crux of the problem. Outside the mining sector, the feeling is that the economy is anything but robust.

Gerry Harvey, the Chairman of large retailer Harvey Norman Holdings, has stated that the last time he had seen weakness like he was seeing today was when unemployment sat at 10% (1991-93), not at the present rate of 4.9%.

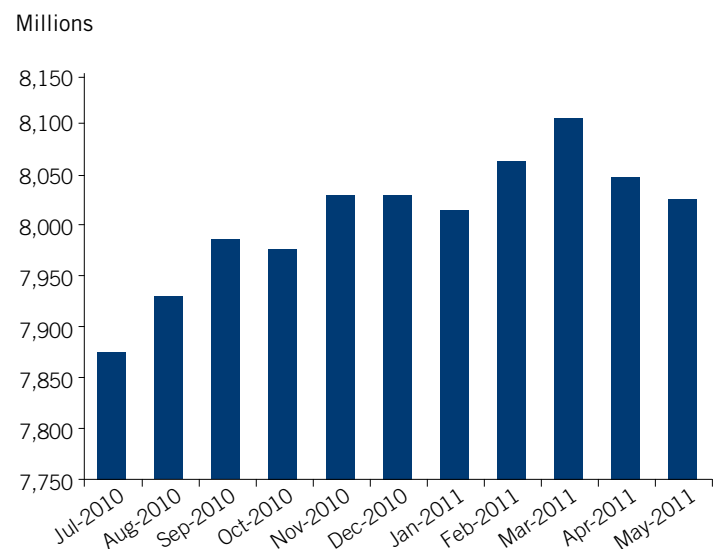
These comments could be dismissed as sectoral pleading, except that they are widespread from business leaders across the economy.

Wesfarmers Managing Director CEO Richard Goyder was quoted as saying that: "If you look broadly, there is a lot of economic weakness in the economy at the moment and I don't think an interest rate increase is going to help that."

Meanwhile, Paul Little, Managing Director of large transport company Toll Group, has stated that: "The non resources economy is certainly struggling at the moment with



**Table 1.** Full-time labour force



Source: Australia Bureau of Statistics-Labour Force Cat. No. 6202.0

# interest rate rises

Economic Sub-Program, Ian James, discusses the potential impact of interest

consumers concerned about further interest rate rises in coming months.”

Changes in interest rates have a broad pervasive impact. In setting interest rates, the Reserve Bank should look at the total economy and not to any particular sector.

Relying on a filter down effect from the resources boom is fine, providing that the patient is not killed in the process. And industries outside of mining and its service industries are looking more like needing a doctor.

Many industries in the economy are already taking a hit from the mining boom. The most noticeable impact is through the exchange rate. The appreciation of the Australian dollar has cast a swathe through a range of industries. The tourism industry has been hard hit and import competition has impacted heavily on the manufacturing sector. Business surveys confirm that for many companies the economic situation has deteriorated this year.

All this is occurring at a time of cautious consumer spending. If there is a booming economy there is little evidence that most Australian households are feeling the benefits. Retail trade is particularly weak, as is the housing construction sector. Utility prices for gas, water and electricity have been rising steeply, as have petrol prices (see table), and are expected to rise further.

More recently, the strong growth in employment that marked the last half of 2010 has ground to a halt. This may be an aberration in response to the climatic disasters that led to negative economic growth in the March quarter. But in April and May, nearly 80,000 full-time jobs were lost and forward indicators of employment have turned down.

An interest rate rise in this climate, to say the least, would be most unhelpful for an industry such as vegetables, which relies on consumer spending.

Finally, the question needs

**Table 3** Utility and fuel price rises 12 months to March 2011

All utilities	Electricity	Gas	Water	Petrol
10.6%	11.7%	5.1%	12.8%	9.3%

Source: Australian Bureau of Statistics—Consumer Price Index Cat. No. 6401.0

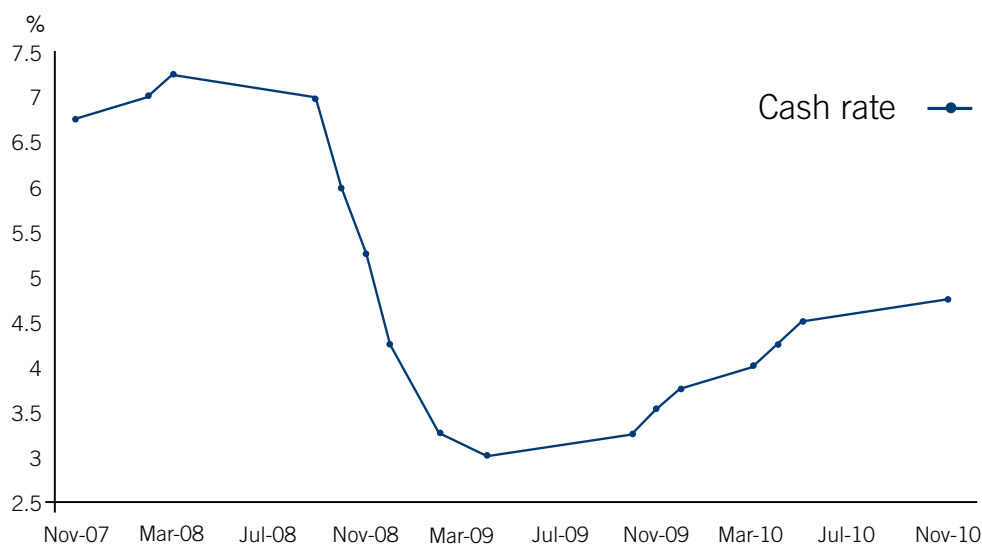
to be asked as to how strong the inflationary pressures from the mining boom will be? Fears of a wages breakout may be overstated. The resources boom of the early 1980s was stifled by such an event. But since then, the centralised wage fixing system has been dismantled.

Wage increases gained in the mining sector do not necessarily flow to other industries in the economy. While labour may move from other industries, it is unlikely that those industries will match mining wage rises due to competitive constraints. As for the extra income generated, in the present climate, that may well end up as saving rather than consumption.

The interest rate increases by the Reserve Bank in 2010 could be justified, as they were restoring interest rates to a ‘normal’ level after they fell to artificially low levels in response to the global financial crisis.

However, an interest rate rise in the present climate is a risky strategy that the Reserve Bank should avoid. Tough talk rather than tough love is all that may be needed at this stage of the economic cycle to prevent an inflationary breakout.

**Table 2.** Reserve Bank of Australia movements in interest rates



Source: Reserve Bank of Australia

## THE BOTTOM LINE

- Economists predict that the Reserve Bank of Australia will increase interest rates this year, but warn that it could be a risky strategy in the current climate.
- Outside the mining sector, the feeling is that the economy is far from robust and that the Reserve Bank, in setting interest rates, should look at the whole economy and not just at one sector.
- It is predicted that an interest rate rise in this climate would be most unhelpful for an industry such as vegetables, which relies heavily on consumer spending.

**i** For more information:  
Ian James is Project Leader for the Economic Sub-Program of the Vegetable Industry Development Program (VIDP).  
Project number: VG08040



Investigating the responses of pak choy to different levels of nitrate supply [also opposite page]

# Looking into nutrients

The rise in popularity of Asian cuisine in Australia in recent years has led to a simultaneous increase in the production of leafy Asian vegetables across the country, writes David Hastie. Growers can now benefit from the findings of latest research that explores the nutrient management of Asian vegetables.

The Asian vegetable sector now contributes six per cent to the value of the vegetable industry, but until now there has been little information on the variety's nutritional requirements in production.

Dr Sophie Parks from the NSW Department of Primary Industries set out three years ago to develop a set of guidelines for growers of leafy Asian vegetables, with regard to their nutritional requirements.

The project, entitled *Nutrient management of Asian vegetables*, has been funded by Horticulture Australia Limited (HAL) using the vegetable industry levy and matched funds from the Australian Government.

The motivating factor driving Dr Parks' research was the lack of understanding of the

“A lot of the Asian vegetables are in the same family, the Brassicaceae family, and a lot of them are suited to the nutrient film technique (NFT) hydroponic system.”

nutritional requirements of these vegetables in production, which in turn made it difficult for growers to produce optimal yields with the greatest efficiency.

As Dr Parks explained, the challenge for the industry was the fact that leafy Asian vegetables were thought to require large amounts of fertiliser, resulting in an undesirably high concentration of nitrate in market vegetables.

“A few years ago I did a small survey of vegetables in the marketplace and I looked at nitrate concentrations of those,” Dr Parks said.

“What we found was that nitrate concentrations were quite high in Asian vegetables. The Asian vegetable industry was quite new in Australia at that stage and we realised that

there was not much information or guidance in terms of the nutritional requirements.”

“Increasingly, growers were moving from field production to hydroponic systems and there really wasn't much information about how to grow them in hydroponic systems.”

Dr Parks' initial research found that potentially too much fertiliser was being used to produce leafy Asian vegetables.

There were two problems that she had identified.

“One was that we didn't know the real nutritional requirements of the Asian vegetables themselves, and secondly, what their requirements were in the new system (hydroponics) that they were being grown in,” she said.

“A lot of the Asian vegetables are in the same family, the

Brassicaceae family, and a lot of them are suited to the nutrient film technique (NFT) hydroponic system.”

During the three-year study, which concluded in April, Dr Parks and her team grew a number of Asian vegetables in a NFT system at different nutrient solution strengths (ranging between 0.5–5.5 dS/m).

The results showed that most of the vegetables tested (basil, choy sum, tat soi, coriander and three varieties of pak choy) grew best in the nutrient solution managed in an electrical conductivity (EC) range of 1.5–2.5 dS/m.

Mustard cabbage was found to produce greater yields at a higher EC range of 2.5–3.5 dS/m.

“What was shown was that

systems worked best with the vegetables studied.

“For example, we did a case study on a vegetable called Kang Kong,” Dr Parks said. “It doesn’t grow at all well in the NFT system. It actually cogs up the channels in those systems. But we have a recommendation for an alternative still nutrient solution system, which is described in the book.”

An additional benefit to growers is the inclusion of a nutrient disorder guide, which can help them pinpoint any particular symptoms that their crop might have.

Dr Parks added: “We grew the vegetables in hydroponic solutions that were either missing a key nutrient or had an excessive amount of a particular nutrient.”

“Reusing nutrients is always going to save you money and the guidelines provide extra information on how to manage the hydroponic system to improve its efficiency.”

they do in fact have quite a high requirement for nitrogen,” she said.

“However, whilst they require a lot of nitrate, it is still possible to supply them with too much nitrate.”

Dr Parks said the key benefit to growers using hydroponic systems to grow leafy Asian vegetables was that the efficiency of the system was much greater in hydroponics.

“By using an NFT system, they are recycling the nutrients that they are putting into the system,” she said.

“With a soil system, fertiliser is applied and it gets taken up by the crop, but the rest of it leaches out or is fixed by the soil. A nutrient solution in hydroponics is collected and then re-circulated back to the crop.”

“Reusing nutrients is always going to save you money and the guidelines provide extra information on how to manage the hydroponic system to improve its efficiency.”

While research showed that the NFT system worked well with most of the leafy vegetables in the study, it wasn’t a hard and fast rule.

The report made recommendations for which

“We took photos of the nutritional symptoms that developed as a guide for growers.”

#### THE BOTTOM LINE

- Asian vegetables, particularly those of the Brassicaceae family, have an inherently high requirement for nitrate compared with other vegetable types. They contain similar concentrations of total nitrogen to other vegetables, but store more of their nitrogen as nitrate.
- Research shows that most Asian leafy vegetables tested (basil, choy sum, tat soi, coriander and three varieties of pak choy) grow best in a nutrient solution managed in an EC range of 1.5–2.5 dS/m.
- Most leafy Asian vegetables are ideally suited to hydroponic systems (particularly the NFT system).



For more information:  
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New South Wales Department  
of Primary Industries  
Email: <sophie.parks@industry.  
nsw.gov.au>  
Project Number: VG07153



Tat soi showing symptoms of nitrogen deficiency



# Around the states

## Victoria



Over the past two months, VGA Vic President Luis Gazzola has attended a number of meetings involving politicians and industry leaders that addressed issues such as: carbon tax, food labeling of origin, relocation of Melbourne Markets, imports of fresh vegetables, retaining the off-label use of chemicals in Victoria and vegetable grower registration.

There are grave concerns expressed by growers as to what greater level of farm efficiency they have to achieve to ensure the future of vegetable production in Australia.

The introduction of a carbon tax by the present federal government will create an enormous cost burden on all Australians. Vegetables may have an exemption, but cost of production will escalate due to other increased services and supplies and the odds are in favour of no increase at the farm

gate for vegetables. The industry must stand firm against the introduction of a carbon tax!

Another successful National Vegetable Expo was held in May at Werribee, with visitors from all states and New Zealand. Seed companies provided an excellent display of new vegetable varieties and the static display by industrial suppliers was well supported. The best seed variety plot was awarded to South Pacific Seeds, with the best innovative industry display to GT Tractors.

This biennial event will again be staged in May 2013 at Werribee.

VGA Vic welcomed the opportunity to join with the Melbourne Market Authority in presenting fresh produce to the consumer at the Good Food and Wine show held in June at Melbourne Exhibition Centre. The display stand provided a wide range of fresh produce being cooked and sampled.

VGA Vic grower representatives Luis Gazzola, David Wallace and Vince Doria were in attendance each day at the Melbourne Market Authority stand to answer questions and inform consumers of the selection and preparation of quality vegetables.

This annual event is one of the rare opportunities that growers have to promote the value of eating fresh vegetables—"The health food of the nation".

Over the past two months, VGA Vic has provided valuable assistance to a project identifying manual handling practices through the Victorian Farm Safety Centre. Project Leader Andrew Sullivan, with guidance from our two IDOs, is visiting vegetable growers in Victoria.

This project should be completed by December 2011, with a roll out of information and workshops for growers.

The 4th annual golf day will be held on Friday, 5 August 2011 at Lang Lang Golf Club in Nyora, South Gippsland, and we encourage all vegetable growers and industry associates to participate at this social event. A brochure and registration details are available from the VGA Vic office.

In further developing services to our grower members, we are pleased to announce the appointment of Rod Hall to the position of part-time Membership Services Coordinator.

Rod has a long background of working within the horticultural

industry and looks forward to the new challenge of the vegetable industry in Victoria. Mr Hall's contact details are 0403 215 935.

The Victorian-funded HIN Project and the HAL-funded CIO programme are working effectively in tandem through our two Industry Development Officers (IDOs). Regular farm visits, meetings and direct communications are enabling vegetable growers to receive a regular flow of industry information and direct on-farm contact.

Take the opportunity and make contact with Helena Whitman IDO West: 0407 772 299 and Slobodan Vujovic IDO East: 0422 583 784.

For the latest in vegetable industry information for Victoria, take a look at our web site [www.vegetablesvictoria.com.au](http://www.vegetablesvictoria.com.au) or [www.vgavic.org.au](http://www.vgavic.org.au)

### Tony Imeson

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Executive Officer  
Phone: (03) 9687 4707  
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Email: <[contact@vgavic.org.au](mailto:contact@vgavic.org.au)>

## New South Wales



The NSW Farmers' Association is working with state horticultural organisations and peak industry bodies to ensure wholesalers abide by the Horticulture Code of Conduct. While adherence to the code is mandatory, many fruit and vegetable growers are suffering from wholesalers who do not follow the guidelines.

The Association is joining its counterparts in calling for the federal government to make a decision regarding the recommendations from the Horticulture Code of Conduct Review.

Growers have been waiting for over 18 months for a decision to be made. They want further clarity and transparency in the market and believe properly implementing the code is the best way to achieve this.

Through the Vegetable Industry Development Program NSW, lettuce and brassica growers recently received brassica and lettuce best management guides, produced by the Victorian Department of Primary Industries. Posters, which complement the guides, are also available through the Association.

The Horticulture Committee is concerned about the introduction of the devastating disease Zebra chip if fresh potatoes are permitted to be imported from New Zealand for processing. It has cost the international potato industry

millions of dollars.

A bacterium (*Liberibacter*) has recently been confirmed as the cause of Zebra chip, with a phytoplasma also associated with the development of the disease. There is also concern that Biosecurity Australia's Draft report for the non-regulated analysis of existing policy for apples from New Zealand recommends that export quality fruit produced using New Zealand's standard commercial practices be permitted access to Australia, subject to verification that standard orchard and packing house practices have been followed.

A key issue to be addressed is what constitutes "standard commercial practices". Australian growers have no access to the NZ Integrated Fruit Production manual. One must question whether other

countries would accept a quality assurance program or standard practices as a quarantine measure.

Planning is underway for the NSWFA Horticulture AGM and Conference on 18 July. The Horticulture Committee is pleased to announce that AUSVEG CEO Richard Mulcahy will be one of the guest speakers. Senator Nick Xenophon has also accepted an invitation to present at the conference.

### Peter Darley

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Horticulture Committee  
Chairman  
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Sydney, NSW 2000  
Phone: (02) 8251 1804  
Fax: (02) 8251 1750



## Tasmania



It's been a disaster season in Tasmania, in particular for poppies and potatoes, where the harvest is down at least 30 per cent. This translates to more than a \$30 million loss of income at the farm gate for potatoes alone. In addition, the reduced crop means that there could be a paucity of seed potatoes for next year. The rain has also meant delays in planting winter crops.

The autumn harvest has been swamped and the dairy and other animal sectors have also been seriously affected. Some farmers have even been pouring milk down the drain because tankers could not get through on flood-damaged roads.

One of the biggest challenges that farmers face is their inability to obtain insurance for what, in their businesses, are essentially

unavoidable risks. This includes things we now hear referred to as 'weather events' (and used to call 'acts of God')—flood, hail, fire, wind, cyclone and earthquake—to list just a few.

No insurer in Tasmania offers policy cover for these events. Similarly, insurance cover for flood damage to crops or to farm equipment and machinery is simply not available. So, no matter what a farmer might be willing to pay to improve their risk management approach, they simply can't insure for these risks. Obviously, if insurance were available, we would of course urge farmers to protect their homes, livelihoods and assets.

Farmers are not looking for handouts—and nor are any available. What we have been seeking on their behalf is assistance to clean up flood damage so they can get back into their paddocks and start again—to remove rubble, logs, and other storm debris; to repair bridges and roads to allow access and to lift essential fencing to stop stock straying into public areas.

These things are not a result of any negligence on their part. In fact, as the government 'owns' watercourses and now charges farmers for water

access, there is a strong argument to suggest that the government then also 'owns' water-borne debris and should be responsible for cleaning it up.

If we have one major flood or one cyclone, farmers may get some assistance for clean-up activities through the federal government's national disaster assistance scheme. However, when it just keeps raining, as it has here since January, there is nowhere for them to go.

This is one of the reasons why we are pushing for the state government to establish a disaster clean-up fund specifically for Tasmanian events. In an urban area, we'd probably see the SES, the army and bands of volunteers cleaning up similar debris for the community good—we can all remember the pictures of the Brisbane flood clean-up in January.

However, like so many other things in Tasmania, there is nothing in place and there is no plan. Farmers need to be able to assess their situation, get quick help with cleaning up flood damage and debris so they can get on with their job of producing food.

TFGA has again brought this to the attention of the

Tasmanian Government. There has to be a plan and there has to be a Budget allocation for it.

We keep reminding the government that, through the global financial crisis and beyond, and through plant closures and forestry upheavals, Tasmanian farmers plough on, through good times and bad, doing what they do better than anyone else in the world.

Farmers are not perpetual mendicants. Their preference is to be self-sufficient and to be left alone. But this is not a perfect world. Sometimes we need a hand-up-and a bit of planning to ensure there is a process to deal with circumstances like the ones we've seen this year would allow us to sleep better at night.

### Jan Davis

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## Queensland



### Growcom wins funding to support women in horticulture and young growers

Growcom would like to thank the Department of Agriculture, Fisheries and Forestry (DAFF) for recognising the important role women play in the horticulture industry and the vital need to encourage the next generation of growers to engage with their industry. Growcom was recently given funding by DAFF to boost efforts to support both of these groups in horticulture.

Firstly, we have been funded to expand and develop our Women in Horticulture network

and training program.

We are excited to announce that with this funding we will take up to 40 women on the Regional Women's Leadership Journey, which is delivered by Women and Leadership Australia.

DAFF has provided funding for up to 20 women and Growcom will match that to provide funding for up to 20 more. We are hopeful that these women will come from horticultural regions throughout Queensland.

The program will benefit from the inclusion of women from a diverse range of backgrounds and crops and from small, medium and large enterprises.

It aims to provide rural women with the tools to take a leading role in their enterprises, their industry and their communities. The objective is to provide participants with the confidence and expertise to engage more meaningfully with their rural and regional communities.

The program will focus on the specific issues and concerns of

the horticulture industry.

Once they have graduated from the course, the 40 women (individually or in groups) will be expected to develop and deliver their own networking program of interest to horticultural women in their region.

Growcom is now calling for expressions of interest from all women in horticultural enterprises who wish to participate.

Growcom has also been successful in obtaining DAFF funding to establish a network and deliver leadership training to our young growers. We are looking for seven young growers from across Queensland to participate in a tailored industry training program, network establishment and activities and a mentoring and succession process.

The group will attend a training and capacity-building program aimed at building industry knowledge, climate change awareness, policy development skills,

communication skills and leadership and advocacy capabilities. Mentors will be provided for the growers to assist their further development and a youth leadership network will be established. These growers will be ultimately called upon to identify other young growers who they in turn can mentor. They will also be involved in developing a submission, business plan or project with relevance to their own community.

For more information about either of these projects, please call Growcom's Commercial Services Manager Donna Mogg on 07 3620 3844 or email [dmogg@growcom.com.au](mailto:dmogg@growcom.com.au)

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## South Australia



### Thirty-year plan for horticulture to 2040

The broader Horticulture Industry in South Australia is currently formulating a 30-year plan for the industry.

Stakeholders from each segment of the industry have been working under the banner of the Horticulture Coalition to formulate the plan. The group has considered a vision for the industry and combined key action points with industry planning to form the 30-year plan.

The draft vision for the industry in South Australia up until 2040 pays particular attention to:-

- Expanded food production, profitability and political recognition of the horticulture sector;
- Viable linkages to customers and other stakeholders through the development of efficient value chains;
- Access to secure land, water and infrastructure resources;
- A skilled workforce with well-informed owners and workers;
- Effective use of technology and sustainable production systems;
- Investment in industry by industry, including an appropriate and controlled level of foreign investment;
- An open domestic market supported by successful

trading into a wide range of international markets; and

- Government policy that supports horticulture and horticulture resources.

The first draft of the plan will be available for comment shortly and further grower input would be greatly appreciated.

### New south east production area

Four new growers in the south east of the state have had exceptional results over the last year with their initial lettuce, cauliflower, broccoli and cabbage crops around the Millicent area. Two additional growers are commencing horticultural production for next season, targeting broccoli as a main crop.

The Millicent black soil plains are exceptional soils for vegetable production and the cooler climate provides for an

extended growing season.

Markets in Adelaide and the local area are keen to access the new production. Grow SA's Gavin Limbert is assisting growers in identifying suitable winter vegetable crops to provide alternatives to traditional feed bean production.

To date, growers have been supplying the Adelaide market in bulk one-tonne boxes, but Grow SA is assisting the move to on-farm packaging and value adding.

### Mike Redmond

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## Western Australia



vegetablesWA has taken an innovative step in marketing vegetables. After conducting comprehensive consumer research, in addition to that provided under HAL, we approached Woolworths with a proposal to pilot a marketing campaign that better links Western Australian growers to Western Australian consumers. While the results of this trial are yet to come in, we are hopeful that we can increase the value of sales and profile of WA vegetable production.

Food security is an issue that will gain only greater importance

in this state and elsewhere. This comes in hand with spiralling health budget costs, which could be greatly reduced if consumers ate more vegetables.

Following representations from vegetablesWA, the state Minister for Agriculture has formed a small working group on the food security issue, with which vegetablesWA will be actively participating.

In another first for Western Australia and following the initiative of vegetablesWA, a new organisation called Horticulture WA has been established to even more strongly represent the interests of our sector.

Horticulture WA is an overarching organisation that will maximise synergies between the member groups to assist each organisation—not take their place. We will specialise in cross-industry issues,

utilising the expertise from the member organisations and other stakeholders.

Cross-communication between members will also enable greater understanding of individual industry's economic and social capabilities.

We are also proud of the recognition our Western Australian vegetable industry was given at the recent AUSVEG National Awards for Excellence. Sam Calameri was recognised as the Grower of the Year, following a long history in Western Australia of achievement and service to his fellow growers. This is the second consecutive year a Western Australian grower has won this national award, following Jim Trandos' recognition in 2010. Well-known DAFWA researcher Rohan Prince was also awarded the

national Industry Impact Award. The other Western Australian nominees should also be acknowledged: Mr Burt Russell; Mrs Yvonne Fahl; the Carnarvon Growers Association; Bogdanich Farms; Western Potatoes; Damien Rigali; and Maureen Dobra.

The other programs we run for growers are continuing to achieve success. Growers are encouraged to get involved with these or use the other services we provide such as our Field Extension Officer.

### Jim Turley

vegetablesWA  
Executive Officer  
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# Calendar of events

## July 2011

### 19 – 21 July

NSW Farmers Association Annual Conference 2011

Horticulture AGM (18 July)

Sydney Showground, Sydney Olympic Park.

#### For more information:

Visit: [www.nswfarmers.org.au](http://www.nswfarmers.org.au)

### 23 – 31 July

AUSVEG New Zealand Young Grower Tour

#### For more information:

AUSVEG

Phone: (03) 9822 0388

Email: [info@ausveg.com.au](mailto:info@ausveg.com.au)



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