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November/December 2011



**2012 Australian
Year of the Farmer**
National campaign
launch

**The chain of
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Vegetable Industry
Development Program

Rohan Prince
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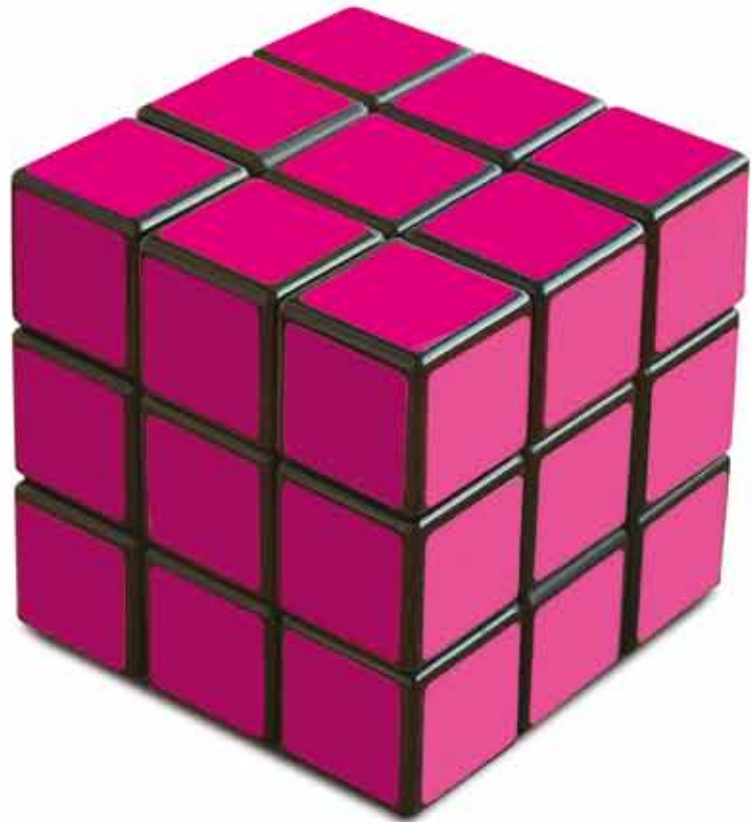
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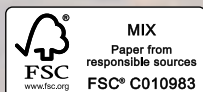
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FRONT COVER:

Jeff McSpedden

Photograph by Mark Quade
Photography

John Brent AUSVEG Chairman

In October, I had the pleasure of representing AUSVEG at the official launch of the 2012 Australian Year of the Farmer initiative. The event was held at the Royal Botanic Gardens in Sydney, which was a fitting location as it was the site of Australia's first European farm.

The often unsung heroes of Australia are at last being given the acknowledgement and accolades they deserve with 2012 being marked as the Australian Year of the Farmer.

The year-long campaign aims to celebrate farmers throughout the country and recognise their important contribution to the economy and the community. It also seeks to bring important issues affecting agriculture, such as food security, into the spotlight.

Governor-General of Australia, Quentin Bryce AC, is the official Patron for Australian

Year of the Farmer - which will deliver various events throughout 2012, including an Agricultural Technology and Innovation Expo. AUSVEG's leading strategic partner Elders has been announced as a Foundation Sponsor of the year.

AUSVEG is continually working towards ensuring the future of Australian vegetable growers and it is heartening to know that the rest of the country will also take a moment to really appreciate their invaluable contribution.

Meanwhile, a new generation of horticultural leaders have graduated from the 2011 Growing Leaders - National Vegetable Industry Leadership Program. The 15 participants from across the industry were officially graduated by Senator Richard Colbeck and myself in Canberra.

With many vegetable growers

either retiring or selling their farms, there is a real need to identify innovative young people who can play a key role in advancing the interests of the broader industry and ensuring its long-term viability. Not only does the industry need those who can continue on-farm production, but it also needs people who can work with and understand the whole supply chain.

As part of the six-month Growing Leaders Program, participants have taken part in more than 20 skills development sessions; networked with more than 90 industry stakeholders through guest speaker panels and networking activities and toured at least two industry workplaces.

Effective leadership in this industry is the constant search to find inventive and efficient ways of doing things, to ensure

growers continue doing what they do best – supplying some of the freshest and safest produce in the world.



John Brent
Chairman
AUSVEG

Richard Mulcahy AUSVEG Chief Executive Officer

After a dedicated seven-year term serving as President of the Vegetable Growers' Association of Victoria, veteran grower Luis Gazzola stepped down from his position at the organisation's recent Annual General Meeting.

Elected to the President's chair was David Wallace, a capsicum grower from Keilor, who has been serving on the Association's Executive Committee as Senior Vice President and Treasurer.

I would like to wish Mr Wallace all the success in his new role and thank Mr Gazzola for his hard work and outstanding contribution to the vegetable industry during his presidency.

AUSVEG has recently been on the road delivering a consultation program around Australia in relation to the draft Vegetable Industry Strategic Investment Plan (SIP) for future R&D investment.

Meetings were held to gain grower feedback in Bathurst (NSW); Bowen, Bundaberg and Boonah (Queensland); Wanneroo (Western Australia); Virginia (South Australia); Devonport (Tasmania) and Werribee and Cranbourne

(Victoria) throughout September and October.

With the vegetable industry R&D investment program anticipated to reach around \$60 million over the next five years, the priority concerns of growers are vital when setting the direction for the investment.

The consultation meetings were used to gauge growers' opinions on the proposed plan and each levy payer was also asked to complete an anonymous survey to determine and record their views.

The next stage of the process will involve a period of public comment, which will take place following a review of the SIP White Paper by the Vegetable Industry Advisory Committee (IAC). AUSVEG will ensure all growers are informed about when the paper will be available for public comment.

The recent issues surrounding dimethoate and fenthion have hit the vegetable industry hard, threatening to further squeeze the bottom line of vegetable growing operations across Australia. I recently had the opportunity to speak on this topic at the Dimethoate and Fenthion Options Seminar

in Sydney and delivered a speech outlining the vegetable industry's perspective.

One of the viable alternatives discussed at the seminar was irradiation, which is extremely applicable to Australian conditions due to its effectiveness and water efficiency. This treatment is currently approved for a number of fruits, and research is currently being undertaken to determine if it is applicable to certain vegetable types.

The suspension of dimethoate and fenthion for post-harvest use in particular will have major effects on the trade of vegetables, both within Australia and to overseas markets. Treatments such as irradiation provide one solution to these issues.

In addressing the seminar, I highlighted that the use of pre-harvest alternatives to the protectant would represent a significant increase in costs to growers.

I also drew attention to results of international trials that found dimethoate to be a safe and effective treatment for certain vegetable types when administered properly and

with appropriate time between spraying and harvest.

AUSVEG had put this case to the APVMA for consideration in relation to a number of vegetables, however, a range of suspensions were put in place by the APVMA when they handed down their decision in early October. For further information on the full list of suspensions of dimethoate please visit the APVMA website at www.apvma.gov.au and follow the relevant links.



Richard J Mulcahy
Chief Executive Officer
AUSVEG

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Editorial

It has been another busy year for both AUSVEG and vegetable growers across Australia and as 2011 draws to a close, thoughts are already turning to what lays ahead in 2012.

The spotlight will shine on growers across the country next year, with 2012 being officially crowned the Australian Year of the Farmer. The initiative is a celebration of the contribution that those in agriculture make to the wider community and, as supporters of the campaign, AUSVEG was invited to attend the official launch in Sydney (page 11).

This edition of *Vegetables Australia* offers a preview of some of the exciting events that AUSVEG has planned for the industry in the coming year.

The 2012 AUSVEG National Convention, Trade Show and Awards for Excellence is set to be one of the main highlights and we have revealed exclusive details of the highly anticipated event in a special feature (page

12) for *Vegetables Australia* readers.

Also ahead in 2012 are two exciting AUSVEG-led international grower tours – one to the USA (page 15) and one to Germany and the Netherlands (page 8).

Vegetable growers often find their path into the industry by following the footsteps of their forefathers, but not too many have had the chance to continue the legacy of a farm that has been in their family since 1841. However, Bathurst grower and Chairman of the Vegetable Industry Advisory Committee (IAC), Jeff McSpedden, is someone who has, and he talks to *Vegetables Australia* about his horticultural heritage and the part he plays in the industry today in a special feature (page 18).

Also continuing to follow the success of generations before him is Cranbourne grower Glenn Favero. His family enterprise, Favero Gardens, has grown from a small patch of land



EnviroVeg case study:
Glenn Favero

36

to become one of Victoria's leading vegetable producers. As the subject of the EnviroVeg case study (page 36), the third generation grower explains how sustainable farm management practices have helped shape the success of the family farm.

Vegetables Australia also spoke to young grower Jordan Bullock (page 26), who has made his childhood dream of growing vegetables come true.

This edition's featured R&D articles include news of an exciting crop scheduling tool now available to baby leaf spinach growers (page

28), information about a project that aims to reduce the levels of pesticide residues on greenhouse and hydroponic-grown vegetables (page 38) and details of recent research into the control of foliar diseases (page 24) and carrot powdery mildew (page 44).

As well as a selection of industry news, *Vegetables Australia's* regular features include the industry economic update (page 46), a snapshot of horticultural statistics in Veggie bites (page 9), a focus on the Vegetable Industry Development Program (page 22) and EnviroNews (page 34).

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Jeff McSpedden

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7-18 February

Germany and the Netherlands

2012 Grower Tour



*“ Embark on a bespoke tour of Berlin
and the Netherlands to discover a flavour
of the horticulture industry in Europe ”*

The project has been funded by HAL using the National Vegetable Levy, voluntary contributions from industry and matched funds from the Australian Government. Growers will be required to make a voluntary contribution of \$2,725 (plus GST) towards the cost of the tour.

The 2012 Germany and the Netherlands tour includes:

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Anyone wishing to express their interest in taking part in the tour should contact **AUSVEG National Marketing Manager Simon Coburn** on (03) 9822 0388 or e-mail simon.coburn@ausveg.com.au



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Horticulture Australia



Veggie bites

The average household weekly spend on fresh fruit and vegetables was \$28.10 per household in the second quarter of 2011, as recorded in Veginsights.

\$28.10

\$9.25 billion

The ABARES Agricultural Commodities September Quarter 2011 report has revealed that the gross value of the Australian horticulture industry (excluding wine grapes) is forecast to increase to \$9.25 billion in 2011-12, which is 6.3% higher than in 2010-11.



6%

Findings in Veginsights revealed that the number of vegetable products advertised during the second quarter of 2011 increased by 6%, reflecting the competitive intensity within the retail channel.

\$1.794 billion

The total of vegetable sales in Australia in the second quarter of 2011 for all fresh, frozen and canned vegetables was \$1.794 billion, according to latest figures from Veginsights.



An average of 600,000 tonnes of fresh fruit and vegetables passes through the Brisbane Produce Market each year.

600,000 tonnes

1841

Melbourne's first official fruit and vegetable market – the Western Market – was opened in 1841, according to Melbourne Market Authority.

32.9%

Woolworths had the largest share of trade for pumpkins (32.9%) between June 2010-June 2011, according to data from Nielsen. Coles' share was 25.4%, while the share for non - supermarkets was 25.7%.



38%

Vegetables are forecast to make up 38% of the total gross value of the Australian horticulture sector in 2011-12, according to latest statistics published by ABARES.

Horticultural connections

An inspiring initiative has seen the next generation of Australian agriculturalists forge relationships with growers in Indonesia.



Joanna Newton with Tegan Nock with farmers in East Java

A group of Australian Agriculture students have travelled to East Java to share ideas for sustainable farming.

The 10 university students travelled to Malang in East Java to run sustainability workshops with around 500 farmers, as part of the second annual Syngenta Connections program.

Launched in 2010, the program aims to link organisations, institutions and growers throughout the Asia Pacific.

While in East Java, the group – which had come together from universities across Australia – worked with local agricultural students to deliver a series of workshops to growers in five villages.

The students were split into groups and each one was assigned to a particular village, where they presented to groups of up to 50 farmers. The workshops included interactive training on the proper use and safe storage of farm chemicals, as well as farm diversification to help ensure their sustainability and profitability.

Most of the produce grown in the Malang region is sold either at local markets or at the large market in Surabaya.

Tegan Nock, a final year

Bachelor of Agricultural Science student from Charles Sturt University, explained: “We were based in the head farmer’s house and worked with the local university students to write the workshop materials and assemble boxes, which were given to participants for chemical storage.”

“In the area where my group was based, most of the farms were small horticulture

“There’s a real sense of accomplishment that comes from being involved in these projects and Syngenta Connections has really opened my eyes to the opportunities to work in agriculture in developing markets.”

operations about one hectare in size. They tended to grow a single variety of crop, generally shallots, tomatoes or corn. The crop was likely to be the one the farmers had the most experience with.”

Throughout the visit, the students also presented 400 fruit trees to local growers to produce fruits such as

mangoes, which can be easy to grow and generate good returns.

“There’s a real sense of accomplishment that comes from being involved in these projects and Syngenta Connections has really opened my eyes to the opportunities to work in agriculture in developing markets,” said Tegan.

“I had originally intended to work for a couple of years as an agronomist before going back

and hand over gifts of stationary and books, as well as paint the classrooms and furniture in bright colours.

Head of Corporate Affairs APAC at Syngenta, Andrew McConville, said the Connections program helped share agricultural industry skills and knowledge and encouraged land use efficiency, while providing students with valuable networking opportunities.

“The workshops presented important information about how farmers should safely buy, transport and store pesticides, as well as encouraging them to use their land effectively by planting new crops, including fruit trees,” he said.

“These were all valuable outcomes for the farmers – but the Australian students benefited from this program too. It allowed them to go beyond their usual agricultural experiences, to see different approaches to farming and farm management. It also allowed them to network with other future agricultural industry professionals, both in Australia and Indonesia, as well as giving them the opportunity to meet some key Syngenta staff during their stopovers in Singapore on the way to and from Malang.”

to my family farm, but now I’m hoping to spend the first few years of my career working in agriculture development and am looking at volunteering opportunities in developing nations.”

The visit to East Java ended with a project to help revive two local kindergartens, which saw the students meet the children

2012 is Australian Year of the Farmer

AUSVEG is backing a national campaign that aims to celebrate the vital work and dedication of Australia's farmers.

A year-long celebration of Australia's farmers has kicked off with a colourful launch event in Sydney.

As the site of Australia's first European farm, the city's Royal Botanic Gardens provided the perfect place to make the official announcement that 2012 will be the Australian Year of the Farmer.

Designed to celebrate the contribution farmers make to the Australian economy and community, the 2012 Australian Year of the Farmer is an awareness campaign founded by a not-for-profit, non-political organisation.

Sydney's Royal Botanic Gardens were transformed into an agricultural showcase to honour the broad range of quality produce grown by Australian farmers, with a centrepiece featuring an array of produce arranged in a map of Australia.

AUSVEG Chairman John Brent and AUSVEG CEO Richard Mulcahy joined farmers, local school children and celebrities for the launch, which was officiated by the campaign's Patron, the Governor-General of Australia, Quentin Bryce AC, in conjunction with Ambassador Glenn McGrath.



AUSVEG CEO Richard Mulcahy and AUSVEG Chairman John Brent at the launch of 2012 Australian Year of the Farmer

"It is with great recognition that we place our farmers and growers in the spotlight and celebrate the multitude of goods and services that they provide to this country," said AUSVEG Chairman John Brent.

"The Australian agriculture industry is the lifeblood of this country and is made up of some of the hardest working people I have ever met, so this opportunity to thank the industry on a national scale is a privilege."

Conceived by New South Wales-based farmer Philip Bruem AM and former Sydney Markets CEO Geoff Bell,

Australian Year of the Farmer will see a range of events, initiatives and educational programs roll-out across the nation throughout 2012, including an Agricultural Innovation and Technology Expo and a Food of Origin Extravaganza – which aims to promote the quality and origin of Australian food products.

The initiative also aims to raise awareness of important issues affecting the agriculture sector such as the significance of food security and the sustainability of the industry in the future.

For more information visit www.yearofthefarmer.com.au.

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Shaping something special

As the countdown to the 2012 AUSVEG National Convention continues, *Vegetables Australia* reveals exclusive news about the esteemed event.

With just six months to go before the curtain is lifted on the 2012 AUSVEG National Convention, Trade Show and Awards for Excellence, a plethora of exciting plans have been revealed.

The event – which has become the biggest of its kind on the horticulture calendar – will take place at the iconic Wrest Point Hotel Casino in the stunning city of Hobart, Tasmania, from 10-12 May next year.

During the three days delegates will enjoy a vibrant mix of entertainment, inspiring activities, knowledgeable speakers from across the industry, access to state-of-the-art technology and the latest research and development information, as well as opportunities to network with some of the most experienced people in horticulture.

As well as leading strategic partners Elders, Syngenta and DuPont, further key sponsors Peracto, Steritech, Dow AgroSciences and Transplant Systems have also renewed for the 2012 National Convention.

Dow AgroSciences will be supporting the Young Growers Event, as well as continuing to sponsor the Young Growers Award – reinforcing a commitment to the younger generation of farmer. Meanwhile, Steritech will again be demonstrating its commitment to the role women play in the industry by supporting the Women in Horticulture event and the Women in Horticulture Award.

Exciting details of the Convention's program have now been announced, including features of the highly anticipated social events.

The 2012 National

Convention will kick off in style with a colourful carnival-inspired Welcome Reception at Wrest Point Hotel Casino on Thursday, 10 May. Delegates will be dazzled by eye-catching entertainment, while also having the first of many chances to meet and network with one another.

For those who would like to capture the culture and rich history of Hobart, The Historic Pub Tour will provide the perfect opportunity. Taking place on Friday, 11 May, the tailored tour – made possible by DuPont – will take delegates on a whimsical journey through Tasmania's past. The tour will visit a selection of



The vibrant Salamanca Markets

Hobart's most famous pubs, where surprises will also await.

A brand new event for the 2012 National Convention is the Partners Program, which will offer the chance for families to enjoy a morning out together on Saturday, 12 May and embrace the sights, sounds and smells of Hobart's famous Salamanca Markets.

The weekly market is a sight to behold, with more than 300 stallholders selling fresh and gourmet produce, arts, crafts and clothes from all around Tasmania. As well as absorbing the atmosphere of the market, delegates will also enjoy a morning tea as part of the event.

Following its success at the 2011 National Convention, the Women in Horticulture event will return in Hobart – but not as past attendees might know it. Having been transformed in a bid to further enhance the recognition of women's contribution to the industry, delegates will visit one of Australia's most famous showcases of art – MONA (Museum of Old and New Art). Attracting critical acclaim

following its opening earlier this year, MONA promises to deliver a unique experience for delegates attending the event on Saturday, 12 May.

The Trade Show is once again shaping up to be a focal point of the whole Convention, with close to 50 per cent of the show booths already sold.

Bringing together some of the biggest names in horticulture and showcasing an array of technology and industry information, the Trade Show is not to be missed.

Highlights of the 2012 show so far include a Tasmanian-themed section and an impressive variety of modern machinery.

Entertainment will also take place as part of the Trade Show, with the return of the Celebrity Chef Cook-off with Masterchef star Calum Hann and an adrenaline-pumping performance from world champion axeman, Tasmanian David Foster.

The 2012 National Convention will once again culminate on Saturday evening with one of the most highly anticipated



events in horticulture – the AUSVEG National Awards for Excellence and Gala Dinner. The evening will honour some of the industry's most outstanding members with a glittering ceremony and gala dinner, which will also showcase special entertainment and esteemed speakers.

Nominations for the National Awards for Excellence are now open and categories and sponsors include: Grower of the Year (Syngenta), Young Grower of the Year (Dow AgroSciences), Productivity Partner Award (Elders), Industry Recognition Award (DuPont) and Women in

Horticulture Award (Steritech).

Delegate Registration Brochures are now available and growers and industry stakeholders are urged to support this influential event next year.

More news and information about the 2012 National Convention will be unveiled in the coming months. To make an enquiry about the National Convention or to request an Exhibitor Registration Brochure, Delegate Registration Brochure, or an award nominations form contact AUSVEG on (03) 9822 0388 or email convention@ausveg.com.au

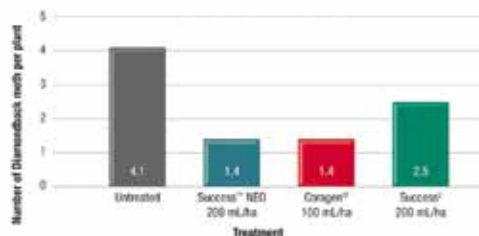
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Cultivating a career

A green-fingered teenager is sowing the seeds for a future in horticulture after discovering the potential of his pastime.

For 18-year-old Daniel Lutz, gardening has been a cherished hobby from an early age.

However, it has now become the key to overcoming personal challenges and reaching his full potential thanks to a school-based horticulture traineeship.

Daniel - who lives in Pasadena in South Australia - is autistic, but that has not stood in the way of him pursuing his passion.

Having embarked on a horticulture traineeship through Urrbrae Agricultural High School, Daniel has already completed Certificate II in Horticulture and is in the midst of working towards Certificate III.

"I have always been interested in gardening and horticulture," said Daniel.

"I grew up with a veggie patch and I love growing the vegetables for my family."

The course involves Daniel studying at TAFE one day a week, as well as working one day a week at Bickleigh Vale Farm - a certified organic vegetable and herb seedling farm near McLaren Vale.

"The main reason I wanted to do a school-based traineeship

was because it gives me the opportunity to gain practical skills and formal qualifications while I complete my VCE," explained Daniel.

"I love being outside in the fresh air using my hands - it is much better than being in an office!"

"My traineeship has helped me get new life skills. It has

“I grew up with a veggie patch and I love growing the vegetables for my family.”

also taught me to be more mature and organised. One of the greatest benefits is that I will finish Year 12 with a qualification under my belt, unlike other school students."

Dianna Bickford, of Bickleigh Vale Farm, said she had been blown away by Daniel's passion for horticulture.

"I first came to meet Daniel at

the local farmer's market where he holds a stall every Sunday," she said.

"I could see that he had a natural flair for gardening and extensive knowledge to back it up. He has a permanent part-time position at Bickleigh Vale farm, assisting with general nursery and production work.

"Daniel's ability and

and I have lots of spare time," Daniel enthused.

"It's a good balance and variety. I also have a lot of support from my family and school teachers."

Looking to the future, Daniel said: "I am interested in animals and agriculture, so that is something I would like to study and pursue. I'm really pleased to be able to do something I love."

Daniel consulted a Trade Schools for the Future program contact, as well as his local Finding Workable Solutions, when deciding what course to take.

The Australian Government has launched a national campaign aimed at helping Australians access skills and training opportunities from the \$3 billion Building Australia's Future Workforce package, announced in the 2011-12 Budget.

The campaign is part of the Australian Government's commitment to building an educated and sustainable workforce, while at the same time helping to build an economy that continues to deliver new jobs and new business opportunities.

enthusiasm is unlimited. His love of growing is infectious."

As well as attending TAFE, school and his job at Bickleigh Vale Farm, Daniel also works at a farmer's market and in the produce section of a local supermarket at weekends and grows fruit, vegetables and orchids in his spare time.

"I still manage to have fun



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For further information or to express your interest, please contact:
Andrew White,
AUSVEG Manager-VIDP Communications
Phone: (03) 9822 0388
Email andrew.white@ausveg.com.au.

The project is funded by HAL using the National Vegetable Levy, voluntary contributions from industry and matched funds from the Australian Government. Growers will be required to make a voluntary contribution of \$1,882 towards the cost of the tour.

All air and land travel, single room accommodation and most meals will be included, as well as registration for the World Ag Expo and Colusa Farm Show.

Vegetable growers are being offered the opportunity of a lifetime to undertake an amazing 13-day tour of key farming areas in the United States.

The tour will run from 6-18 February, 2012 and includes visits to the World Ag Expo (Tulare), the Colusa Farm Show (Colusa), as well as a packed schedule of farm visits in the Salinas Valley and broader California area.

The World Ag Expo is the largest annual agriculture exposition celebrating 45 years of innovative agriculture, with 1,600 exhibitors displaying the latest in farm equipment, chemicals, communications, and technology on 2.5 million square feet of exhibit space.

It is sure to be an amazing experience for the growers who attend, with a large focus on mechanisation and equipment, as well as new products and technologies. It is an event that has to be seen to be believed!

The Colusa Farm Show is located in agriculturally rich and

diverse Colusa County, California, and has been running for 46 years. This event includes the latest in modern farming equipment and techniques, and year-in, year-out, it is attended by farmers and suppliers from around the globe.

Vegetable levy payers are encouraged to express their interest now, as places are limited. As well as visiting the World Ag Expo, Colusa Farm Show and a range of vegetable farms across the USA, growers will participate in exclusive tours of the Dow AgroSciences headquarters in Indianapolis, Indiana, and the John Deere factory in Moline, Illinois (TBC).

The USA Study Tour is also extremely cost effective for growers, at a cost of just \$1,882 for vegetable levy payers.

The tour will provide many benefits to participants- growers will be introduced to production, technical, and supply chain systems operating in a country recognised as setting the benchmark in many vegetable growing and supply chain operations.

Future investment of levies

Grower consultations in the key vegetable growing regions of Australia regarding the future investment of the National Vegetable Levy have recently been completed.



Consultations have been held to gather grower feedback on the Vegetable Industry Strategic Investment Plan Draft White Paper.

Greg Spinks and Chad Bystedt from Melbourne-based consulting firm Consulting Implementation Services (CIS), which AUSVEG commissioned to undertake the review of the plan earlier this year, travelled to six states over two weeks in September and October this year to obtain feedback from levy payers. In order to speak to a broad range of levy payers, the consultations also included teleconferences and grower focus groups.

More than 100 vegetable levy

payers were consulted as part of the process, after around 200 people were consulted in the first phase of the project, and their feedback is currently being incorporated into the White Paper - which will be available for public comment once it has been finalised.

The consultation meetings typically consisted of an introduction and welcome by an AUSVEG member of staff, which was then followed by an outline of the Draft White Paper and the findings to date were summarised in a four-page Executive Summary.

Discussion time was allowed to gauge grower opinions about the proposed direction of the

plan, which will guide levy investment over the next five years. In order to document growers' feedback, they were asked to complete an anonymous survey to ensure that their views were recorded and could be taken into account.

The first leg of the review visited Queensland and New South Wales, beginning on September 19 with a focus group meeting in Brisbane, followed by an evening consultation at Simon's Tavern in Boonah. These meetings set the tone for the rest of the tour, with a wide range of issues and opinions raised for discussion at the following meetings

in Western Australia, South Australia, Tasmania and Victoria.

The meeting scheduled for Bowen almost had to be cancelled when AUSVEG staff got stalled by a large grassfire that had bridged the only highway into the town from Proserpine (pictured). Luckily, the fire was contained and the party was allowed through to complete the consultation as planned.

The next part of the process will be a period of public comment, which will occur once the White Paper is reviewed by the Vegetable Industry Advisory Committee (IAC). AUSVEG will ensure that growers are informed as to when this period of public comment will commence.



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Vegetable levy payers who have an interest in serving on the Vegetable Industry Advisory Committee (IAC) and levy payers or industry members that are interested in serving on the specialised Working and Advisory Groups are invited to register their interest with AUSVEG now.

Positions are being considered for all Working and Advisory Groups and applications from Queensland and Victoria are being sought to join the Vegetable IAC in 2012. These will be interim appointments through to July 2012, while the outcomes of the Vegetable Industry Strategic Investment Plan review are being considered. The nature and composition of the various groups may be altered following the Strategic Investment Plan review.

The role of the Vegetable IAC is:

- To represent vegetable levy payers by acting as the final Advising Group to HAL in recommending the investment of industry R&D levy funds.
- To assess the relative return to growers from investing in one area over another, and determine weighting of significance for each strategy based on chance of success, value of return to growers relative cost, and significance to the industry as a whole.

The Working Groups and Advisory consist of a mix of growers and other skills-based representatives to ensure that well-informed decisions are made and that levy payer interests are protected. Consultation with these groups is essential in determining the most critical investment priorities for the industry and the structure of the committees aligns logically with the key pillars of the current industry strategic plan.

Individuals who wish to be considered for appointment

should enclose their curriculum vitae or a brief description of their relevant skills and experience and any other information demonstrating the ability to undertake the role and write to:

Expressions of Interest – Vegetable IAC and Working and Advisory Groups

C/- AUSVEG Limited
PO Box 2042
Camberwell West VIC 3124
OR

Email: richard.mulcahy@ausveg.com.au (CEO of AUSVEG)
by no later than 11 December 2011.

All applications will be treated as confidential to AUSVEG and HAL. Nominees may expect to be interviewed during January 2012 by representatives of the PIB, and the successful appointees will be notified after agreement is reached between the PIB and HAL, with a view to commencing as IAC or Working/Advisory Group Members in early 2012.

Requirements for appointees:

- IAC Members must be levy payers or could be a senior employee with a levy payer.
- Levy payers and specialists (who need not be levy payers) are encouraged to nominate for Working and Advisory Group membership and should bring a range of skills to the Committees (Working Groups comprise: Environmental, Chemical, IPM, Biosecurity, and Protected Cropping. Advisory Groups comprise: Market Development, Information Technology Development and Dissemination, Production, Consumers, and Leadership and People Development).
- A knowledge and commitment to horticultural industry issues and R&D work is essential.
- For IAC Members, an ability to participate in monthly one-hour teleconferences to discuss R&D proposals and to attend face-to-face meetings on two occasions each year for approximately 3-4 days in total, as well as an induction day.
- Must be capable of reading and reviewing R&D project proposals.
- Preference will be given to those applicants demonstrating involvement with established industry networks that provide linkages with other growers of their product at state or national level.
- Willingness to participate in an interview as part of the selection process for the committee.

Successful nominees will receive Sitting Fees for face-to-face meetings at the rate of \$315 per day (taxable), plus reasonable expenses incl. economy class airfares, accommodation and meal costs for attendance at meetings. Working and Advisory Group Members will be required to participate in a meeting in Hobart in mid-May 2012.

* Industry communication is facilitated by HAL in partnership with AUSVEG and is funded by the National Potato and Vegetable Levies. The Australian Government provides matched funds for all HAL's R&D activities.

AUSVEG



Horticulture Australia





Living a family legacy

Running a farm that is steeped in horticultural history and playing a vital role on influential committees that represent the interests of growers is all in a day's work for Jeff McSpedden. The Bathurst grower and winner of the prestigious 2011 AUSVEG Chairman's Award for his long-standing service to the industry, spoke to *Vegetables Australia* about the foundations of his family farm, the changing landscape of the industry and how he hopes to make a small difference to horticulture.



“I was born with the farming gene,” Jeff McSpedden laughed when asked about his humble beginnings in horticulture.

“Our farm was established in 1841 and we are the second oldest family farm in Bathurst that still farms on the same piece of land. I am the fifth generation to farm here now.”

It is fair to say that Mr McSpedden has firm roots in farming and while it was in 1967 that he himself started growing, the land at his New South Wales family farm had been worked for decades before that.

“The farm has always been a mixed farm,” said Mr McSpedden.

“Through the gold rush, tobacco grew on the flats and

then Chinese vegetables were grown for the miners. They were all watered with wells. Then potatoes would have been grown, as our family was Irish by descent.”

“Cauliflower then started being grown around the time of the First World War, when there was an increase of vegetables needed to feed the troops. After the First World War, the farm still grew cauliflower and that was during my grandfather's time and continued right through until my generation.”

Keen to follow his calling, Mr McSpedden began growing vegetables – namely sweet corn – while he was still at school and he hasn't stopped since.

“Over the years, we've grown most vegetables, including

broccoli, cauliflower, cabbage, lettuce and sweet corn,” he said.

“We also used to grow raddiccio for export to supply 80 hotels in Japan and have even exported some broccoli to Japan. We also grew lettuce for supply to McDonalds.”

Enjoying a secure water supply from nearby Campbell's River and having healthy soils to work with has afforded Mr McSpedden the opportunity to choose crops over the years that have promised a good return.

“I will grow whatever I can make the most profit out of,” he said.

“We tended to contract our produce wherever we could

to avoid the fresh market. If something was viable, we would do it, if it wasn't then we wouldn't. I would always say that 'something always comes along'.”

Given the climate of the Bathurst region, crops are generally grown only during the summer months. With that in mind, Mr McSpedden sought to generate a winter income during his early years of growing and trained to do welding instruction, before eventually launching his own small agricultural engineering business building machinery for other growers, which he did through the winter periods.



Jeff McSpedden at the Bathurst property where his family have farmed since 1841

“ We tended to contract our produce wherever we could to avoid the fresh market. If something was viable, we would do it, if it wasn't then we wouldn't. ”

Taking over his father's farm full-time five years ago, Mr McSpedden today grows 300 acres of sweet corn and 200 acres of seed crops – as well as managing 3,000 sheep.

“We scaled down the vegetable side, so we just grow sweet corn for canning now,” he explained.

“We have also greatly reduced the labour input and farming is now fun again! We have gone from having 10 to 12 workers down to three, as there is just less physical work involved now.”

“We also use new technology – we've got six different irrigators we use and we also use GPS. I like to just be one step behind the early adopters. You've just got to see what's out there all the time.”

While juggling livestock, vegetables and seed crops on one farm might sound like a tricky undertaking, Mr McSpedden explained that all the elements of his enterprise actually worked in harmony.

“It is integrated farming,” he said.

“The seed crops are good

because we can also graze the sheep on the paddocks. The seed crops and the sheep and the irrigation all fit in with each other.”

Mr McSpedden's contribution to horticulture extends far beyond the boundaries of his Bathurst farm, for he has also held prestigious positions on a number of influential bodies during the years.

His many accomplishments within the industry were honoured earlier this year, when he received the Chairman's Award for his long-standing service of more than 40 years to the industry at the 2011 AUSVEG National Awards for Excellence.

“I've always been a member of the New South Wales Farmer's Association (NSWFA) and then when I was about 34, I joined the Horticulture Committee of the NSWFA and have been on there ever since,” he said.

“I was later appointed to the Board of AUSVEG and then became Vice Chairman of the Board until the constitution of AUSVEG was re-written. I

have also always been involved with project committees within the vegetable sector and have progressed some good projects.”

The enthusiastic farmer was also one of six directors to take over the former Simplot factory at Cowra and launch Cowra Export Packers, before its sale to Windsor Farm Foods.

Currently, Mr McSpedden plays an integral role as Chairman of the Vegetable Industry Advisory Committee (IAC), which is pivotal in the process of deciding how to best invest vegetable levy payers' money.

“We have an IAC that is very diverse with a lot of skilled individuals, but one that is still cohesive,” he explained.

“It's a workable IAC and we get good support from Horticulture Australia Limited. The committee and the project groups are developing all the time and I hope for the time I am there that I can make a bit of a difference as well.”

Throughout more than four decades as a vegetable grower, Mr McSpedden has seen the

industry change shape in many ways, through the advances in technology, the fluctuation of markets and the variety of challenges that growers have faced.

“What I've found since we started is that the rate of return has dropped dramatically,” said Mr McSpedden.

“I think that the vegetable industry is doing it very tough at the moment. Most growers don't mind doing it tough, as long as they are treated fair, but at the moment we are getting squeezed from both sides.”

“It's getting much tougher now, because it's a global market and there's some things we can do better than the rest and some things we can't do better. There is much more competition from places like Asia and South Africa now.”

Mr McSpedden explained that processing companies were under pressure to meet the prices of international products and some were pushing that back on to growers.

“That's what is making life difficult on-farm,” he said.

“A lot of growers are locked



into having no other alternative, but we are lucky we can grow vegetable crops, broad acre crops and rear livestock."

The issue of country of origin labelling, Mr McSpedden said, was also adding pressure to the industry.

"Australians would like to buy Australian, but there are two main problems with that. One is that there is no real definitive country of origin labelling and the other is that we don't know what percentage of Australian produce the major supermarkets are really selling."

In the years to come, Mr McSpedden said that it was vital to get young people involved in the industry to safeguard the supply of food for future generations.

"If we are really concerned about food security long-term, then we've got to get young people to want to farm. And the only way we will get young people to farm is if it's going to be profitable for them."

"I personally think agriculture is a great industry to be in and there are a lot of great people out there who are involved in it."



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The chain of communication

In an increasingly competitive and market-driven sector, Vegetable Industry Development Program (VIDP) Communications Manager Andrew White knows that communication is the key to helping growers remain competitive, writes David Hastie.

Andrew White

The very notion of deploying a Vegetable Industry Development Program (VIDP) Manager was a foreign concept to even the most forward thinking of growers when it was conceived in 2009.

Andrew White admits that even he needed time to digest the significance of the project, after he was contracted by AUSVEG back in September 2009 to begin working on the program.

More than two years later, as part of a young and enthusiastic team at AUSVEG where the average age is in the mid-20s, Mr White continues to promote the advantages of the national R&D database the project has built.

The VIDP was developed to help growers build their businesses and remain competitive for generations to come.

At its heart is the national online database, where research and development (R&D) reports and findings dating back to the early 2000s are kept for growers

to easily access.

Mr White said this Knowledge Management System – an archive of all levy-funded research and development – provided growers with access

“One of our main tasks is to promote the national database to growers. It is important that they are aware of the thousand or so R&D reports that are available to them.”

to information more quickly and effectively than in the past.

“The idea behind the program was to use a network of trusted sources and have a variety of trusted sub-programs with expertise in different

areas such as economics, consumers and marketing, knowledge management, people development, and so on,” Mr White said.

“Our part in the program is

in horticulture before starting at AUSVEG, Mr White said it was a “huge culture shock” going into the industry after previously running his own website development business.

Now more than two years into the job, he shares the role of Deputy to the CEO and is as committed as ever to helping growers improve and develop their industry, with AUSVEG representing the growers of 136 different varieties of vegetables.

“The thing that amazed me the most was the array of different interests and ways of doing things across the industry,” Mr White said.

“Also, just the number of different crops that AUSVEG represents was a real eye-opener.”

“But you very quickly learn that there are a lot of different interests at stake in the industry and understand just how crucial the vegetable industry is to the Australian economy.”

“Growers are under enormous pressure to stay viable, particularly in that lower and

the communication aspects supporting the knowledge management team, and that involves communicating with growers about the outputs of those other sub-programs.”

Having not previously worked



The AUSVEG website, which has access to a wealth of R&D information for growers

middle tier of the industry, with imports coming in and the challenge of producing more food from less resources and remaining innovative."

During his time overseeing the VIDP's communications, Mr White said growers had slowly warmed to the idea of the project.

However, he conceded that some remained skeptical, with access to the internet database presenting a significant technological hurdle for many, particularly in more isolated regional areas where only dial-up internet access was available.

"Initially, it was thought that using more contemporary communication methods to communicate through the internet was going to be much more cost effective and more efficient way of communicating with growers," Mr White said.

"But I've found in my program that that has not necessarily been the case and we have had to step outside that original scope."

"One of our main tasks is to promote the national database to growers. It is important that they are aware of the thousand or so R&D reports that are available to them. This is levy-funded research so we are keen to make growers aware that this resource exists and can be beneficial to them."

"Though AUSVEG's role is the smallest of the sub-programs by far, the industry has invested several million dollars in the VIDP overall, so we are talking about a significant investment through the levy, with matched government funds."

Mr White said that thinking outside the square was vital in helping to get the message out to growers.

He explained that providing agronomists and suppliers with access to the database had allowed them to spread news of important research.

"While growers weren't necessarily logging on to the national R&D database, a lot of the supply chain community was quite interested and keen

to get that information to the growers," Mr White said.

"We realised that we should really be talking to the agronomists and the service providers and allowing them to access this database, because they are probably in the best position to decide what the most relevant R&D is to the growers they are working with, and they can communicate it to them in a way that will be beneficial for their businesses."

The communications team is considering an SMS trial in the coming months to help with the communication effort.

Mr White added that the media remained an important platform from which the program could continue to communicate with growers.

Between April and June this year alone, 201 media mentions related to the VIDP were recorded from print and radio coverage, including in notable publications such as the Weekly Times, Ballarat Courier and Sunday Canberra Times.

This was a direct result of

AUSVEG utilising material outputs of the VIDP.

"We've achieved in excess of 500 media hits across ABC rural radio and industry publications, communicating on all aspects of the Vegetable Industry Development Program," Mr White said.

He also stressed that in all aspects of its work, AUSVEG made every effort to ensure that growers continued to get the maximum return from their levy investment.

"As the National Peak Industry Body we put a large emphasis on ensuring that all service providers are providing value for growers, including ourselves" he said.

"It is crucial that the levy invested does yield tangible outcomes for growers."

"It is equally important that they know exactly how this will benefit them, and that is what we are continuing to work towards with this program."

To register for access to the AUSVEG website and national R&D database log on to www.ausveg.com.au.

Caring for greenhouse crops

New Australian research recommends growers avoid over-using fungicides and introduce a range of strategies to control powdery mildew and *Botrytis* in greenhouse-grown cucumbers and capsicums, writes Karen Shaw.

Research has found that integrating several practices such as good hygiene, monitoring greenhouse climate conditions and varying fungicide treatment with softer alternatives helped to manage fungal diseases and also improve crop yields.

Senior Researcher Dr Kaye Ferguson, from the South Australian Research and Development Institute (SARDI), spent four years, which included interviewing and visiting commercial growers throughout South Australia, New South Wales and Western Australia to collect and collate data for the important study.

The project, called *Sustainable integrated control of foliar diseases in greenhouse vegetables*, was funded by Horticulture Australia Limited (HAL) using the National Vegetable Levy and matched funds from the Australian Government, and was undertaken by SARDI.

With greenhouse growers struggling to control powdery mildew and *Botrytis* in cucumber and capsicum crops, the industry commissioned research into better disease management.

The first phase of the project involved undertaking a

grower survey to understand the specific disease issues and problems. Survey results showed that 27 per cent of growers did not know the source of their foliar diseases and 43 per cent did not know how they spread.

Dr Ferguson said: "We quickly realised there were gaps in growers' knowledge, which also

developing fruit.

"Because it can affect fruit, *Botrytis* often has more of a direct impact on crop yield," Dr Ferguson said.

As part of the project, the distribution of specialist fact sheets has helped improve disease knowledge, as has making growers aware of diagnostic services based

understood the significant part that temperature, humidity and moisture played in the development of foliar fungal diseases.

"For example, we know that *Botrytis* needs a cool, moist environment to infect and spread, so increasing the greenhouse temperature creates less conducive conditions for the fungus," she said.

Once growers understand the importance of monitoring humidity and temperature data, it is often a simple procedure to adjust conditions by opening greenhouse doors or vents, or introducing some form of heating to help control disease.

The initial survey also identified that fungicide use was an area of concern among growers, particularly understanding newly-released products and the softer alternatives available.

Dr Ferguson warned that before spraying with anything, growers needed to correctly identify the disease and then select the most suitable registered fungicide for control.

She suggested a spraying program that included rotating currently registered fungicides with softer alternatives such as potassium-bicarbonate-based products.

"More work needs to be

“We know that *Botrytis* needs a cool, moist environment to infect and spread, so increasing the greenhouse temperature creates less conducive conditions for the fungus.”

included being able to correctly identify the diseases. It's difficult to control or manage a disease if it's not diagnosed correctly."

Powdery mildew is a white mould that appears first on the oldest plant leaves and can infect plants at all times of the year, while *Botrytis* grey mould is a fuzzy, grey fungal growth found on flowers, stems and

at SARDI and other similar organisations.

Climate is another consideration in disease management and Dr Ferguson visited commercial greenhouses across the three states to collect and collate data about specific growing conditions.

Dr Ferguson said it was important that growers



Assessing capsicums for disease



Powdery mildew on cucumber



Botrytis grey mould on cucumber

done in this area, but it does give growers some alternative, and more sustainable spray options," Dr Ferguson said.

"We found that it's important to use protectant fungicides early, before powdery mildew and *Botrytis* become established in crops, and systemic fungicides later."

There are also simple greenhouse hygiene practices to help prevent the spread of both diseases. Dr Ferguson

suggested that growers constantly check crop leaves for tell-tale signs of powdery mildew.

"It's easy to prune any problem leaves and remove them from the greenhouse. Similarly, scout plants for signs of *Botrytis*, particularly in late autumn when conditions are more favourable. And again, always remove any problem plants immediately and dispose of them."

"Another tip is to start working in the youngest crop and move to older plants, which might already have the disease," she added.

As part of the study, Dr Ferguson also trialed several cucumber varieties to test resistance to powdery mildew and *Botrytis*. She found that all varieties of cucumber were susceptible to *Botrytis* grey mould.

All cucumber varieties were also susceptible to powdery mildew, however, Palermo had a delayed onset of the disease and Panama and Myrthos had less disease in mature plants.

"It is important for growers to know because it may assist with management by giving more time to apply a spray," she said.

Dr Ferguson believed the research had improved industry information and given growers the confidence to introduce a range of options to help manage powdery mildew and *Botrytis* grey mould in crops.

"Ultimately, knowing more about disease management will save time, money and improve productivity," she said.

THE BOTTOM LINE

- New Australian research recommends using a range of disease management techniques to control powdery mildew and *Botrytis* grey mould in greenhouse-grown capsicums and cucumbers.
- Prevention strategies include: correct disease identification; good greenhouse hygiene, monitoring temperature and climate growing conditions and a spraying program that includes rotating registered fungicides with alternative softer options.
- For fact sheets and further information about sustainable disease management go to: www.sardi.sa.gov.au and follow the links.



Find more information
Dr Kaye Ferguson
South Australian Research and
Development Institute (SARDI)
Phone: (08) 8303 9627
E-mail: kaye.ferguson@sa.gov.au
Project number: VG05094



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Age: 22

Location: Meadow Flat, Bathurst

Works: Kurrawong Organics (owned by Lesley and Quentin Bland) at Kirkconnell

Grows: Broccoli, cauliflower, cabbage, Brussels sprouts, beans and peas

Q&A Young grower feature

Following a dream



Meadow Flat,
Bathurst

So eager was Jordan Bullock to embark on his horticultural career that he started growing vegetables and supplying them to a local restaurant while he was still at high school. Some years later and the 22-year-old Bathurst grower now plays an integral role at an established organic enterprise.



Photography by Mark Quade



How did you first get involved in the vegetable industry?

I've always wanted to do something on the agricultural side. I did agriculture all through school and I grew up on a farm where my parents kept horses. I couldn't stand being inside.

I started growing tomatoes and beans at my parents' farm for a restaurant in Lithgow when I was still at high school. My brother worked at Kurrawong Organics and that's really how I got into working there. I have been there for six years now.

What is your role on the farm?

As it is a small farm, I do several different things a day, including planting, irrigating and harvesting. We farm about 70 acres a year and we have a three-year rotation.

We grow broccoli, cauliflower, cabbage and Brussels sprouts and in summer we grow beans and peas. Our produce is supplied to Sydney Markets and some also goes to Brisbane Market.

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

We sell produce at farmers' markets in Sydney once a week and I really enjoy that side of things. It's great selling the product direct to the customer.

I also really enjoy harvesting and being out there in the paddock. We see the crops all the way through from seedlings to being packed and sent off to market, so harvesting really

makes you feel like you've achieved something.

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

I have completed up to Certificate III in General Horticulture Landscaping through TAFE over the last few years. I did it so I could have a piece of paper behind me. I would like to stay in the growing industry, but it's good to have something to back you up if things don't work out.

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

I feel that you've got to be interested in the industry to work in it. You've really got to be interested to get up and work outside come rain or shine – not many people would spend hours in 35°C changing irrigation pipes, for example.

We get a lot of young people coming to work for a summer to save up to go travelling and things, but we never see them again.

I think making young people more aware of the industry at school would help, but I do think they have to be interested in it to start with.

What challenges do you face on-farm?

We are quite lucky because we are surrounded by pine forests and have no neighbouring farms. We still get pests, but we can manage them a lot easier than some other farms can. We still have organic sprays, but we have very little pests and diseases. The fact that we can let the paddocks rest for three years helps break down a lot of pests in the soil.

We do, however, still face some of the same problems as other farms such as things like diseases in seedlings.

Where do you see yourself in 10 years?

I hope I will still be farming in 10 years - it's where I would like to be.

You recently attended the AUSVEG-led Young Grower Tour to New Zealand. How did you find the experience?

It was excellent. It was great to see the farms on such a big scale compared to what I'm used to. It was a real eye-opener to see how they do it on a large scale. We went to see one organic farm, which was interesting, but I also took things away from the visits to the bigger farms as well.

It was also good to meet other young growers from Australia and share information with each other about how to manage pests and diseases etc. This was my first grower tour and I would absolutely recommend it to other young growers.



Harvesting to the tee

Australian research has led to the development of a tool that aims to take the guess work out of growing. Using temperature averages for major growing regions in Australia, the technology is set to enable baby leaf spinach growers to predict harvest dates throughout the year.

Baby leaf spinach is a vegetable that requires an extra level of accuracy to ensure the production of a sellable crop.

The leaves grow rapidly and are usually only suitable for harvesting on a single day; harvesting too early reduces yield, while harvesting too late results in leaves that are too large and outside of specification.

This sensitivity to harvest date is further compounded by the short post-harvest shelf-life of baby spinach.

A need was identified for growers to be able to develop a planting plan to allow for regular supply of harvested product in the face of varying weather conditions – which have a significant impact on the rate of development of the crop – and a research project was undertaken by AHR Environmental Pty Ltd.

The project, entitled *Development of a crop scheduling program for baby leaf spinach in the major*

growing regions of Australia, aimed to examine the relationship between planting date and the time required for baby leaf spinach to reach

and matched funds from the Australian Government.

Researchers set out to understand the relationship between ambient temperatures

sowing date of a crop, based on regional long-term temperature averages.

Project Leader Dr Gordon Rogers, of AHR Environmental Pty Ltd, said: “The issue is that over the growing year there is a very significant change in the development time of the crop. It can range from 25 days in summer up to 50 or 60 days in winter. For growers, in terms of planning the harvest, the planting times vary significantly.”

“The project set out to try and assist growers in being able to schedule their plantings so they would be able to harvest at a certain time. This is also important for processors who are trying to source the produce from growers, as it can allow them a more even supply.”

Dr Rogers explained that major baby leaf growing regions around Australia were identified and researchers worked closely with growers in these areas to collect weather, planting, harvest and management data. The areas were identified as Gympie, in Queensland; Camden and

“Growers can use the tool in two ways; they can use it to predict the harvest date if they know their planting date, growing region and variety type or they can work backwards from a desired harvest date and that will tell them when they need to sow.”

commercial maturity.

The project has been funded by Horticulture Australia Limited (HAL) using voluntary contributions from industry

and the time taken for baby leaf spinach to reach harvest point. The information was then used to develop a practical model that can predict the harvest or



Cowra in New South Wales and Boisdale and Maffra in Victoria.

The information was used to establish the amount of time taken for crops to reach harvest point across different seasons by working out the number of Growing Degree Days (GDD), which is the most widely used formula to calculate the amount of thermal heat units required for crops to reach commercial maturity.

The prediction model assumes that the crop accumulates Daily Thermal Units (DTUs) and that the accumulation of these DTUs is needed until the total requirement for the crop is reached.

"We looked at baby leaf spinach and grouped the varieties into three categories: fast growing, medium growing and slow growing," explained Dr Rogers.

"We then developed a heat unit model based on temperature and tested how well that model predicted the actual crop development time."

The model assumes that plant growth does not occur below a minimum or above a maximum temperature and these cut-off temperatures vary depending on species. Growers were asked to continue collecting planting

and harvest dates and the information was fed into the model to measure its accuracy.

"We think the tool is now accurate to plus or minus three days, although factors such as water stress and plant density could affect the result," said Dr Rogers.

Crop Scheduling program for baby spinach

"Growers can use the tool in two ways; they can use it to predict the harvest date if they know their planting date, growing region and variety type or they can work backwards from a desired harvest date and that will tell them when they need to

sow."

"The benefit to growers is that it will help them to plan out their planting schedules so that they can have more certainty over their harvest dates. If they want even production, it will also allow them to work out a planting schedule that will result

in a more even harvest pattern."

The crop scheduling program for baby leaf spinach has been developed for growers using Microsoft® Excel® software and has a user-friendly interface that can be used by anyone with basic computer skills.

THE BOTTOM LINE

- A need was identified for baby leaf spinach growers to be able to develop a planting plan to allow for regular supply of harvested product in the face of varying weather conditions.
- AHR Environmental Pty Ltd undertook a project to create a crop scheduling program for baby leaf spinach in the major growing regions of Australia, to examine the relationship between planting date and the time required for baby leaf spinach to reach commercial maturity.
- The tool, which is available in Microsoft® Excel® software, enables growers to predict the date of harvest of their crop or predict the date they need to sow in order to reach a desired harvest date.



For more information or to request the crop scheduling program:

Dr Gordon Rogers – Project Leader at AHR Environmental Pty Ltd.

Tel: (02) 8627 1040

E-mail: gordon@ahr.com.au

Project number: VG08167

Minor-use permits

Permit Number	Permit Description (pesticide/crop/pest)	Date Issued	Expiry Date	States Covered
PER13038	Phosphorous acid / Strawberries, Herbs and Passionfruit / Phytophthora	01-Nov-11	31-Oct-14	Valid for all states (other than Vic)
PER13034	Score Foliar Fungicide/ Beetroot/ Leaf Spot	18-Oct-11	31-Aug-13	Valid for all states (other than Vic)
PER12017	Fluazifop-p-butyl / various leafy vegetables, swede, turnip / Annual grass weeds	21-Oct-11	30-Jun-16	Valid for all states (other than Vic)
PER8930	Phorate / eggplant, peppers, shallots & spring onions / aphids, jassids, mites, thrips & onion maggot	14-Aug-11	31-Jul-16	All states
PER13002	Metalaxyl-M / Lettuce (field crops) / Damping off	27-Sep-11	30-Sep-13	Valid for all states (other than Vic)
PER13035	Clethodim / Radish / Control of grasses	27-Sep-11	30-Sep-16	All states
PER12571	Acramite (bifenazate) / snow and sugar snap peas (field and greenhouse) / mites	1-Apr-11	31-Jan-13	Valid for all states (other than Vic/NT)
PER12770	Glyphosate / Grapevine removal/destruction / Phylloxera	12-Oct-11	31-Dec-16	Valid for Qld only
PER12442	Trichlorfon/ Eggplant, Pepino & Cape gooseberry	10-Aug-11	31-May-14	Valid for all states (other than Vic)
PER13031	Maldison/ Capsicums & Cucumbers (protected and field grown crops)	6-Oct-11	31-May-14	Valid for ACT, NSW, NT, QLD, SA and WA
PER13036	Bravo (chlorothalonil) / fennel / Downy mildew, Purple blotch	21-Sep-11	31-Jul-16	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

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Ask the industry

with Scott Mathew

Scott Mathew, Technical Services Lead at Syngenta, discusses the spread of viruses and reveals best practice techniques to help growers stop the spread among crops.

Question: How are viruses spread from plant to plant?

The spread and significance of any viral damage can vary from season to season. Aphids are responsible for spreading many of the viruses that affect vegetables (Cucumber mosaic virus, Potato Virus Y in tomatoes and capsicums), but other pests such as thrips can be responsible for the spread of viruses such as Tomato spotted wilt virus.

Question: When some people talk of viruses they mention the words persistent and non-persistent transmission. What does this mean?

Viruses spread (transmission) by aphids can be divided into two main groups - persistent and non-persistent transmission. It is critical to understand the difference between the two, as they differ both in their uptake and behaviour within the insect vector. Therefore, the methods used to limit their spread will vary accordingly:

- With persistent transmission, the aphid will usually carry the virus for life. For the virus to be spread to plants requires a certain period of feeding. After an incubation period of several hours or days within the insect, the virus is then ready to be passed onto another host plant. Due to this, the spread of persistent viruses is favored by aphid species that colonise and spend time in the crop. The use of insecticides can significantly reduce the spread of persistent viruses.
- Non-persistent viruses (NPV) can be acquired within a few seconds after feeding or probing an infected plant. Winged aphids can then move quickly from infected plants onto healthy plants, transmitting the virus in the process. Interestingly, aphids can lose the virus particles from their mouthparts, which are 'cleaned' when they feed on the next available plant. They are then unable to transmit disease to additional plants, thus slowing disease spread. Due to the speed at which aphids acquire and transmit NPVs, insecticides are not usually effective in controlling their spread.

Question: How can we better manage our crop to prevent or slow the spread of viruses?

When considering virus management strategies, it is important to consider site selection and location.



Scott Mathew, Technical Services Lead at Syngenta

- Vegetable crops with the highest incidences of viral disease tend to be located near weedy pastures. When possible, select fields away from susceptible host crops.
- Crops planted later in the season will tend to sustain more damage from viral diseases. Therefore, where possible, susceptible crops should not be planted adjacent to one another, in order to reduce the sources of viruses.
- Considering many viruses overwinter in perennial weeds and are spread by aphids, it is essential to control weeds early prior to planting and to reduce the number of alternate weed hosts that maybe a source of the virus both in and around the crop.
- Scouting and monitoring fields for aphids and disease symptoms regularly will allow for early recognition of potential problems and assist growers in deciding on a suitable course of action to prevent significant losses.

Ask the industry

If you have a question that you would like addressed, please ring Syngenta on 1800 067 108 or email [Vegetables Australia: info@ausveg.com.au](mailto:Vegetables.Australia:info@ausveg.com.au)

Please note that your questions may be published.

Rewarding weed work

Tasmanian-based agricultural research organisation Peracto was honoured with the Productivity Partner Award at the 2011 AUSVEG National Awards for Excellence earlier this year. Working for more than 20 years using research and technical expertise to benefit growers, Peracto received the recognition for its positive contribution to the Australian vegetable/potato industry. One key area that Peracto has been committed to improving is weed control and in this special article for *Vegetables Australia*, Principle Project Manager at Peracto Phillip Frost explains some of the work done so far.

The management of weeds can represent a significant cost in the production of vegetable crops.

This is in addition to the indirect costs of weeds such as harbouring pests and diseases and competition with the crop for light, water and nutrients.

Despite the importance and cost of weed management to Australian vegetable growers, there is currently very little publically or privately-funded research looking at improving weed management in Australian vegetable crops in comparison to areas such as pest and disease management.

Weed management strategies used by Australian vegetable growers employ a combination of physical, ecological, biological, chemical and genetic methods to obtain effective, economical and sustainable weed control.

History has shown weed populations can adapt to weed management systems that rely on few or single control

“Intensive horticulture in Australia needs to be proactive in identifying suitable products and raising the priority of development programs for new herbicides to control weeds.”

options. Thus, the adoption and continued development of weed management programs incorporating a diverse range of management methods is essential for vegetable cropping systems to remain productive.

Herbicides are currently the predominant control option for weeds in intensive vegetable production. In a number of vegetable crops such as capsicums, there are few, if any, suitable herbicides registered for broadleaf weed control.

To develop new herbicides, companies are faced with increasing costs to satisfy the data requirements prior to registration and cannot justify the development of new herbicides in vegetable crops in Australia.

Intensive horticulture in Australia needs to be proactive in identifying suitable products and raising the priority of development programs for new herbicides to control weeds. It also needs to seek out new, potentially beneficial,

technologies from non-traditional sources.

Through its research, Peracto has a long history of facilitating the development of new weed management strategies for the Australian vegetable industry.

During the past 15 years, projects have been completed in crops including:

- Cucurbits
- Green beans
- Sweet corn
- Lettuce
- Processing peas
- Potatoes
- Brassicas
- Processing tomatoes
- Carrots
- Capsicums and chillies.

The principle aim of these projects has been to develop new herbicides for these crops to address specific weed management issues. The work was principally funded by Horticulture Australia Limited, with voluntary contributions and in-kind support from a number of manufacturers.

The outcomes from this work

Wild radish infesting a broccoli crop



are very important for the industry. For example, Frontier-P 720 EC and Command 480 EC are currently the only two herbicides registered for broadleaf weed control in cucurbit crops.

Some examples of outcomes from this research are as follows:

- Baron 400 WP is a novel formulation of oxyfluorfen, which can be applied immediately post transplanting to cabbage, cauliflower and broccoli seedlings to control a broad range of weeds. This product has changed the way brassica crops are grown in many regions, by reducing the reliance on mechanical inter-row cultivation and hand weeding and providing improved management of weeds such as wild radish, which are closely related to the brassica crop and in the past have been very difficult, if not impossible, to manage with selective herbicides.
- Command 480 EC is registered for pre-emergence

grass and broadleaf weed control in cucurbits, green beans, navy beans and potatoes. This product can also be used as part of an integrated control strategy for weeds such as black nightshade (*Solanum nigrum*), hogweed (*Polygonum aviculare*) and potato weed (*Galinsoga parviflora*).

- Frontier-P 720 EC is registered in crops, including green peas, green beans, sweet corn and pumpkins, for the management of a range of grass weeds and broadleaf weeds, including *Amaranthus spp.*. Growers have found Frontier-P can significantly reduce the costs of hand weeding and inter-row cultivation in crops such as pumpkins.

New weed management tools do not necessarily need to be herbicides, they can be other new technologies.

One example is an exciting new product called e-Film, which is about to be launched



Ian Macleod, Senator The Hon Bill Heffernan, Mark Geraghty and Dipper at 2011 AUSVEG National Awards for Excellence

by Australian company AgNova Technologies. After several years of extensive trialling using a range of patented and fully biodegradable biopolymers, e-Film will have major benefits for growers and the environment by eliminating the need to recover and dispose of mulch after the crop has been harvested.

The bottom line for the Australian vegetable industry is that while it may be a slow and expensive process, new weed management technologies are

being successfully developed through research.

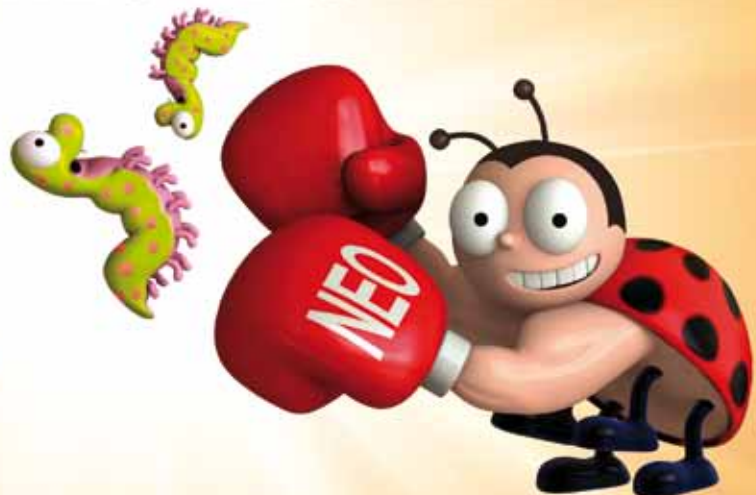
This is resulting in the development of more efficient, sustainable and effective weed management strategies for Australian vegetable production.

i For more information contact
 Phillip Frost
 Principal Project Manager at
 Peracto
 Phone: (03) 6423 2044
 or visit: www.peracto.com.au



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EnviroVeg Committee meets to discuss current environmental concerns

The EnviroVeg Committee met in Devonport, Tasmania, on 6 October to discuss the most recent activities of the EnviroVeg Program.

At the recent EnviroVeg committee meeting, members discussed improvements that have been made to the EnviroVeg Manual, which has recently been re-launched for the vegetable industry.

Version 3 of the EnviroVeg Manual is now available to vegetable growers who are members of the program, or who would like to join, and contains a wealth of information on topics including soil health, energy management, water use and chemical management,

as well as case studies on the sustainable practices growers are utilising around Australia.

Vegetable growers who are interested in joining the EnviroVeg Program should contact AUSVEG on (03) 9822 0388 or email info@ausveg.com.au. Further information is also available on the EnviroVeg webpage at www.ausveg.com.au. The Program is free for vegetable levy payers.

Using EnviroVeg management principles can help to reduce input costs for fertilisers and crop protection products and

improve soil health, soil friability and water and nutrient holding capacity, among a range of other benefits.

Other topics discussed at the committee meeting were: third party certification, updating the EnviroVeg webpage, and plans to hold a number of new EnviroVeg seminars targeted at growers - details of which will be made available once they are finalised.

The EnviroVeg Committee comprises members from each state of Australia, as well as a specialist advisor.

EnviroVeg Members are also reminded to undertake their annual self-assessment. The annual self-assessment is an important tool for growers that is easy to complete and will allow for an understanding of environmental risk associated with individual enterprises.

The self-assessment enables and assists in decision making on environmental aspects on-farm. The self-assessment checklist is available to download and print out from the EnviroVeg webpage or please contact AUSVEG on (03) 9822 0388 to obtain a copy.

New South Wales primary school to start building Bushtucker Garden

Government grant supports New South Wales primary school's environmental program.

The New South Wales State Government has pledged \$2,500 into St. John's Primary School, as part of its 2011/12 Environmental Trust Eco Schools program.

As reported in the Rouse Hill Times, staff along with the 115 students at St. John's, will use the money to increase the size of the vegetable beds already in

place, as well as construct their very own Bushtucker Garden.

Principal Marion Bell was ecstatic at the news and stated that the grant was "a big boost" and that St John's had "always wanted to start a Bushtucker Garden."

Currently, St. John's Primary School has approximately 45 children out of 115 involved in

the garden beds, but with the welcome addition of the NSW government grant, they hope to increase the number of students involved.

After visiting the school, Riverstone State Liberal MP Kevin Conolly said: "The project will also help to develop and extend the language skills of our students, as they interact

and communicate with others and develop their public speaking skills when presenting information about the garden buds program."

Mr Conolly added that any excess produce from the vegetable patches would be sold to the family and friends of St. John's Primary School.

Breakthrough sustainable technology to increase energy produced by plants

A new technology from Arcadia Biosciences Inc. enables plant leaves and stems to produce high levels of natural vegetable oil, allowing the growth of biofuel crops on marginal land.

The U.S. Department of Energy's Advanced Research Projects Agency - Energy (ARPA-E) - has announced that it will inject US\$950,000 into the plant and stem research conducted by Arcadia Biosciences.

Centred around increasing health in humans, as well as the environment, Arcadia is creating a plant that is able to produce significant amounts of oil in its leaves and stems, leading to greater energy output of the organism itself. This will inevitably mean that the production of biofuels will be better for the eco-system, as well as more cost effective for the grower.

As reported in Business Wire (Davis, Calif, 19 Oct 2011), the development being undertaken by Arcadia will focus upon utilising what is usually considered as waste on a plant, and turning it into a valuable source of energy.

Vegetable oil, the oil Arcadia is undertaking the development of, is predominantly produced by seeds and is the richest source of energy coming from a plant.

Therefore, with the development of plants that produce high amounts of vegetable oil, farmers will be able to increase their



productivity and, more importantly, greatly decrease their carbon footprint by harvesting this biofuel. This will be achieved by converting the fixed carbon, which many crops leave behind in their leaf and stem, into sustainable fuel to be used for transportation.

In essence, it enables growers to turn their waste into a highly

demanding and environmentally-friendly product, while also improving their carbon footprint and increasing overall output.

Eric Rey, CEO and President of Arcadia Biosciences, said: "Finding sustainable, plant-based alternatives to fossil fuels is a high priority worldwide. Current sources, however, are inherently inefficient and

require high levels of energy to produce."

"Successful development of new crops that produce oil in all parts of the plant can measurably increase oil production per acre and offer a more sustainable bioenergy alternative."



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Teachings through time

It was 80-years-ago that the Favero family sowed their first seeds into a small patch of Victorian land at Centre Road, Narre Warren, in anticipation of a fruitful future of vegetable growing. Speaking to *Vegetables Australia*, third generation grower Glenn Favero looks back at the history of the family enterprise and explains how sustainable practices are helping to secure its success long into the future.

It was 1931 and Domenic Favero had arrived in Australia from Italy determined to make a living.

With no experience of market gardening and little money in his pocket, the enthusiastic entrepreneur took a gamble on a 16-acre patch of land at Narre Warren, near Melbourne.

Today, that 16 acres is now 600 acres in the Cranbourne Sands and Devon Meadows area. Favero Gardens has grown to become one of the state's leading vegetable producers, supplying markets and stores around the country.

The enterprise is now run by the third generation of the Favero family – Glenn, his brother David and their cousin Allan – at Cranbourne, a few kilometres away from the site of the original farm.

"I've been in the industry for 22 years," said Glenn.

"It was an easy transition for me. My dad Silvio and his brother John ran the farm following my nonno (granddad) and then they gradually took a step back and let us run the business; the day-to-day growing, marketing and the whole process of the operation."

The main crops produced by Favero Gardens are celery, parsnips and broccoli, while lettuce and sprouts are grown

seasonally.

"In the 1930s, my nonno (granddad) dabbled in different kinds of crops," explained Glenn.

"You name it, they tried to grow it. They tried everything all those years ago to see what would work and what wouldn't. Over the years, we've had to consolidate the lines that worked for us with the harvests and rotations."

Having the expertise to grow produce consistently is the key to a successful business in Glenn's eyes and that expertise, he believes, is something that is passed on through the generations.

One important lesson that Glenn, David and Allan learnt very early on was that soil was the lifeblood of growing and that protecting it was paramount to the future of the business.

As a result, the growers' environmentally sustainable management practices centre predominantly around nurturing the soil and keeping it in good condition.

"We use a lot of straw as mulch and introduce organic matter back into the soil," explained Glenn.

"We get good humus into the soil with the straw. The benefits are that the soil has a good moisture content and we also

get a cover crop out of the straw. Once the cover crop reaches around one-foot high, it is then incorporated back into the soil."

Glenn added: "This is one factor that's been important in establishing the way we grow; we've been doing this for at least 40 years. It doesn't make us money, but it is definitely a good result in the end for the crops."

"We've been farming in this area on this land for around 40 years and we are still reaping the benefits from the soil. All the practices over the years have been passed on to us; it's how we've been brought up to look after the soil."

"Soil is our tool, if we don't have that then we are not sustainable."

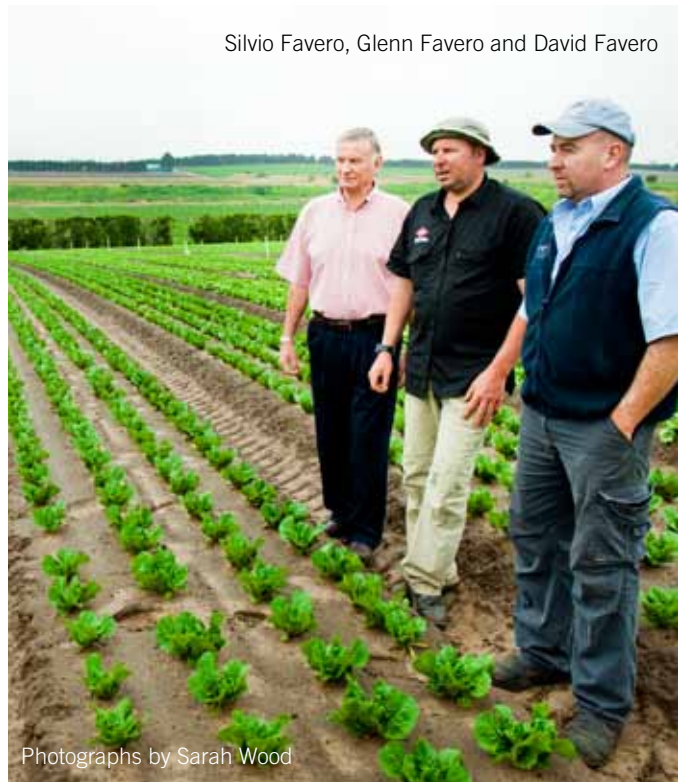
With parsnips in the ground for around six months, celery in the ground for 16 to 18 weeks and lettuce grown for an even shorter period, Glenn said that crop rotation took a bit of managing.

"It would be great to have thousands of acres to rotate, but we don't have the luxury of having that amount of land to do it," he said.

Working closely with an agronomist is another key factor in achieving consistent quality and improving on-farm practices, according to Glenn.

"We have an agronomist that





Photographs by Sarah Wood

comes to the farm and if we find any problems then we get them tested and rectify the problem," he said.

"We also manage our own Integrated Pest Management accordingly between myself and the agronomist. We've got to utilise the services and the technology we have available to us today and embrace it."

As well as embracing new technologies, Glenn is also a fervent believer in using the powers of Mother Nature to assist with working the land.

"Mother Nature plays a big part in what we do, we are at the mercy of that," he said.

"It can be both a benefit and a hindrance for us. There are ways we can use Mother Nature to our benefit. For example, we plough and lift the soil in the sunlight to dry it and break-up disease. These are the little things that have been passed down from generation to generation."

Having been involved with the AUSVEG EnviroVeg Program since its conception, Glenn said he felt that it was a good tool for his business.

"The program really gives you something to strive to, which is good because we are striving to be better all the time at what we are doing. If there is a tool or a guide to help us improve things on-farm then it's all for the better."

As well as tackling the everyday challenges that come with being vegetable growers, the Favero family is also being forced to manage the effects of

urbanisation, as the suburban sprawl from nearby Melbourne encroaches closer to their land.

"It is very different now to when my nonno (granddad) started growing in the 1930s, when there wouldn't have been much around at all," said Glenn.

"There is prime land for growing here and it's just getting chewed up by houses. We try to manage the effects of urbanisation accordingly and it is something we are very vigilant about. We have neighbours and we don't want to upset them."

"We are careful when watering and vigilant when applying fertiliser using best farm practices."

Ensuring the sustainability of the farm long into the future is an ethos that lies at the heart of the Favero family, with the potential of succession by a fourth generation and sights set on developing land at nearby Devon Meadows for growing.

"What we take away we always try and put back," said Glenn.

"If you stop doing that then you are going to go backwards very quickly. I think that's the balance that you have to have."

Glenn added: "I have children and David and Allan also have children, but it will be totally up to them if they decide they want to take the business on. You've got to have the passion to do it."

"Vegetable growing is a learning curve. We've just got to keep moving with the times and the conditions that we have to grow in. I think that's what makes us all unique as growers."



A typical outdoor hydroponic NFT production system for lettuce, herbs and Asian greens



A typical greenhouse hydroponic NFT production system.

Benchmarking best practice

Industry benchmarking is desperately needed to prevent the prevalence of pesticide residues being found on greenhouse and hydroponic-grown lettuce and Asian greens, writes David Hastie.

Violation of the Maximum Residue Limit (MRL), or pesticide residue non-compliance, is the second most important factor after quality that can cause product to be rejected by the major retailers.

With this in mind, a two-year scoping study set out to seek explanations for the fact that pesticide residue issues can occur more often in lettuce grown in greenhouses and/or hydroponic systems, than in field-grown lettuce.

The project, entitled *Neutralising pesticides in recirculating water systems within a protected cropping system*, was conducted by Graeme Smith, of Graeme Smith Consulting, and has been funded by Horticulture Australia Limited using the National Vegetable Levy and matched funds from the Australian Government.

Practical data was collated

from three commercial growers located in Queensland, New South Wales and Victoria who used protected cropping and/or hydroponic systems.

Mr Smith, who has 25 years of experience in the greenhouse industry, said that excess levels of residue were directly referable to growers using techniques developed for crop production in the field.

“One of the targets we had early on was to look at what actually happens in the industry today by looking at three prominent grower locations with notable growers,” Mr Smith said.

“Our crops are quite different in how we run them and manage them from the field. What we recognised was that a lot of the products out there that are used for control of disease, spraying techniques and all the rest of it, are all for traditional soil-based growing systems.”

Mr Smith added: “Very little work or research has been done on the greenhouse side of things. We have different plant densities, more plants per square metre, so there are different geometries and different climates, and we don’t have any rain degradation or wind or UV.”

Summarising the project’s findings, Mr Smith said the aim was to achieve open and honest communication with the growers about the practices they employed in order to better understand why MRL violations were taking place in greenhouse and/or hydroponic systems.

MRLs are established for pesticides across a range of crops and production methods. In Australia, only a few pesticides have special registration and a set MRL for protected cropping and hydroponic-produced lettuce. A pesticide that is not registered

for lettuce using this growing method would have no MRL.

In this situation, a zero (or very low) tolerance would apply and any amount of residue detected would lead to an MRL violation.

Mr Smith said occurrences of pests and diseases were often higher in greenhouse production due to significantly longer growing seasons, as well as intense production, which resulted in more spraying.

He explained that shorter crop cycles led to reduced time between spraying and harvest, which also contributed to MRL violations.

“The usual climate variations that you get in the field are largely excluded in the greenhouse situation,” he said.

“What was very clear in looking at the three sites is that there was hardly anything that was done in the same way; with regard to how the three growers set things up, how they managed

it, how they ran them, what technology they used to spray and even the volumes they put on."

"The big issue confronting us is that there is no benchmarking. A lot of the growers in new industries fumbled their way through, found their own way of doing things, but nowhere is there a benchmark or a comparative study to say, 'If you are going to do this sort of thing, use this technology in this way'."

Mr Smith added: "It really showed up quite significant differences between the growers, who are successful in their own right, but are achieving it in very different ways."

While the three growers incorporated Integrated Pest Management (IPM) technologies in their respective production processes, the research found that all three still utilised the 'shot-gun' approach (blasting pesticides onto crops) rather than doing it with finesse and careful consideration.

"A lot of growers had taken advice from product and chemical companies,

“A lot of the growers in new industries fumbled their way through, found their own way of doing things, but nowhere is there a benchmark or a comparative study to say, ‘If you are going to do this sort of thing, use this technology in this way’.”

but without the work done in a greenhouse context, even advisors are stretched to try and come up with an application rate in an application way that makes sense," said Mr Smith.

"When we are starting to see increasing numbers of close to or MRL violations, then something is going amiss somewhere. I suspect it is a combination of application volumes, rates and techniques, because they all seem to be a bit hit or miss at the moment."

Data collected from the three protected cropping sites will go towards the establishment of an industry benchmark.

Mr Smith is currently working on a proposal for a national centre for controlled environment horticulture – a training, demonstration and R&D centre that he believes would meet all the industry needs identified by this scoping study.

"It points to the fact that there is a huge desire and a demonstrated need for some sort of benchmarking," he said.

THE BOTTOM LINE

- Violations of the Maximum Residue Limit (MRL) or pesticide residue non-compliance is the second most important factor after quality that can cause product to be rejected by major retailers.
- New research has found that there is a strong need for industry benchmarking, as there is currently no blueprint for advice on how growers should proceed.
- Better training opportunities in crop protection systems are needed to help eliminate inconsistent advice given to growers. This could be achieved through the development of a national centre for controlled environment horticulture.

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Project number: VG09121

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A clean start for the perfect finish



Soil solutions

with Rohan Davies



Measuring water infiltration

Rohan Davies, Technical Agronomist – Horticulture at Incitec Pivot Fertilisers, discusses water infiltration rates.

Question: Is the water you are applying going down or across the soil profile?

Have you ever seen water ponding on the surface, or running down the rows rather than into your soil? Are you losing nutrients across your paddock rather than down your soil profile?

The type of soil, its structure and water content all affect how quickly and easily water will move down the soil profile, allowing plants to gain maximum benefit. For example, lighter soils such as sands will allow more vertical movement than heavier soils.

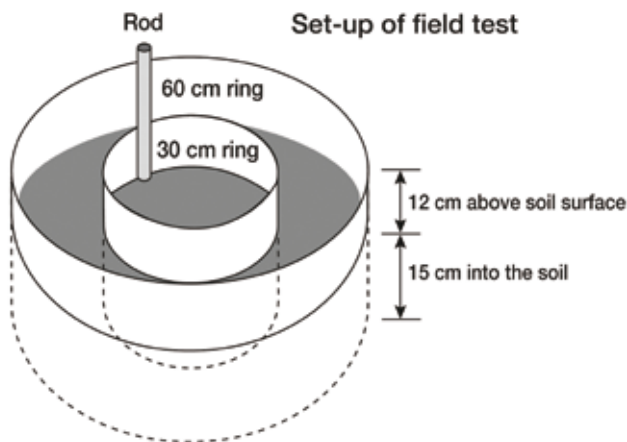
It is also important to see how the soil is made up. For example, consider whether there is a crust on the surface, whether the soil is compacted and the organic matter content. Does the soil have strong aggregates and what is the structure of the soil?

All of these factors play a major role in reducing or increasing the infiltration rate.

Wet soils will generally have a slower penetration rate than drier soils.

The best way to understand your soil and the way water infiltrates is to do some simple measurements.

Two simple field test methods can be found at these websites: www.crcv.com.au and www.fao.org



These tests essentially use metal rings and some hessian to determine the infiltration rate. Several tests should be conducted over a paddock to reduce any micro-spatial variability in your results.

Undertaking this type of testing, and adjusting practices to suit, can have significant benefits through better water utilisation, improved nutrient use efficiency and ultimately better yields.

The infiltration rate is the speed at which water enters the soil. It is usually measured by the depth (mm) of the water layer that can enter the soil in one hour.

An infiltration rate of 15 mm/hour means that a water layer of 15 mm on the soil surface will take one hour to infiltrate. Some normal soil water infiltration rates are as follows.

Soil water infiltration rates

Soil type	Infiltration rate (mm/hr)
Sand	>30
Sandy loam	20-30
Loam	10-20
Clay loam	5-10
Clay	1-5

Source: Food and Agriculture Organisation of the United Nations, 1998.

Some options that can help increase water infiltration rates include:

- Reducing tillage operations (reducing soil disturbance improves soil structure and encourages biological activity).
- Increasing the amount of organic materials added to the soil (tillage operations 'burn up' organic materials by encouraging microbes to use the organic material as a food source).
- Decreasing compaction by avoiding the use of machinery, especially when the soils are wet (consider controlled traffic).
- Managing the soil surface through cover crops or residue retention to reduce the impact of rain drops on the soil surface.
- Using a rotary hoe or row cultivator to shatter the crust.

Improving how water enters your soil can help to improve overall farm productivity by improving water and nutrient use efficiency.

It is important to note that the quality of the water also affects how it reacts with the soil and plants. Continued use of very pure water can be as detrimental as the use of saline water.

Testing the water for its salinity or sodicity levels can provide valuable information about how the water is impacting your soil structure.

Remember also that some 'non wetting' soils will repel moisture and, if that is the case, the water and/or the soil needs to be treated to enable it to infiltrate below the surface.

Soil nutrition questions

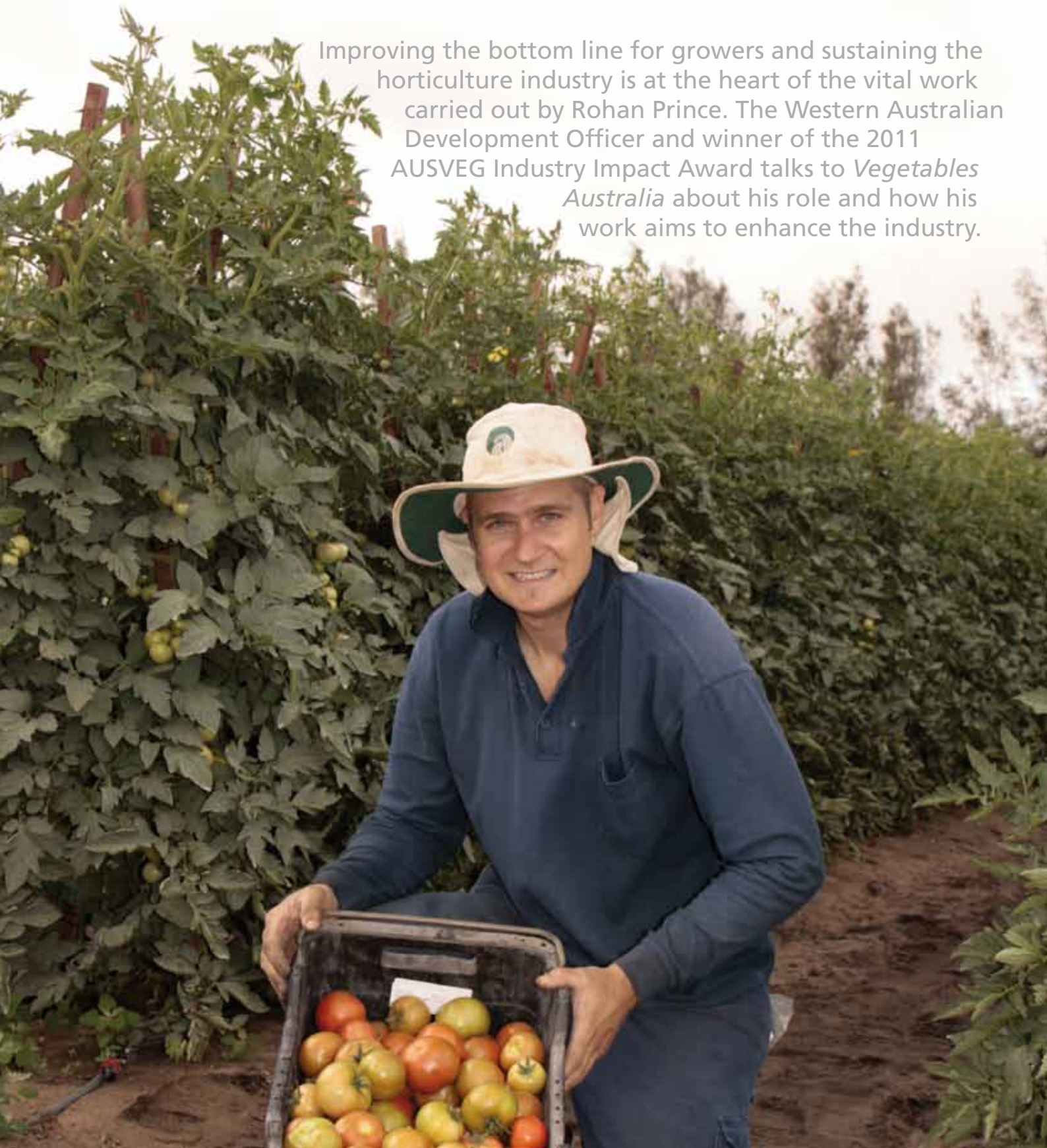
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Phone: (03) 9822 0388

Making a difference

Improving the bottom line for growers and sustaining the horticulture industry is at the heart of the vital work carried out by Rohan Prince. The Western Australian Development Officer and winner of the 2011 AUSVEG Industry Impact Award talks to *Vegetables Australia* about his role and how his work aims to enhance the industry.



Rohan Prince may have only worked in horticulture for a modest six years, but he has already made a long-lasting impression on the industry.

The Department of Agriculture and Food Western Australia (DAFWA) Development Officer earned acclaim from his peers earlier this year when he was presented with the Industry Impact Award at the 2011 AUSVEG National Awards for Excellence in recognition of the important work he carries out in Irrigated Agriculture at DAFWA.

"It felt really good to receive the recognition for the work we do, but I also felt a bit undeserving because I have only been in the industry for such a short time," said Mr Prince.

"The award was recognition of the work that the whole department does. I'm really just the front face of the projects, but I obviously have a lot of technical support and people to help me do the job."

In his role as a Development Officer, Mr Prince is tasked with helping growers to improve on-farm practices, with the aim of

reaching better economic and environmental outcomes for the industry.

"We develop or modify tools to use to improve management practices of crops and farm practices, and we also do on-farm monitoring of current practices," said Mr Prince.

"I also facilitate communication between researchers and growers to try and develop better relationships and benefits for growers. Part of my role also involves working with different groups on irrigation and nutrition and being part of consultations on policy."

While Mr Prince has embraced his role within the horticulture industry with gusto, his background was more concerned with things that grew in the sea rather than in soil.

"I have a science background and my degree is in aqua culture and seafood science," explained Mr Prince.

"It still involved research and development and similar things to what I do now, so the skills were transferable."

Following his studies, Mr

Prince worked in Plant Virology, before the opportunity arose of working in the Irrigated Agriculture group within DAFWA.

"I had already done some work on irrigation and I found it interesting and I had worked with horticulture and broad acre crops too," he said.

"I really enjoy working with the vegetable industry and at the Department. I really like the mix of the work I do. I spend a couple of days in the office then a couple of days in the field, so it's a good mix."

"The people in the vegetable industry are great people; they are very friendly and very supportive of the work we do as well. It is always nice to work with people that appreciate it."

Aiming for a better future

Currently, Mr Prince is working on three projects: Developing 'Good Practice' for tomatoes grown on sand using drip irrigation (funded through APC, VPC and Horticulture Australia Limited); Continuing on-farm improvement through good practice demonstration

(funded through APC, VPC and Horticulture Australia Limited); and Alternatives to Dimethoate and Fenthion to maintain market access for tomatoes (funded through APC and VPC).

In carrying out his work, Mr Prince said that he hoped it helped growers to get a better slice of the pie.

"We make sure the research we do means a better economic outcome for the industry."

"For example, 80 per cent of tomatoes grown in Western Australia are sent to the east coast and there will be huge economic impacts as a result of the ban on dimethoate. So our project is aiming to make sure that there are other plans put in place to protect growers and the industry here."

Mr Prince added: "The work is about economic development and improving environmental outcomes. It is always good to feel we are making a difference to the bottom line of people's businesses."

"We are also looking after the environment and assisting the supply of fresh fruit and vegetables for the country."



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Caring for carrots

With some 234,250 tonnes of carrots being produced by Australian growers, remaining vigilant about diseases in the crop is critical. To that end, new research has set out to help tackle the challenges associated with carrot powdery mildew - a relatively new disease being faced by the industry.

Since it was first observed in Australia in 2007, carrot powdery mildew has presented a challenge to growers around the country.

Incidence levels of the disease have fluctuated in the carrot growing regions of South Australia, Tasmania and New South Wales, where the disease was first found, and it was revealed this year that the disease is now also present in Queensland.

Although the change in environmental circumstances - whereby wetter weather has replaced drought conditions - has resulted in the reduction of carrot powdery mildew in some regions, the disease is still considered a major threat to carrot production in Australia.

In a bid to develop an effective approach to tackling this disease, the New South Wales Department of Primary Industries (NSW DPI), Peracto and the South Australian Research and Development Institute (SARDI) have initiated a project, entitled *Investigations and developing*

management strategies for carrot powdery mildew.

The project has been funded by Horticulture Australia Limited (HAL) using the National Vegetable Levy and matched funds from the Australian Government.

Researchers identified a lack of knowledge on how carrot powdery mildew was introduced, its survival, infection and its impact on carrot yield, as well as a lack of information on disease control measures in regard to product efficacies, application methods and timing.

The project set out to assess the impact of powdery mildew on carrot growth, harvest, yield and quality; assess the efficacy of chemical and non-chemical products and develop integrated methods for disease control.

Research Leader in Plant Pathology at NSW DPI Andrew Watson said: "Because carrot powdery mildew is a relatively new disease in Australia, we didn't know what we would be faced with when we started the

research."

"The project has been looking at control options, which includes fungicide usage, water management, varieties and weather conditions."

A number of field and greenhouse trials have been conducted as part of the project and the results have been featured in a recent milestone report published by HAL.

One of the key findings, Mr Watson highlighted, was that the powdery mildew fungus spread incredibly easily from infected to uninfected plants, especially through the movement of people and equipment.

"Carrot powdery mildew is highly contagious," said Mr Watson.

"I could pick it up from a paddock in New South Wales on my clothes and effectively take it to South Australia. The spores just stick to your clothes and if you walk from one crop to another they get into it."

"The disease also appears to be worse where crops are carried over. It is difficult for growers to control movement and that sort of thing, but what they can do to help prevent

the spread is break the crop cycle and not grow carrots continually all the year."

Mr Watson explained that carrot varieties had also proven to be an important factor in the control of the disease.

In greenhouse and field trials, the varieties Mojo and Stefano were found to have high resistance to powdery mildew, while the Ricardo and Ringo varieties did not.

"Testing the varieties proved to be a valuable part of the research," said Mr Watson.

"There are a number of varieties of carrots, but there are different resistances between them. One of the main things growers can do to assist with the control of the disease is to look at variety selection."

Early detection of powdery mildew on carrots is difficult, as it might not be seen until levels are already high. However, spotting the disease early is critical for optimum control with fungicides.

A number of fungicide efficacy trials were carried out in New South Wales, where carrot crops were sown in December. The crops were grown at this time so they would mature over the mid to late summer, which is found





Carrot powdery mildew

to be the time when powdery mildew develops in carrots.

Results showed that Cabrio®, Amistar®, Sulphur® and Folicur® were successful in controlling the disease, while there was also a trend that showed Timorex Gold®, Peratec® and Talendo® could offer some alternatives to the others, although further work needs to be done.

“Amistar® is definitely a very good product, while Sulphur® also showed to work well,” explained Mr Watson.

“However, we are concerned

that a resistance might develop with Amistar®, so we are conducting further fungicide trials.”

Yield loss was recorded in trials undertaken in Tasmania and greenhouse trials revealed that the yield from carrots with powdery mildew could be reduced by 20 per cent, compared to carrots kept free of disease through fungicide application.

In assessing water management, trials showed that overhead irrigation reduced disease, compared to drip

irrigation. This indicated that growers in areas such as regions of New South Wales, where furrow irrigation is used, are likely to experience more disease compared to growers with pivot applied irrigation.

Mr Watson explained that this finding was observed in Tasmania, when the disease proved more severe as a result of pivot applied irrigation water being less obtainable.

“The research showed that growers can reduce the disease using irrigation management,” said Mr Watson.

The next stage of the project will involve further fungicide trials and research is also being carried out into the effects of weather conditions on the disease.

“We are going to be looking at why summer is the period that the carrot powdery mildew likes,” said Mr Watson.

“We know the fungus prefers a temperature of around 27°C, but we will look at things such as day length. We also know that it likes cloudier conditions, so we want to confirm these observations.”

THE BOTTOM LINE

- Researchers identified a lack of knowledge surrounding the survival and control management strategies of carrot powdery mildew, which was first observed in the Australian vegetable industry in 2007.
- A project was initiated by NSW DPI, Peracto and SARDI to develop an effective approach to tackling the disease, which involved a number of trials being undertaken.
- Key findings showed that the fungicide Amistar® was successful at controlling the disease; different varieties of carrots had different disease resistances; overhead irrigation reduced the development of the disease compared to drip irrigation and that carrot powdery mildew was incredibly contagious.



For more information
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Leader in Plant Pathology at
NSW DPI

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Project number: VG08044

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Clean Energy Policy

In the second part of Industry Economist Ian James' in-depth look at the impacts of the carbon tax on vegetable growing, the Project Leader of the Vegetable Industry Development Program's Economic sub-program highlights some of the positives contained within the package and explains how growers could benefit from them.

In the last edition of *Vegetables Australia* we examined the negative impact of the carbon tax on vegetable grower operations. Carbon emissions from vegetable growing are relatively small, although many growers also undertake other agricultural activities where emissions are considerably higher.

While carbon emissions from vegetable growing will avoid the tax, growers will face increased costs for a range of inputs. The size of the increase is uncertain and will depend on the extent to which companies paying the carbon tax can offset the cost of their carbon emissions through changed practices, the buying in of carbon offsets and whether they pass the full cost on to their customers. The biggest direct hit will be in electricity prices.

On a more positive note for vegetable growers, the government has introduced as part of its Clean Energy Policy a number of measures

to either lessen the tax's burden or provide incentives to reduce carbon emissions. The justification for these measures is that pricing carbon emissions is a major structural adjustment to the economy and businesses need time to adjust.

Positive measures to help adjustment to a low carbon economy

The government has provided generous compensation packages for some of the largest emitters to ease the cost burden flowing through to other sectors of the economy, for example, the \$300 million assistance package to the steel industry. Under the Clean Technology Program, \$150 million has been allocated to the food processing industry to enhance energy efficiencies.

Smaller growers with turnover of less than \$2 million a year will have the threshold for the instant asset write off increased

to \$6,500.

Grants will be available up to \$25,000 for the purpose of procuring energy efficient capital equipment and \$40 million provided for an energy efficient grant scheme to assist small and medium businesses. The government has also allocated \$1 billion over four years to set up a bio-diversity fund and other land-based measures to encourage the establishment and/or enhancement of native vegetation.

Carbon Farming Initiative (CFI)

For vegetable growers, the major positive is the accompanying Carbon Farming Initiative (CFI). The CFI is aimed at providing economic rewards for growers who take steps to reduce carbon pollution.

Credits will be issued for emissions abatement or soil sequestration, which growers

can sell to businesses required to pay the carbon tax or to other businesses that see a marketing advantage in being carbon neutral. An administrator is being set up and a carbon offset market will be in operation by the end of the year.

The expectation is that carbon credits will sell for less than the carbon tax price of \$23, being somewhere under but close to \$20 per tonne. Carbon credits can be sold internationally. Eligible projects can backdate credits to 1 July, 2011.

Abatement estimate is a major challenge for soil carbon due to natural variability in soil carbon levels. As part of the Carbon Farming Futures, \$201 million has been budgeted over six years to support research into new ways of storing carbon and reducing pollution, \$20 million to convert research into practice and \$99 million in grants for farmers to take action to test new ways to reduce pollution and increase soil carbon.



A Carbon Farming Skills program is being set up, which aims to create new jobs in rural and regional Australia based around low carbon outcomes, and \$68 million has been provided for communication, extension and outreach services, including the return of farm extension officers.

The CFI has been hailed as 'opening up new income streams for farmers and landholders across regional Australia.'

Although the carbon offsets market in Europe has been impacted by the debt crisis, it was worth US\$125 billion. While some vegetable growers will see this as all 'airy fairy' and not 'true farming', carbon offsets offer the potential to mitigate the adverse impact of the carbon tax and, if generated through higher carbon retention in soil, generate increased productivity gains.

The rules

At present, the rules are still being established and the accounting framework for the CFI is not fully set up, although the type of activities that qualify for earning carbon credits have been defined.

Vegetable growers are most likely to earn carbon credits through either reduced fertiliser emissions or increased carbon retention in soil. Measuring emissions is easier than soil sequestering. There is a lot of paperwork involved in generating marketable carbon credits and growers seeking to earn them are most likely to employ an expert in the area, in a similar vein to their use of an accountant.

In order to qualify for a carbon credit, a government-approved methodology has to

be developed, which covers things such as a description of the activity, the amounts of carbon removed and how the program will be measured and monitored.

All offset methodologies are assessed by the Domestic Offsets Integrity Committee (DOIC), an independent committee of experts, to ensure they lead to real and measurable emissions reductions.

In reality, a grower or his/her advisor is likely to accept a standard industry developed methodology.

There are certain integrity standards that must be met, the most important of which are:

- **Additionality**—the activity is one that would not have occurred in the absence of the offsets scheme. This is controversial, as early innovators who already practice carbon-reducing practices will not be able to earn carbon credits.
- **Permanency**—the emissions saved will not be released for the period of the active life of the greenhouse gas, which in the case of carbon is estimated by scientists at 100 years.
- **Leakage**—the project does not increase emissions elsewhere.
- **Measurable and verifiable**—all activity must be accurately measured and independently audited.
- **Conservative**—assumptions, figures and measurements must be conservative to avoid over claiming.

How to get involved

Growers have three options:

1. Set up their own scheme;
2. Use a specialist to do all the paperwork and monitoring and pay a fee for the service,



but retain ownership and rights to sell the carbon credits generated, usually through a broker; or
3. Use an aggregator, who will buy carbon offsets from a number of growers and trade them as a package on his/her account.

The first option is unlikely, as there will be a minimum parcel size that will be beyond the level of potential market offsets that can be generated by growers.

Conclusion

The positive aspects of the Clean Energy Policy offer vegetable growers the opportunity to reduce the negative impact of the carbon tax. Growers seeking to make windfall profits out of carbon credits are, however, likely to be disappointed.

There are good environmental and productivity reasons why growers should consider carbon farming. But carbon offset production involves a holistic approach to growing, with both economic costs and opportunities attached to changing existing production techniques.

There is still some uncertainty around the rules and operations of the market for carbon credits. While worth watching and exploring further, growers should proceed with caution in entering this market.

THE BOTTOM LINE

- As part of its Clean Energy Policy, the government has introduced a number of measures to either lessen the carbon tax's burden or provide incentives to reduce carbon emissions.
- For vegetable growers, the major positive is the Carbon Farming Initiative (CFI), which is aimed at providing economic rewards for growers who take steps to reduce carbon pollution.
- Vegetable growers are most likely to earn carbon credits through either reduced fertiliser emissions or increased carbon retention in soil.



Find more information:

Ian James

Project Leader of the Vegetable Industry Development Program's Economic sub-program.

Project number: VG08040



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Around the states

Queensland



Project will help improve growers' recovery from natural disasters

Growcom is undertaking a project to investigate ways to improve Queensland growers' resilience to natural disasters.

The six-month project will culminate in the release of an information pack for growers that outlines aspects of farm design and practice that maximises resilience to natural

disasters. It will be available to all growers in a particular region.

In addition, a disaster recovery toolbox will be developed that will enable growers to create a customised and prioritised checklist of activities, contacts and resources required to resume production as soon as possible following a natural disaster.

The project will be managed by David Putland, Climate Program Coordinator.

He will collect information and knowledge gained during recent natural disasters, including Cyclone Yasi, Larry and the 2011 floods.

Growcom will also seek out representative growers from affected areas and conduct interviews with them to identify aspects of farm design and

practices that reduced the impacts of natural disasters and identify the steps required to enable producers to rebuild their lives and businesses afterwards.

Additional interviews will be conducted with disaster recovery experts and emergency services personnel to maximise the information gathered from a range of perspectives.

A detailed desktop review of international recovery strategies will add to the information gathered locally.

The project has been funded by the Rural Resilience Industry Grants, which are part of the Australian and Queensland Governments' \$20 million Rural Resilience package for areas hit by Cyclone Yasi.

Funding has also been provided to horticultural

commodity bodies for similar projects, including the Australian Banana Growers Council, for developing and assessing crop management strategies to reduce the impact of cyclones, and the Tropical Exotic Fruit Association, to raise awareness of best practice and work towards improving industry resilience against cyclonic events.

Alex Livingstone

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Victoria



2011 Annual General Meeting

A good attendance of members at the business session on 14 October resulted in the election of a new President - David Wallace, a capsicum grower from Keilor. In accepting the President's chair, David made reference to the outstanding seven-year term that outgoing President Luis Gazzola had served the Vegetable Growers Association.

New executive member William Bulmer, a vegetable grower from Lindenow, joined past President Luis Gazzola as an Executive Committee member. All members of the previous Executive Committee renominated, except Roger Turner, and all were duly elected. Following the business session,

members and guests received presentations from IDOs Helena Whitman and Slobodan Vujovic, covering recent grower study tours to Western Australia, the USA and Italy. These were followed by short industry presentations from Neil Lowe, Melbourne Market Authority Chairman; Martin Kneebone, Freshlogic; Andrew Sullivan, Farm Safety Council; Will Gordon, HAL; Graeme Ford, VFF and Richard Mulcahy, AUSVEG CEO.

Dinner followed the AGM and guests were entertained by a presentation by David Fussell, Marketing Manager of Melbourne Market Authority, reviewing the Market Fresh Schools Program.

Supporting the Melbourne Market Authority's marketing team

Despite the vegetable industry's lack of revenue, through a vegetable marketing levy or promotional funding, we have continued our support of the marketing team from the Melbourne Market Authority and have contributed to annual programs and events that have been held in Melbourne and

around Victoria.

Growers' Information Night

The Growers' Information Night was held once again at Lindenow in September and was most successful and well attended. There were two presentations, one on manual handling on-farm and one on what consumers wanted with vegetables.

Our thanks go to Andrew Bulmer, who organised the night in conjunction with Slobodan Vujovic, IDO East.

Vegetable production training

Many growers have questioned VGA Vic on the subject of vegetable production training. Over the past few years, we have seen the demise of opportunities at training institutions to provide appropriate courses tailored to meet the needs of the vegetable industry.

It has become clear that young people in the workforce do not accept attendance at courses within a classroom environment. Growers have indicated a need for on-farm training, with accreditation to maintain an ongoing qualified workforce in

the vegetable industry. VGA Vic recently prepared a submission to the Victorian Agricultural Education and Training Committee with respect to workforce training programs and also distributed its "In the Field" notes on improving horticultural training.

VGA Vic has now been invited to appear at a hearing with the State Government Committee.

VGA Vic has reported that the view of its members is that classroom training is not now encouraged and that on-farm training with accreditation is preferred. We also have concerns in the ability of private Registered Training Officers to offer on-farm training courses with content and assessment that meet the criteria of the vegetable industry training requirements.

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Tasmania



Biosecurity vs. Trade

We continually hear from experts that the next big global issue is food security. Governments around the world have recognised that food is a basic requirement for all people and that there is a need to nurture their domestic food industries. But we simply don't seem to get it.

We have again seen commentary from people who should know better saying that Australia (and Tasmania) should forget about biosecurity and just open our doors to a flood of imported food products.

There is a difference between the concept of biosecurity and that of trade protectionism. Unfortunately, the difference is too subtle for some commentators.

When farmers (in this latest instance, apple growers) express alarm at the prospect of imports into Australia from countries where pests and diseases not present here are known to

exist, these commentators, who usually opt for simple explanations, accuse us of wanting to keep competition out and, by implication, prices up.

One person came out recently claiming that farmer support for biosecurity measures was simply a barrier to trade, and that farmers were simply trying to protect their own interests.

We have never been against trade and competition – in fact Australian farmers compete very successfully every day in world markets. However, we are steadfastly focused on protecting our industry and the environment from serious biosecurity risks.

You have only to look at past examples of biosecurity failures to understand why keeping our borders secure is such an important priority – for all of us, not just our farmers. Cane toads, prickly pear, myrtle rust, equine influenza, citrus canker, Newcastle disease, Asian honeybees – and the list goes on.

Tasmanian growers have reason to be concerned about apple imports from New Zealand, not because of the competition they represent, but because growers believe - no matter what Biosecurity Australia asserts - that fireblight will be brought here. Our growers are convinced that the conditions imposed by Biosecurity Australia are not

stringent enough to prevent the spread of diseases such as fireblight, European canker and apple leaf curling midge.

Independent Senator Nick Xenophon, who is planning a private member's bill to protect Australian apple growers, describes fireblight as the "herpes of fruit". If it establishes, we will never get rid of it. We do not have access to the same chemicals as overseas growers to fight it. The major chemical used to control fireblight is streptomycin – a human antibiotic that is not registered for agricultural use in Australia.

And once fireblight is established, saying 'we told you so' won't really help.

Why are we not allowed to send tomatoes, capsicums, mangoes and other produce to New Zealand? The Kiwis have said no, they don't want to take the risk of importing Queensland fruit fly, even though the likelihood of it establishing in their cooler climate is next to zero. They don't want our bees either, because they fear the diseases that Australian bees are said to carry.

Australian farmers would welcome a level playing field – bring it on, we say. The same rules should be applied to everyone. Australia has the highest standards of food production found anywhere in the world. If chemicals are not

registered for use here, products using those chemicals should not be allowed in.

If produce is grown without care for the environment, or using slave labour, it should not be allowed in. Alternatively, all the rules and regulations that are layered onto our farmers should be removed – and that is not an outcome any of us would like to see.

The city commentators, whose only exposure to food is eating it, say that Tasmanian apple growers should "accept the science and stop corraling gullible politicians, the media and the public into thinking that the world is about to end and their industry wiped out."

Fair enough. We will, if you will.

We say to the scribes, remove the virus protection software from your laptop and import some applications from countries where you know viruses prevail. Oh, not so keen now, are you?

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South Australia



In a Cabinet reshuffle after the recent change in South Australian Premier, the portfolio of Agriculture, Food and Fisheries once again has a change of Minister. The Hon Michael O'Brien MP had been the Minister for the past 12 months or so and has enjoyed

a great deal of cross-industry backing for his support of industry.

Initiatives such as the reversal of the decision to close the night shift at the Fruit Fly Border Checkpoints at Yamba and Ceduna, and the proposed amendment of the existing fruit fly quarantine area to include fireblight restrictions, have been largely welcomed by industry.

The Agriculture, Food and Fisheries portfolio has now become one of five Ministries under the 'regional' banner and the responsibility of the Hon Gail Gago MLC. Grow SA looks forward to developing a great working relationship with

Minister Gago.

The pain of systems audit has recently been shared by Grow SA, as it recently underwent its monitoring audit for the training department (Registered Training Organisation).

In the hope of making growers feel a little better about their Freshcare, HACCP and Vendor Quality System audits, the Grow SA audit was conducted over two days by four auditors. That's right - eight auditor days for an organisation as small as Grow SA.

Industry consultation around the Vegetable Industry Strategic Investment Plan (SIP) has generated a great deal

of interest since the meeting at Grow SA headquarters on 4 October. General grower discussions have resulted in a number of additional questionnaires being received by Grow SA, with a firm belief that there are more to come.

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New South Wales



The NSW Farmers Horticulture Committee has taken the time to contribute to various chemical reviews, as well as hosting a series of workshops for vegetable growers as part of the NSW component of the Vegetable Industry Development Program (VIDP) in recent months.

On top of that, the Committee has been driving a major promotion of the state's apple industry in primary schools through the AppleQuest initiative.

NSW Farmers has also provided a submission to the

APVMA review of Diuron. The Association supports the safe use of chemicals, however, we believe it's important that sound evidence-based science underpins the assessment of risk associated with any specific chemical use.

We do not believe a scientific assessment of risk would warrant a blanket ban on the use of Diuron products nationally. NSW Farmers has asked the APVMA to consider factors including farming systems, spray technology, climate, topography and actual use patterns in its risk assessment of Diuron. These factors are highly variable within Australia.

While it is likely that some uses of the chemical will be suspended, users of Diuron in low-risk regions should not be penalised by a national suspension.

To promote the benefits

of healthy eating and the importance of educating students on where apples come from, NSW Farmers has donated more than 50,000 apples to schools across NSW as part of the 2011 AppleQuest challenge.

AppleQuest is a NSW Farmers initiative, with 300 apples donated to each of the 190 primary schools taking part this year, along with educational material to help children across the state better understand the role farmers play in producing fresh produce. The apple promotion is also supported by Aussie Apples, Woolworths and N&A Fruit Distributors.

A number of workshops have been held recently as part of the VIDP, funded through HAL. The first was held in Mildura and was facilitated by NSW Farmers, the Vegetable Growers Association of Victoria, NSW DPI and DPI Victoria.

Topics covered included pollination, the dimethoate review and ICA's for interstate trade, food safety, precision horticulture and the VegTool production costs calculator.

Workshops for the protected cropping industry were also held in Sydney and Coffs Harbour, with the support of NSW DPI and Protected Cropping Australia. Benchmarking, spray application and disease management were some of the topics discussed.

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Western Australia



The vegetablesWA marketing pilot has been hailed as a breakthrough success. The pilot 'Retail Revitalisation' attracted partnerships with Woolworths and Buy West Eat Best and re-merchandised the produce section of the Woolworths store at Ellenbrook with point-of-sale materials featuring local growers and health messages.

Consumer research and focus groups found shoppers reacted

very positively to the material we developed and link this local origin to freshness and quality. As the results of this vegetablesWA initiative spread across the state, the value of vegetable sales will increase.

In addition to the benefits of improving the value of sales, the WA vegetable industry will also benefit from consumers identifying with and supporting their local vegetable industry when vegetablesWA publicly represent growers on a range of issues important to us.

Following the success of this pilot, vegetablesWA is rolling out the next phase, which has attracted partnerships from FruitWest, Western Potatoes Pty Ltd, Buy West Eat Best and Go For 2 & 5.

vegetablesWA has also initiated the WA Produce Marketing Group, which is improving the collaboration between all fruit and vegetable promotions in this state.

WA growers will no doubt be relieved that, although again below average, this winter has yielded better rainfall than the last. Those unable to attend the vegetablesWA meeting with the Department of Water in early September should contact us for a summary of the discussion.

Separate to this meeting, vegetablesWA and the Potato Growers Association are continuing to represent growers strongly on WA water policy.

vegetablesWA has commenced a trial that involves faxing the fortnightly e-news to

those growers who don't have an email address. Growers who have a fax number but have not received it should contact our Communications Officer, Hayley Wilson, on (08) 9481 0834 to be added to the distribution list.

vegetablesWA and the Potato Growers Association are continuing to work hard to ensure the current and future prosperity of our industry. If there are any issues we can help you with, please let us know.

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vegetablesWA

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Calendar of events

November - December 2011

30 November - 2 December

AgriPro Asia

Hong Kong Convention and Exhibition Centre, Hong Kong

For more information:

Visit: www.verticalexpo.com

May 2012

10 - 12 May

2012 AUSVEG National Convention, Trade Show and Awards for Excellence

Wrest Point Casino Hotel, Hobart, Tasmania

For more information:

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Phone: (03) 9822 0388

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