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## Roger Turner Focus required

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## **2011 AUSVEG** National Convention, Trade Show and Awards for Excellence

Sebel-Citigate Hotel Brisbane, Australia 14-16 April 2011



#### vegetables australia

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lorticulture Australia

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#### FRONT COVER:

Roger Turner

Photo by James Vincent Groove Imagery



#### John Brent AUSVEG Chairman

December and January saw some of the most devastating floods to hit south east Queensland in the state's history.

We have recommended to the Federal Government that similar assistance to the Drought Exceptional Circumstances packages that have been offered in the past is now made available to growers in that state, and other states affected by the subsequent extreme weather events down the east coast of the country.

Growers in flood hit areas down the east coast have experienced severe damage and require substantial assistance in the form of low-rate loans of up to \$250,000 for those who cannot increase their borrowing, or up to \$100,000 to subsidise interest payments for those who have existing loans. This assistance is a necessity and will lessen the financial impact on the industry.

Needless to say, our thoughts are with everybody in the vegetable industry who has been affected by this disaster. As a proud Queenslander, having seen the effect on vegetable growers in my home state, this issue is very close to my heart.

In Boonah, we experienced rain and flooding, but fortunately the only damage suffered was superficial, and not in the same realm as the damage caused in the Lockyer Valley, Toowoomba, Stanthorpe, Bundaberg, Rockhampton and in far north Queensland.

The effect on growers has been far-reaching across a range of commodities, though the exact impact will not be known for some months. In Victoria, the damage to vegetable crops in the broader Werribee and Koo Wee Rup areas in January was significant.

I have been particularly moved by the way not only Queenslanders, but Australians in general, have been able to rally behind their neighbours.

Not only were there millions of dollars raised in relief efforts to help fund the clean-up and re-building, there were also many people from other parts of the country arriving to provide hands-on assistance.

With the enormous recovery effort already well underway, the 2011 AUSVEG National Convention, Trade Show and Awards for Excellence will be a timely boost to morale and inject some much needed positivity into the industry.

The Convention is being held from 14-16 April in Brisbane

at the Sebel-Citigate Hotel and promises to be an event not to be missed. I look forward to seeing you all there.



John Brent Chairman AUSVEG

#### **Richard Mulcahy** AUSVEG Chief Executive Officer

Excitement is building in the vegetable industry as we count down the days to the 2011 AUSVEG National Convention, Trade Show and Awards for Excellence.

The 2011 National Convention will be held from 14-16 April in Brisbane at the Sebel-Citigate Hotel, and with many growers struggling to recover from the tragic floods that inundated parts of Queensland, New South Wales, Victoria and Tasmania in the early part of this year, it is hoped the event will provide a much needed morale boost for those growers who attend.

The excellent combination of expert speakers from across the agribusiness and research and development spectrums, with a strong social program reinforces our family-friendly yet informative approach. Key events include the Gala Awards Dinner, MasterChef cooking demonstration featuring Callum Hann, Special Theme Night and Young Growers Night.

Preparations for the event are close to being finalised and the trade show has reached capacity, with all trade booths sold out, however, vegetable growers can still purchase tickets to the Convention by calling AUSVEG on 03 9822 0388 or by turning up on the day.

The commitment made by agribusinesses in supporting this key industry event has been illustrated through the number of strategic partners that have re-signed, as well as those that have come on board for the first time in a sponsorship capacity in 2011.

A list of strategic partners can be found on page 12, where we highlight the incredible list of speakers that will make presentations. In this regard, every effort has been made to attract speakers that are high profile names in the industry, business and political world, who'll provide valuable insights for growers on a range of issues in respect of R&D and business.

A special mechanisation seminar will precede the Convention on Wednesday 13 April. The seminar will bring together representatives from all sectors of the industry, including leading growers, to help establish priorities and guide R&D investment in this crucial area.

With the topic of mechanisation increasing in importance in the industry, this edition of *Vegetables Australia* is dedicated to developments in the area. Reducing the industry's reliance on labour through automation, provides growers with the opportunity to dramatically improve their operations. In this edition we examine some key technologies that may assist vegetable growers in becoming more automated in their businesses, thereby reducing the cost of labour and improving profitability.



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Richard J Mulcahy Chief Executive Officer AUSVEG

# Editoria Editoria

f mechanisation isn't at the forefront of your thinking, then hopefully after reading this edition of *Vegetables Australia* it will be.

With labour costs applying more pressure than ever in the industry, automating production is an avenue growers can utilise to gain an edge on their international competitors. In this special edition of *Vegetables Australia* we highlight the people and companies across the industry supply-chain that are leading the way in terms of mechanisation.

On page 24, Geoff Williames, Managing Director and founder of Williames Pty Ltd, discusses the birth of mechanisation in the industry, and goes on to outline how his company has remained on the cutting-edge of delivering innovative equipment and advancing the vegetable industry.

We also speak to Roger Turner, General Manager of Coolibah Herbs, and member of the Vegetable Industry Advisory Committee. With experience gained in the UK and in Africa, Mr Turner has extensive knowledge on how automated technology can become a competitive advantage for vegetable growers. Turn to page 30 to discover how he has quickly made an impact on the Australian vegetable industry.

A number of research projects are also featured in this edition, which illustrate how the industry is already confronting some of the challenges associated with mechanisation. Projects dealing with developments in Controlled Traffic Farming (page 46); how improved irrigation systems can increase your profitability (page 44) and the importance of crop uniformity to utilise mechanical harvesting equipment (page 26) are highlighted to give growers a greater understanding of mechanisation.

Finally, the 2011 AUSVEG National Convention, Trade Show and Awards for Excellence is fast approaching. We look forward to seeing you at the Convention, to be held from 14-17 April in Brisbane at the Sebel-Citigate Hotel.

lechanisation workshop

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Presicion Agriculture - pg 20

Williames Pty Ltd mechanising the industry - pg 24

Sustainable farming with Steve Newman - pg 36



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## Roger Turner

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## Resilience required

Just two months after an unprecedented flash flood ripped through the Lockyer Valley and drowned the Brisbane Produce Market, the resilience of the Queensland vegetable industry is coming to the fore. Growers, staff and resellers throughout the industry supply-chain have already begun the long road to recovery.

On Monday 10 January, a day that will be etched in the memory of those in south east Queensland forever, extraordinary rainfall caused record flooding not seen since 1974.

It is estimated that between 150 and 250 millimetres of rain fell on that single day, along the already saturated Toowoomba Range escarpment. This unprecedented high-intensity rainfall event caused severe and devastating flash flooding in the Lockyer Valley, as the huge amount of water rushed eastward via the Lockyer Valley creek systems towards the upper Brisbane River.

The Lockyer Valley is regarded as one of Australia's premier fruit and vegetable production areas. Fruit and vegetables are grown year-round in the region, and the industry is a major source of employment and economic stimulus in the local communities.

Creek lines throughout the Lockyer region have been

devastated, with massive soil loss, severe bank erosion and overland flow damage caused, as creeks broke their banks and eroded cropping areas.

In the area north of the Warrego Highway, 85 per cent of vegetable farming land was flooded by fast flowing water, or inundated by backed-up slowflowing water full of flood debris.

The sheer volume of water coming down the creek system created a flood depth that averaged more than one metre deep across much of the vegetable cropping enterprises in this area.

Flood debris, including household goods, tree trunks, twisted irrigation pipes and knotted drip irrigation tube, lined the creek banks, littered the fields, and covered fences. Top soil and silt had been scoured off production fields and redeposited by the overland flow. Once laserlevelled paddocks have been remodelled and eroded, they will require earthworks prior to returning to full production potential.

Despite the devastation to farming land and the damage to the local economy, an underlying resolve has emerged. Growers are determined to remain in the region, to rebuild and continue in the industry, with one long-term positive advantage being the fact that the underground water supply is at record levels.

#### Day two

On Tuesday 11 January, the Brisbane Produce Market situated in Rocklea took the full force of the flood with water, mud and sludge rising to a depth of 1.5 metres in the Central Trading Area, and up to three metres in some warehouses, engulfing ground floor offices, storage sheds and cold rooms.

Damage of more than \$100 million has been estimated, given the fresh produce lost, vehicles and equipment destroyed and infrastructure damaged.

By Friday 14 January, market tenants were joined by the Australian Army, State Emergency Services, NSW and Queensland Fire and Rescue Brigades and hundreds of volunteers to begin the clean-up effort.

By Sunday 16 January, limited distribution recommenced on the Central Trading Floor using generator power for lighting, and by the next morning, wholesalers were trading with fresh produce that had arrived overnight.

Brisbane Markets Chairman Mr Tony Joseph said that to the untrained eye, it looked like business as usual just a number of days after the flood, but behind the scenes that was far from the truth.

In the first week following the floods, Brisbane Produce Market was at 30 per cent capacity. A week later, it was at 50 per cent and over the ensuing days, fresh produce volumes and efficiencies continued to increase as power was reinstated and warehouses were given the tick of approval by the Brisbane City Council Health Department.

"There was quite a bit of general media misreporting of the site taking up to weeks and months before it would be operational," Mr Joseph said.

"It was also thought that with the need to distribute to retailers, secondary wholesalers, and other food service businesses, shortages of fresh fruit and vegetables would see a dramatic escalation in prices." "Obviously product supplies

returned quickly, and price rises have, in reality, been quite moderate, given what has occurred with floods in all eastern states."

#### Rebuilding

Though Stanthorpe growers, south of Toowoomba, avoided the worst of the flooding, many were still heavily affected with damage to infrastructure and logistical issues such as transport causing concern.

Stanthorpe grower, Richard Harslett, was one of the first in his region to be engulfed by the rapidly rising flood water. Situated high on the range.

Mr Harslett's dam was the first

to catch the run-off from the creek. When the heavy rain started, the large catchment was inundated with a volume that caused part of the dam's by-wash to buckle under the weight.

"Trees were flying down the creek and were smashing against the by-wash," he recalled.

"When the concrete wall broke, the dam almost emptied out."

"With the heavy rain returning in surges, the dam continued to rise and fall, even with the bywash out of action." Despite the incredible amount of rain, Mr Harslett said the only significant damage was structural.

"With bridges and roads damaged, we were cut off from the markets for a few days, and obviously we needed to repair the by-wash," he added.

Vegetables Australia magazine acknowledges the assistance of the Gatton DEEDI office in sourcing some of the information regarding Lockyer Valley impacts in this article.



## <mark>Ne know</mark> Horticulture



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Scott Mathew, Technical Services Lead from Syngenta, answers the tough questions from Australian growers.

#### **Q**. How can you tell if crop protection products are compatible with each other?

Sometimes these questions are easy to answer if compatibility testing has been done, however, if this isn't the case, then a simple jar test may be all you need.

#### Note:

Nitrogen solutions or complete liquid fertilisers may replace all or part of the water in the spray solution if this is what is to be used in the final spray solution. Because liquid fertilisers vary, even within the same analysis, **always check compatibility with pesticide(s) before use.** 

Incompatibility of tank mixtures is more common with mixtures of fertiliser and pesticides.

#### **Test Procedure**

- 1. In a clean glass jar with a tight, sealable lid add approximately 25 per cent of the final volume of carrier (water or liquid fertiliser if this is to be used as the carrier) e.g. if 1L of total solution is to be made up then add 250ml to the jar at this stage. Note: Use the same source of water that will be used for the tank mix and conduct the test at the temperature the tank mix will be applied.
- 2. Add a compatibility agent if one is to be used (e.g. ammonium sulfate, Supa LinkTM). Shake or stir gently to mix.
- 3. Next add the appropriate amount of pesticide(s) in relative proportions based on recommended label rates. If more than one pesticide is used, add them separately with dry pesticides first, flowables next and emulsifiable concentrates last. After each addition, shake or stir gently to thoroughly mix.
- After the pesticides are mixed, add any adjuvants that are to be used in the final spray solution at their recommended label rates.
- 5. Fill the jar to the required final volume e.g. for the example above, make up to 1L total volume.

- 6. Put the lid on and tighten. Invert the jar 10 times to mix. Let the mixture stand for 15-30 minutes and then look for **separation**, large flakes, precipitates, heat, gels, heavy oily film on the jar, or other signs of incompatibility.
- 7. If the mixture separates, but can be remixed readily, the mixture should be able to be sprayed as long as good agitation is used.
- 8. If the mixtures are incompatible, test the following methods of improving compatibility: (a) slurry the dry pesticide(s) in water before addition; (b) add a compatibility agent if one was not used or (c) add half of the compatibility agent to the fertiliser or water and the other half to the emulsifiable concentrate or flowable pesticide before addition to the mixture. If incompatibility is still observed, do not use the mixture.
- 9. After compatibility testing is complete, dispose of any pesticide waste in accordance with the **Storage and Disposal** section on the label.

Important information: This procedure will only test for physical incompatibility of various products. It is still possible for some mixtures to be chemically incompatible i.e. efficacy or crop safety may be impacted despite no physical evidence of mixing problems.

A compatibility test is often recommended before tank mixing to ensure physical compatibility of various pesticides.

#### Ask the industry

If you have a question that you would like addressed, please ring Syngenta on 1800 067 108 or email *Vegetables Australia*: <lisa. higginson@ausveg.com.au>

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## **GREAT NEWS FOR VEGETABLE GROWERS:**

The brainy people at Dow AgroSciences are up to something





The 2011 AUSVEG National Convention, Trade Show and Awards for Excellence speakers, a packed trade show and a host of highlight events, writes Lisa

The biggest event on the horticultural calendar is set to go off with a bang.

In just four weeks the curtain will be lifted on the 2011 AUSVEG National Convention, which takes place from 14-16 April at the Sebel-Citigate Hotel in Brisbane.

AUSVEG has proudly announced that Senator Barnaby Joyce–Shadow Minister for Regional Development, Local Government and Water, and Leader of the Nationals in The Senate–will deliver the keynote speech and pave the way for a stellar line-up of respected speakers across the Convention program.

Among the highlights will be an address delivered by Senator The Hon Joe Ludwig MP, Minister for Agriculture, Fisheries and Forestry, at the industry's National Awards for Excellence Gala Dinner.

Alongside exciting appearances from the likes of footballing great Robert DiPierdomenico–who will emcee the convention again-the inspiring list of high-profile attendees and speakers also includes: CEO of Elders Malcolm Jackman, who will outline how he plans to reinvigorate the iconic Australian company; Richard Macchiesi, General Manager of Insights and Innovation for VISY, who will present on consumer trends; Managing Director of Peracto lan Macleod, who will speak on succession management; Andrew Guthrie, Syngenta's Regional Director-Asia Pacific, who will discuss the emerging trends in agriculture and Dr. Maria Teresa Almanza, who is the global specialist for beneficial species and pollinators at Bayer CropScience, where she leads the development of Integrated Pest Management systems.

Together with the array of prestigious speakers, the Convention will showcase an impressive trade show–which has sold out and is at full capacity of trade stands.

#### Great minds, great debate

Some of the greatest minds in Australian agriculture will be brought together for a number of the Convention's highlight events such as the Incitec Pivot Plant Nutrition Sessions (Friday, 15 April), which will feature Senior Research Scientists in soil and land management Dr Robert Mikkelsen-from the International Plant Nutrition Institute in California- and Dr Cameron Gourley, as well as Associate Professor/Principal Scientist Professor Richard Eckard and Principal Research Scientist in Plant Pathology Dr Ian Porter.

One of the most anticipated events is The Great Debate (Saturday, 16 April), which will see two experts go head-to-head on the topic of 'Water Usage in the Murray-Darling Basin'.

Expressing their significantly different perspectives on the issue will be Dr Arlene Harriss-Buchan from the Australian Conservation Foundation, who leads the organisation's work on the Water for the Future program, and Dr Jennifer Marohasy, a biologist and expert in water science who is concerned that public policy on environmental issues is increasingly driven by moral crusading rather than objective science or need. This event is proudly brought to you by Boomaroo Nurseries.

#### **Celebrating horticulture**

The Convention will also showcase a series of social events designed to celebrate the industry. This will commence with the Welcome Reception and Trade Show Opening at the Sebel-Citigate Hotel (Thursday, 14 April at 6.30pm)-a great opportunity to meet and interact with fellow delegates and enjoy the launch of the 2011 Convention.

The Brisbane Produce Markets in association with the Central Markets Association of Australia (CMAA) will host a fantastic breakfast event (Friday, 15 April), which will be the perfect



## is set to take the horticultural world by storm with a sterling list of esteemed Higginson.

opportunity to experience one of Australia's largest wholesale fresh fruit and vegetable markets.

MasterChef series two contestant Callum Hann will cook up a storm when he takes to the stage for a Celebrity Chef Luncheon (Friday, 15 April), supported by AUSVEG Strategic Partner VISY Fibre Packaging. As part of the Trade Show, the event will see Callum lead a cookery demonstration focusing on vegetables sourced from growers in south east Queensland.

A special Country and Western Theme Night (Friday, 15 April), supported by Strategic Partner DuPont, has been planned to kick off the weekend in style... and everyone is reminded to bring their dancing boots to make the most of the evening.

Following its success at the 2010 Convention, the Women in Horticulture Breakfast (Saturday, 16 April), supported by the Department of Immigration and Citizenship, will return this year to recognise the significant contribution women make in horticulture and celebrate the pivotal role women play in the functioning of farms around the country.

The Young Growers Event (Thursday, 14 April), sponsored by Dow AgroSciences, will also return for a second year, bringing together the future leaders of the vegetable industry with an afternoon of paintballing fun.

A Sporting Identities Lunch, supported by Bayer CropScience, will also take place on Saturday, 16 April.

#### Trade showcase

Featuring 70 exhibitors, the Trade Show (Thursday, 14 April – Saturday, 16 April) is the ultimate opportunity to interact with exhibitors and discover new products that are available on the Australian market. Held in the Presidential Ballroom and Washington Room at the Sebel-Citigate Hotel, the show will feature research and development information, farming equipment, chemical and biological products, seedling and nursery products, information on governmental programs, packaging products and much, much more.

#### Industry honours

The 2011 National Convention will culminate with the AUSVEG National Awards for Excellence Gala Dinner (Saturday, 16 April), aimed at celebrating the cream of the crop within Australia's vegetable and potato industries. The awards–which will be held

at the Sebel-Citigate Hotel– will honour growers, researchers and all members of the industry who have made outstanding contributions.

In 2011, two new award categories have been announced: The Rising Star of the Year Award supported by Landmark, which will recognise an emerging leader (under 35) in horticulture who has displayed exceptional commitment towards the industry, and The Environmental Award supported by Netafim, which will celebrate the achievements of an individual who has demonstrated a commitment to implementing sustainable practices on-farm.

#### The award categories are as follows:

Grower of the Year syngenta
Young Grower of the Year Olde
Industry Impact Award 🛛 🌺
Industry Recognition Award
Rising Star of the Year
Productivity Partner Award Elders
Researcher of the Year Bayer CropScience
Innovative Marketing Award
Environmental Award
Women in Horticulture

Growers interested in receiving a convention brochure or businesses wishing to become partners of AUSVEG should phone: (03) 9822 0388, or email convention@ausveg.com.au

## **Convention** Program

#### Leading Strategic Partners...







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Day 1:	Thursday 14 April
10:00am- 6:30pm	Registration open
6:30pm - 8:00pm	Welcome Reception & Opening of Trade Show
Day 2:	Friday 15 April
6:30am	Buses to Brisbane Markets Leave
7:00am - 8:30am	Breakfast at the Brisbane Markets - Proudly sponsored by the Central Markets Association of Australia (CMAA)
9:00am	Buses return to the Sebel-Citigate Hotel
9:00am	Trade Show opens
9:20am -9:40am	Michael Schaper- Deputy Chairman of the Australian Competition and Consumer Commission - Speaking on The Horticulture Code in operation: An ACCC Update
9:40am -10:00am	Malcolm Jackman - Elders CEO
10:00am-10:30am	Morning Tea - Proudly sponsored by Terranova Seeds
10:30am -10:50am	The Hon Tony Abbott MP, Leader of the Opposition <i>(TBC)</i>
10:50am -11:20am	Keynote Speaker Session - Senator Barnaby Joyce - Leader of The Nationals in the Senate.
11:20am-12:50pm	Incitec Pivot Plant Nutrition Sessions
11:20am -11:50am	Dr Cameron Gourley - Speaking on Accounting for Nutrients
11:50am -12:05pm	Dr lan Porter - Speaking on Nutrient Benchmarking
12:05pm-12:20pm	Prof. Richard Eckard - Speaking on Nitrous oxide emissions and carbon trading for the horticulture industry
12:20pm-12:50pm	Dr Robert Mikkelsen - Speaking on Global Developments in Horticultural Nutrition
12:50pm-1:50pm	Lunch
1:00pm-2:00pm	Celebrity Chef Lunch Entertainment with MasterChef finalist Callum Hann (to be held in the Trade Show). Proudly sponsored by VISY.
4:30pm	Trade Show closes
6:00pm- 9:00pm	Special Theme Night - 2011 Country and Western Night! - Proudly sponsored by DuPont

Day 3:	Saturday 16 April
6:45am-7:45am	Women in Horticulture Breakfast
8:00am	Trade Show opens
8:00am- 8:20am	Greg Fraser - Executive Director and CEO of Plant Health Australia
8:40am- 9:00am	Ian Macleod-Peracto Managing Director - "Succession Management in Horticulture"
9:40am-10:00am	Dr. Maria Teresa Almanza- Bayer CropScience Global Development Manager Beneficials and Pollinators
10:00am-10:30am	Morning Tea
10:30am-10:50am	Andrew Guthrie - Regional Director Syngenta Asia Pacific
10:50am-11:10am	Richard Macchiesi- General Manager - Insights and Innovation - "Consumer Trends"
11:10am-11:30am	Greg Spinks - Director of Consulting and Implementing Services - "Vegetable Industry Strategic Investment Plan"
11:30am-12:30pm	<b>"The Great Debate" - Proudly sponsored by</b> <b>Boomaroo Nurseries</b> Topic - "Water usage in the Murray-Darling Basin" Debater: Dr Arlene Harriss-Buchan - Australian Conservation Fund Debater: Dr Jennifer Marohasy - Biologist; <i>The Land</i> columnist; and Adjunct Research Fellow at CQ University
12:30pm-12:50pm	Mark Swinchatt - Regional Business Director for DuPont Crop Protection Asia Pacific
1:00pm	Trade Show closes
12:50pm-1:50pm	Lunch - served outside the Trade Show
1:00pm - 1:40pm	Bayer CropScience Sporting Identities Lunch
2:00pm-2:30pm	Potato Levy Payers' Meeting (Held in the Speaker Auditorium)
2:30pm-3:30pm	Vegetable Levy Payers' Meeting (Held in the Speaker Auditorium)
7:00pm - 11:00pm	AUSVEG National Awards for Excellence Gala Dinner - Addressed by Senator Joe Ludwig - Minister for Agriculture, Fisheries and Forestry

Strategic partners...















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#### A message from your Chairman

#### Dear Growers,

Time is fast approaching for you to decide on attending the main event on the 2011 horticulture industry calendar–the AUSVEG National Convention.

Scheduled for 14-16 April in Brisbane, the event is set to be the largest gathering of the vegetable and potato industries this year. Your attendance is key to ensuring that your grower voice is heard and that the government takes us seriously as we move to be the largest industry in rural Australia.

Last year's event was hailed as a tremendous networking opportunity with 650 delegates attending our large industry trade show-a focal point in connecting all parts of the industry together.

High profile speakers this year include the always interesting Barnaby Joyce, Leader of the Nationals in the Senate, who will present the keynote address; Michael Schaper, Deputy Chairman of the ACCC; Malcolm Jackman, CEO of Elders and there will be a lively televised debate covering both points of view about water management in the Murray-Darling basin.

In 2011, support from our suppliers has broken all previous records, with dozens of companies signing up to support the industry, and ultimately to support the work that AUSVEG has been doing on your behalf.

The success of this important event for the industry depends on grower support-on your backing and input-and it allows us to continue influencing the politicians in Canberra to ensure that growers are getting a fair go.

#### Your attendance is paramount to ensure that AUSVEG has the financial capacity to represent you-the grower-throughout the year.

AUSVEG also wants to hear from you and get your input on a range of key issues that affect your business. This will allow us to better represent your interests.

The Convention will provide the perfect platform for you to network with fellow growers and industry representatives from across Australia. There will also be many other benefits for growers in attending the event.

You will have the opportunity to pick up valuable ideas from world experts to give you an edge in your business and **improve your bottom line**.

You will also have the opportunity to provide direct feedback at the vegetable and potato levy payers' meetings on R&D investment, and presentations will be given by experts on topics including: Succession Management in Horticulture, Water Use in the Murray-Darling Basin, soil health and supply-chain issues.

There will also be a series of speaker sessions focusing on plant nutrition, and the National Awards for Excellence Gala Dinner promises to be a fantastic night of fun and frivolity, as we celebrate the achievements of the industry during the past year, hosted by the always entertaining Robert DiPierdomenico.

A range of social events will also take place at the Convention, which are designed to give an entertaining edge.

#### Your board needs your support at this important event to enable us to ramp up our representations on your behalf.

I would encourage you to contact AUSVEG on (03) 9822 0388 for further information so you can register to attend. Special discounts are available for members of the state vegetable grower bodies and we have negotiated a special discounted rate on rooms at the Sebel-Citigate Hotel, where the Convention will be hosted.

Please show your support for this industry event-your attendance is critical. I hope to see you there.

Yours sincerely

John Brent Chairman



This event is about Australian growers and issues affecting them. It is about fresh produce and everything that is important in our industry. Where most conventions are usually built around an agenda of marketing and sales, the AUSVEG National Convention is truly about Australian produce and the people who grow it.

> **Richard Gorman,** Grower, Kalfresh, Boonah, QLD



I think the AUSVEG National Convention is great for the industry. It is a wonderful networking opportunity and a chance to meet and communicate with fellow growers and industry experts. This time of year can be very busy for growers, but I would recommend that those who can make it should attend.



*Luis Gazzola,* Grower, Gazzola Farms, Narre Warren, Vic

The AUSVEG National Convention adds value to the horticulture industry. There is always a good selection of people from within the sector who take part in the event and it is a great chance to hear from expert speakers and ministers.

Michael Nixon, Grower, Riverlodge Assets, Carnarvon, WA



ഗ	Permit Number	Permit Description (pesticide/crop/pest)	Date Issued	Expiry Date	States Covered
	PER12589	Chlorpyrifos / swede, turnip, brassica leafy vegetables, silverbeet, spinach, celery, beans, snow peas, sugar snap peas / African black beetle and wireworm	7/02/11	30/06/12	Valid for all states
0 O O O	PER12385	Copper (various types) / endive, chicory, brassica leafy vegetables, eggplant, snow peas, sugar snap peas, paprika, chilli and horseradish / various diseases	4/02/11	30/03/13	Valid for all states (other than Vic)
or-use	PER12405	Score (difenoconazole) / celery / Cercospora leaf spot and Septoria spot	07/01/11	31/10/12	Valid for all states (other than Vic)
	PER12571	Acramite (bifenazate) /snow peas and sugar snap peas (field and protected) / Two spotted mite	01/04/11	31/01/13	Valid for NSW, Qld, SA, Vic and WA only
$\subseteq$	These permits ha	ve had their additional data requirements changed.			

Full details of all permits are available on the APVMA website: www.apvma.gov.au/permits



#### The art of powdery mildew control

Crop Care is proud to offer Australian cucurbit growers Vivando<sup>®</sup>, a state-of-the-art fungicide with the following key features and benefits:

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## Workshop to shine spotlight on mechanisation

With the help of AUSVEG's strategic partner, Transplant Systems, a special mechanisation workshop will immediately precede the AUSVEG National Convention 2011.

The AUSVEG 2011 Mechanisation Seminar will be held on 13 April 2011 at Brisbane's Sebel-Citigate Hotel, preceding the AUSVEG National Convention.

The workshop will comprise of growers from every state of Australia taking part in a round-table discussion about the advantages and the future disadvantages of mechanisation in Australia.

Participants will focus on how implementing automated technology can reduce input and labour costs.

Experts in mechanisation and representatives from leading agribusinesses paving the way for an increase in automation will also present at this unique event. This gathering of minds will provide valuable insights into how the vegetable industry can be enhanced through mechanisation, and guide investment in research and development in this crucial area.

In addition to Transplant Systems-one of the industry's leading suppliers of automated plant raising and planting equipment-AUSVEG strategic partners John Deere and Boomaroo Nurseries will also be joining the seminar.

The event will cover topics such as:

• The opportunities and impacts

• Site Specific Precision

- Agriculture
- Product handling, people and automation Founder of Transplant Systems

Mr Alan Rogers said that the workshop would hopefully increase grower awareness of the issue.

"Some growers are very aware of how important the issue is, but others are still relying

is, but others are still relying

"Automatic low-density, single-row machines will in time replace single row semiautomatic machines on farms," he said.

"In the long-term though, the industry will move to both high density multi-row machines and low density single-row machines that allow for greater row spacing flexibility, and then eventually self-powered machines will be implemented."

#### If growers wish to save money, then they will need to look at mechanisation.

on outdated techniques and equipment," Mr Rogers said.

"If growers wish to save money, then they will need to look at mechanisation. Not only are growers currently paying huge amounts for labour, but they are also forced to spend hours ringing their contacts trying to secure workers."

Mr Rogers said that slowly more growers were looking past semi-automatic planters and committing to an automatic planting system. Mr Rogers said mechanisation wasn't just a case of buying an automatic planting machine.

"Growers will need to seriously consider an automatic planting system which encompasses ground preparation, the supplying nursery, and the supplier of the automatic planting machinery."

According to Mr Rogers, all three segments are paramount to the success of the system and the crop being planted.

"The grower must prepare the

planting bed correctly," he said.

"The farm or wholesale nursery must produce seedlings to the required specification, and deliver them on the right day. Finally, the machinery supplier must provide reliable machinery with good field support."

In order for a universal shift toward mechanisation, Mr Rogers said that nurseries needed to be situated in the key growing areas and able to supply seedlings in trays that had the right specification.

"In the short-term there is a big responsibility for nursery operations to deliver seedlings in trays that fit the automatic planters, otherwise growers are less likely to buy such a piece of equipment. However, viewing the longer term there is also a responsibility on the machinery suppliers to provide machinery solutions capable of processing the most widely preferred seedling containers."

Transplant Systems has now supplied some 30 automatic planting machines, all of which are highly productive in Australia.

For more information about planters available from Transplant Systems visit www.fieldtransplantsytems. com Plan in place to maximise levy investment

A new initiative involving extensive grower consultation will help redefine industry priorities and guide investment in Research and Development. In conjunction with Horticulture Australia Limited (HAL), AUSVEG will oversee the formation of a strategic investment plan for the vegetable industry.

n a move that will update industry objectives and pinpoint priorities for R&D funding, an initiative has been launched that will culminate in a new strategic investment plan for the vegetable industry.

Under the guidance of Horticulture Australia Limited (HAL) and with input from the Vegetable Industry Advisory Committee (IAC) and growers, AUSVEG has been charged with overseeing the process to deliver a comprehensive strategic investment plan for the industry.

Chair of the IAC. Mr Jeff McSpedden, said it was imperative that a strategic investment plan was in place to ensure growers were receiving the maximum return on their investment of levy dollars.

"Vegvision 2020, which is the

current over-arching document that guides the investment of levy funding, is now five years old and is more of a vision rather than a strategic plan," Mr McSpedden said.

"When this new plan is completed, it will provide a detailed outline of where levy funding should be directed and will be a good reflection of growers' opinions."

The strategic plan will follow an Australian-wide review of current industry views, that will include extensive grower consultation. Encompassing each state of Australia, special levy payer meetings will soon be completed, with growers expressing their ideas for where levy funding should be spent.

Mr McSpedden said the levy payer meetings were an important aspect of the process and gave growers an avenue to put forward what they believed were the most critical industry priorities.

"This process gives growers a chance to participate in the formation of a strategic plan and hopefully reveal what they believe are the issues that should be targeted," he said.

"There are a number of issues growers currently are dealing with. Issues such as labour costs, labelling laws, increasing regulations and rising input costs. These meetings should pinpoint what growers believe are the most crucial problems and give them a chance to nominate how R&D funding should be allocated to overcome them.'

AUSVEG has been charged

with the responsibility of overseeing the construction and implementation of the strategic investment plan. The national peak industry body has engaged Mr Greg Spinks and his team at Consulting and Implementation Services (CIS) to manage the process and, along with a steering committee, it will be monitoring the progress of the strategic plan.

Mr Spinks, who is Managing Director and founder of CIS, said this project aligned perfectly with the company's skills set.

"We have been involved in strategic planning for more than 15 years and are experts in implementation," he said.

"Our organisation has also extensive experience in dealing with the research community and expertise in how to maximise

Vegetable growers wishing to attend the National Convention or who are seeking further information about how they can have input on the plan should contact AUSVEG on (03) 9822 0388.

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Greg Spinks, Director of Consulting and Implementation Services (CIS)

the impact of research. We are also aware of who the major players in terms of research are, and how this sector of the industry operates."

Mr Spinks said that the aim of CIS was not just to develop a high level plan, but to also deliver a plan that had real impact across the industry.

The review process has already begun with Mr Spinks and his team seeking feedback from growers at a series of levy payers' meetings held in all states of Australia throughout February and March.

Other leading members of the supply-chain will also be consulted, along with various research bodies, in a six-week long review.

Mr Spinks and his team have taken significant direction from the IAC and the AUSVEG Board Steering Committee, and will work closely with AUSVEG, which is overseeing the industry-wide consultation.

Mr Spinks said this was one of those rare opportunities that only come about once or twice a decade, which allowed people to be involved in the planning

process.

"These high level plans are only constructed maybe twice a decade and so we want to involve as many peoplewho have strong opinions on where the industry should be heading-as possible. If they have burning issues they want addressing then we want to hear is finalised (expected late in 2011), CIS will develop what is referred to as a White Paper, which will allow feedback and public comment.

Mr Spinks said that in addition to this industry-wide consultation, a unique focus on the impact of possible initiatives would be undertaken through a

#### When this new plan is completed, it will provide a detailed outline of where levy funding should be directed and will be a good reflection of growers' opinions.

#### from them."

Following the review, and once CIS have a clear understanding of what the major issues are, a lengthy investigation will be undertaken that will include further grower consultation, a nationwide survey and a significant amount of data collection.

Before the strategic plan

partnership with the Centre for International Economics (CIE).

"We want to make recommendations that will have the greatest impact on the industry and through this partnership with CIE we will be able to compare and test ideas by running them through an economic model," he said.

"This will help validate

recommendations and should result in only the issues that maximise investment being incorporated into the final plan."

Mr Spinks will present at the AUSVEG National Convention, which runs from April 14-16, providing a further opportunity for growers to have input, as part of the consultation process, on the future direction of the industry.

#### THE BOTTOM LINE

- AUSVEG will oversee the development of a strategic investment plan for the vegetable industry.
- This over-arching document will redefine industry priorities and auide investment in research and development.
- Extensive industry-wide consultation will allow growers to provide their ideas on how the industry should be shaped.

For more information contact: AUSVEG

Phone: (03) 9822 0388 Email: info@ausveg.com.au Project number: VG10115



## The quick and easy way to find harvest workers











## Precision Agriculture

## with John Deere

John Deere offers a range of Ag Management Solutions to help growers implement and utilise the latest technology available in the industry.

Modern farming is all about getting the best out of a piece of land, no matter where you live or what conditions you face. The key to this is finetuning the operation, and that's where precision agriculture steps in.

No farm has flat, perfectly rectangular paddocks and an Ag Management Solution (AMS) helps the farmer to make use of every inch of land.

"The heart of the John Deere system is the receiver," said

Paul Galletly, AMS consultant for Drummond and Etheridge in Ashburton, NZ.

"It's a dual frequency receiver, which means it gets signals from two satellites roving above. Single frequency receivers can tend to wander."

"It also has built-in terrain compensation so if you're on a hill it compensates for that. The StarFire™ correction signal comes from a stationary satellite to hubs owned and operated by John Deere. That's an exclusive, and why we can get up to 2.5 centimetre pass-to-pass accuracy."

Such a system may also lead to an increase in efficiency and productivity, and is less reliant on human operation.

Mr Galletly also cited the benefits in regards to reduced inputs.

"You don't spend as much on fertiliser, sprays, diesel, so costs come down. You can make huge inroads in spraying and spreading because chemical costs are so high." The John Deere AMS is also highly transferable.

"All we need to run our systems is a power inlet," Mr Galletly said.

"They can go in any colour tractor."

For further information on John Deere Ag Management Solutions, visit our website www.johndeere.com.au or contact your local dealer.



## **Precise performance**

Forward-thinking technology from John Deere is enabling farmers to add new capabilities and increase in-field performance in their business.

As part of the company's GreenStar<sup>™</sup> 3 2630 touch-screen Ag Management System applications, the innovative GreenStar<sup>™</sup> Rate Controller technology allows integration with many anhydrous ammonia applicators and many non-John Deere pull-type sprayers to accomplish rate control, field documentation and map-based prescriptions.

New South Wales-based grower John Mulligan and his family have been relying on John Deere tractors and pickers since his father started farming on his land in the seventies.

Mr Mulligan has embraced the new technologies available and has adopted John Deere Ag Management Systems – including the GreenStar™ - on his 2,000-hectare property.

"Farming has come a long way since we got the John Deere 4040 in the early eighties, but the biggest advancement without doubt has been the rapid development of agricultural management systems," he said. "From my experience, I would advise anyone considering adopting Ag Management Systems like John Deere's to not necessarily go with the cheapest system out there. If your equipment is John Deere then it would be pretty hard to go past their GreenStar<sup>™</sup> system as it's all integrated and works in harmony."

The GreenStar<sup>™</sup> Rate Controller also comes with the advantages of Swath Control Pro<sup>™</sup> (activation required), which turns implement or sprayer boom sections on and off based upon position to reduce overlap in headland areas and oddly shaped fields. The results include reduced input costs, reduced operator fatigue and enhanced land stewardship, according to the company.

Mr Mulligan added: "We fertilise by using John Deere's Rate Controller and Swath Control Pro<sup>™</sup> to maximise the effects of fertilising."

In addition, the GreenStar<sup>™</sup> Rate Controller can also be used in conjunction with Swath Control Pro<sup>™</sup> for Planters.

For further information visit www.johndeere.com.au or contact your local dealer.

## Grower resources revealed

A range of resources are now available to growers as a result of the Vegetable Industry Development Program, writes Andrew White.

## It's a fact!

A series of easy to understand produced for vegetable growers. The fact sheets have been produced through the InnoVeg program and are available from www.ausveg.com.au under 'Resources', or can be obtained in a hard-copy format from the

state vegetable grower bodies– Growcom (QLD), Grow SA (SA), vegetablesWA (WA), the Vegetable Growers' Association of Victoria (VIC), New South Wales Farmers Association (NSW), and the Tasmanian Farmers and Graziers Association (TAS).

#### **Topics include:**

- Managing pesticide resistance;
- Biosecurity;
- Post-harvest management;
- Climate change and carbon–what is it, how does it affect me and how can I manage it on my farm?;
- Healthy soils for vegetable production.

## **Growing Leaders**

#### National Vegetable Industry Leadership Program

One of the aims of the People Development sub-program of the Vegetable Industry Development Program (VIDP) is to foster and encourage a new generation of young leaders in the vegetable industry.

A national vegetable levyfunded project run by Rural Training Initiatives aims to assist people wishing to take up leadership roles at all levels of business and industry leadership.

The focus of the program is for participants to develop an understanding of how to have a positive impact in their business and industry.

Jill Briggs from Rural Training Initiatives runs the program.

"Growing Leaders has developed from a need

identified by the industry,"Ms Briggs said.

"It has been developed in consultation with the industry and therefore the outcomes are profoundly important and useful for the industry."

"It's really important that growers get involved because it's been developed for them." "Grower graduates have found

"Grower graduates have round that the program has been helpful for them at a personal, business and at an industry interaction level."

Growers can register for the program by contacting Dianne Fullelove from the People Development program on 0413 101 646 or by emailing diannefullelove@optusnet.com.au

Last year's Growing Leaders.

#### When and Where

Session 1 - 12-14 April–Brisbane in conjunction with 2011 AUSVEG National Convention

Session 2 - 26-28 July–Melbourne Session 3 - 11-13 October–Canberra

## Lettuce in the spotlight

he Economics sub-program regularly produces indepth 'spotlights' on particular vegetable commodities to help growers better understand the market, including category performance.

Industry economist lan James said that the spotlights helped growers by "enabling them to get a snapshot of a particular

commodity in a concise form." The value of lettuce production rose by 11.3% to

\$187 million in 2008/09. Growers can download the 'Spotlight on Lettuce' from the Resources section of the AUSVEG website-www.ausveg. com.au. Other vegetables in the spotlight section include broccoli, cauliflower and carrots.



## An insight into vegetable purchasing

Want to know how big a particular segment of the vegetable market is? Want a category profile on the

vegetable commodity you grow? growers with a snapshot of the

vegetable market, including

retailer activity, consumer trends, new innovations and category profiles.

In the January edition of Veginsights capsicums were profiled. Data from dockets showed that the average quantity of capsicums purchased was 292 grams. Capsicum purchasing

varies by household type and this aligns with the available discretionary dollars.

The penetration of 'Singles and couples with a higher income' and 'Established families' is 47.5%, while the capsicum penetration of the other three household segments of 'Singles and couples with a lower

income', 'Budgeting families' and 'MT nesters' is 34.5%.

Visit www.ausveg.com.au and click 'register now' to access the reports in full or simply call AUSVEG on (03) 9822 0388.

- This analysis has drawn on data gathered from Aust, retail and UK and US online sites. It is considered representative of the retail ranges in each market.
- All markets offer loose product that is sold by the kg or by the lbs in the US.
- The UK and US ranges offer smaller pack sizes of smaller sized capsicums.
- The UK market has more higher value speciality products ranged.

Veginsights is a monthly report available via email and on the AUSVEG website that provides

UK -US -Aust retail range profile



The Aust range is close to the value of like product in the UK and US and is offering less smaller sized products than in the UK.

Faster, smarter cheaper

Founder and Managing Director of Williames Pty Ltd, Geoff Williames, speaks to *Vegetables Australia* about how mechanisation in the vegetable industry has developed over the past 35 years, and how his company continues to be at the forefront of innovations in the industry.

F aster, smarter, cheaper. This simple philosophy has been the cornerstone of Williames Pty Ltd-one of the original design and manufacturing firms that ignited mechanisation in the vegetable industry-for more than 35 years.

Williames, you could say, was there when it all began. When

mechanisation first started to have an impact in the vegetable industry, Geoff Williames seized the opportunity, joining forces with nursery owners Bob and Bruce Bone, who he said were pioneers at utilising technology and mechanising their operation.

"They (the Bone brothers) really believed that mechanisation was the way forward and the industry owes a lot to their commitment to improvement," Mr Williames said.

Williames is still partnering with vegetable growers and nurseries more than three decades later, working with both big and small operators, and maintaining the same values that saw it become a success in Australia and overseas.

"We have always tried to strip away the complexity, to design machinery that does the job and takes

the job and takes the load off people's

backs, and stick it on steel," Mr Williames said.

#### From small beginnings

Williames made several significant advances in the late seventies, including designing world-first equipment.

"To my knowledge, we designed the world's first Selective Transplanter and Vacuum Seeder for a green house," Mr Williames said.

Mr Williames also travelled throughout the United States and parts of Europe, combining his knowledge with that of others



who also saw opportunities to increase the industry's reliance on mechanisation.

Working with the industry and continually listening to where the industry wanted to go, Mr Williames said, was the reason why the company had been able to deliver innovative equipment.

"We have been good listeners to the industry."

"Our aim has been simple; we have tried to design equipment in the simplest form for our clients; tried to get them the best return and therefore the best results."

"It has been a joint effort. We wouldn't be successful without our partners in the industry."

Mr Williames said the level of mechanisation that was now evident in the industry was exceptional.

"What we're seeing now is

very professional systems, computerised nursery systems that can track a product through various treatment sprays and handling," he said.

"The nursery industry is now leaning towards total system automation."

#### **Perfect partners**

Mr Williames said the company's greatest asset was its ability to work with clients to reach a desired outcome.

"We don't go along to force an idea on a person or a company. We look at their business plan and where they want to go. We look at what their practices are and what they want to achieve."

"Man is worth what man produces. If you can produce more efficiently, then there is a payback from day one." Mr Williames added that with the ability to segment production lines and isolate areas that were causing the greatest impact on a grower's profitability, Williames was able to design equipment that could be incorporated into an existing production line without having negative flow-on effects.

Although the industry seemed to be geared toward larger, more professional organisations, Mr Williames said opportunities would always be there for smaller firms who could find ways to do it better and cheaper than everyone else.

"We're happy to work with people who are new in the industry and continue to work with them as they grow," he said.

"A good example of this is Boomaroo Nurseries, who we supplied with their first transplant seeder. They are now one of the leading nurseries in Australia and we continue to work with them and find ways to increase their level of mechanisation."

Williames too, has gone through similar transformation in recent years, as it has sought to become a more professional organisation.

An understanding of customers and a constant eye on developing technology have Williames on the path to remain a leader in mechanisation and automated technology in the vegetable industry.

For more information about the range of Williames products available, please visit www.williames.com



#### Celery and sprouts under the spotlight

#### Topical talk at the Australian Celery and Sprout Growers Association AGM

A round 40 of the country's celery and sprout growers gathered in Melbourne in February for the Australian Celery and Sprout Growers Association's Annual General Meeting.

It was the turn of the Association's Victorian state branch to host this year's event, which focused on the current issues affecting the industry and heard reports from representatives of each state. The meeting also welcomed AUSVEG CEO Richard Mulcahy as guest speaker.

Celery grower Therese Schreurs, of Clyde in Victoria, told *Vegetables Australia* that the major subject of concern discussed at the meeting was that of some growers purchasing second-hand cartons and packing their produce in them without changing the label.

Mrs Schreurs explained that this practise had serious ramifications on the traceability of produce that was placed in them.

Chairman of the Victoria Celery Growers Association, Silvio Favero, said the use of second-hand cartons with incorrect labels could also have repercussions on maximum residue limits (MRLs). He said that the Association was lobbying for a crackdown on use of second-hand cartons in this way. Members also discussed industry matters such as water issues, and heard about the Association's

promotional activities in stores and in schools.

# NECHANISATION SPECUTION Speculation Speculatio

Variation in the rate of growth in almost all vegetable commodities is a substantial obstacle standing in the way of increasing the level of mechanisation in the industry. Dr Gordon Rogers, from Applied Horticulture Research, explains how research hopes to discover methods that allow for a successful mechanical harvest.

t has surely crossed the mind of most growers at the end of a long day's work, 'what if there was a way to deliver a once-over mechanical harvest and speed up the process?' The issue is particularly relevant for brassica growers, with previous research showing only a 50 per cent success rate for mechanical broccoli harvesting.

The problem, however, isn't just concerned with a lack of specialised equipment, it is also about improving the uniformity of growth in vegetable crops.

Dr Gordon Rogers—who led a recently-completed study that looked directly at this issue in broccoli crops—believes that plant uniformity is a key element to the success of mechanical harvesting. Results from the project entitled *Agronomic programme to improve the uniformity of broccoli for onceover mechanical harvest* were featured in *Vegenotes*, edition 22

Dr Rogers and his team sought to investigate ways of improving the cost-effectiveness of mechanically harvested broccoli by obtaining a greater uniformity of crop growth.

"It's a very common problem in the wider industry that very few crops mature at the same time," Dr Rogers said. "This is compounded by It's a very common problem in the wider industry, that very few crops mature at the same time.

the variability in the crops that reduces the effectiveness of a mechanical harvester." Despite the obstacles, Dr Rogers said the benefits of developing such techniques in the vegetable industry would be an enormous benefit to growers.

"The cost of hiring pickers and the unreliability of labour in the industry is a huge problem that many growers face," he said.

"Even if you can source reliable workers, there is the added logistical obstacle of managing unskilled labour."

#### **Finding solutions**

Working in collaboration with Matilda Fresh, Sakata Seed



Company and South Pacific Seeds, Dr Rogers and his team from Applied Horticultural Research investigated the issues surrounding uniformity of broccoli crops for a once-over mechanical harvest.

Prior to this project, mechanical broccoli harvesting had only been able to achieve a 50 per cent success rate when it came to cutting available heads. Extreme variations in the rate of development were blamed, and a more uniform crop growth was needed to improve the harvesting strike rate.

This project aimed to develop agronomic strategies to improve the uniformity of the plant stand and, in turn, the efficiency of the mechanical harvester. Trials were run over three seasons between 2007 and 2009 in Armidale, NSW, and the Queensland districts of Gunalda, Gatton and Toowoomba.

A number of different varieties were established as transplants and planted using the standard farm fertiliser rates and agronomic practices. The seedlings were irrigated as soon as possible after planting using furrow irrigation. Beds were spaced at 0.9 metres between centres; two rows of plants per bed with 30 centimetres between plants (60,000 plants per hectare). High density and low density plantings were also established at 90,000 and 30,000 plants per hectare respectively.

#### Lessons to learn

This project was able to improve the once-over harvest percentage by up to 90 per cent, by ensuring a uniform plant stand. It was found that a mechanical harvest with a success rate of 90 per cent would mean a 65 per cent reduction in the cost of harvesting a broccoli crop by eliminating the need to hand harvest.

Dr Rogers and his team also discovered that a higher density of plants helped to increase the consistency of rate of growth.

"The closer the planting, you tend to find less damage to plants with the mechanical harvester than you would if they were more spread out," Dr Rogers said.

"When plant density was increased from 60,000 plants

per hectare to 90,000 plants, the heads produced were taller with straighter stems, which made them well-suited to mechanical harvesting."

The trials also showed that preparation of the bed was a critical step for ensuring a uniform plant stand, and a single-row planting (rather than a double-row planting) gave a more uniform result.

Dr Rogers said it was also important to have uniform irrigation and nitrogen applications for a uniform plant stand.

"Variations in these two inputs across a planting will produce variability in plant height and reduce the efficiency of the mechanical harvester," Dr Rogers said.

According to Dr Rogers, this trial provided valuable lessons for all growers, regardless of what they grow.

"In order to have a mechanical harvest, growers have to think about a number of different aspects," he said.

"Precision of planting, controlling water, soil moisture and the concentration of nutrient across the paddock are all factors that need to be considered, which links into the opportunities now available through controlled traffic farming."

#### THE BOTTOM LINE

- The growth rate and uniformity of crops are a substantial problem standing in the way of successful industry adoption of mechanical harvesters.
- A recently completed study focusing on plant uniformity in broccoli crops illustrates the problems associated with mechanical harvesting.
- Density of plants, number of beds, precision of water and nutrients, and the resilience of the particular variety grown, were all shown to be important for the success of a once-over mechanical harvest.

For more information contact: Dr Gordon Rogers Applied Horticulture Research Phone: (02) 9527 0826 Email: Gordon@ahr.com.au Project number: VG06053

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Calibah le

MECHANISATION SPECIAL



General Manager of Coolibah Herbs and member of the Vegetable Industry Advisory Committee, Mr Roger Turner, is a man growing in stature in the vegetable industry. With extensive experience gained across three continents, Mr Turner explains why focusing on mechanisation is essential for Australian growers.

The blazing Australian sun is a world away from the grey, dim English skies that Roger Turner experienced in his youth. Although the highly successful General Manager has spent little more than five years working in the Australian vegetable industry, his impact cannot be underestimated.

In that short time, Mr Turner has become General Manager of leading baby leaf producer Coolibah Herbs, and has also joined the Vegetable Industry Advisory Committee (IAC) as the Victorian representative.

It was in search of a better lifestyle and a fresh start that prompted Mr Turner and his family to migrate to Australia in 2005. Leaving behind a senior role with a UK farming and import company, and with a wealth of experience, including time spent working on farms in Africa, it didn't take long for Mr Turner to find his feet.

Before leaving the UK, he had already secured a job with Coolibah Herbs, managing the pack house for the ever expanding company. Within months, Mr Turner was promoted to General Manager, charged with responsibility for managing the entire organisation-which farms on 15 separate properties across Victoria.

Coolibah Herbs was founded by Michael and Jenny Bogicevic more than 30 years ago and has expanded from humble beginnings to become one of Victoria's leading growing operations. Now based at Pearcedale on the Mornington Peninsula, the company has for the last 10 years been focused on producing baby leaf lines for mesclun salad mix.

Mr Turner recognises the importance of working with a skilled grower.

"To be able to be involved with a grower of the skill and experience of Michael Bogicevic has helped my understanding of the Australian marketplace enormously," he said.

To keep pace with increasing demand for this healthy and convenient product, the company's production techniques and equipment are continually being modernised, a concept that aligns with Mr Turner's views on where the industry's focus is required.

One look at the company's packing shed and the level of

mechanisation is evident.

The shed acts as one massive cool room, whilst also housing enough machinery to incorporate five production lines under the one roof.

Despite the level of automation, Mr Turner said that there was always room for improvement and that at Coolibah Herbs they were constantly on the lookout for ways to reduce their reliance on labour.

"I think in some way or another there are benefits for all growers to look at mechanisation," Mr Turner said.

"If you don't continually find ways to improve your operation, then you will get left behind."

"The challenge in Australia is that the large, mainstream manufacturers are not based here. They may have agents in Australia, but they are actually based in Europe or the United States."

"Not being able to easily speak directly with the manufacturers means that sometimes you aren't aware of what equipment is available, or don't know about the latest developments."

Despite acknowledging these challenges, Mr Turner believes that at times growers dismiss

## Coolibah Herbs

Melbou Sydney Pearce

the opportunities available by mechanising too easily.

"In Australia there are not that many products that are grown here, that are not grown everywhere else," he said.

"So someone, somewhere has probably come across a similar issue in the past."

"From a mechanisation point of view, you have to look at what you want to achieve and examine what is available in the marketplace. If there isn't anything available, then you might have to create something or modify an existing piece of equipment."

"It is a very labour intensive style of industry and the product is naturally delicate, so mechanising the process can be somewhat difficult, but ultimately very rewarding."

#### **Reliance on labour**

Mr Turner said that a major benefit of going down the mechanisation path was that it eliminated the often huge costs associated with labour.

"As we have seen in recent months, mother nature is every growers biggest challenge, but in terms of the challenges that you can control, labour is without doubt the most important," Mr Turner said.

"Mechanisation will always be

Name: Roger Turner Company: Coolibah Herbs Situated: Pearcedale, Victoria Grows: Salad leaf varieties and herbs

a priority as long as labour is a problem. This isn't an industry where you find local kids out of school, knocking on your door looking for a job, wanting to work out in a paddock in 35-degree heat. Securing labour will always be a challenge, and for most growers the cost of their workers will be a large percentage of their input costs."

Even after labour is secured, Mr Turner said there were often language problems to deal with.

"You could have the best worker in the world, but if you can't communicate with them then you are not going to get the best results," he said.

According to Mr Turner, there were further important benefits to mechanisation.

"It helps to get some standardisation in your business and making your processes as standardised as possible usually leads to increase in consistency," he said.

"If you can achieve consistency then you have not only saved on labour but also improved your business by giving your customers reliable supply."

Finding this level of consistency is certainly paying dividends at Coolibah Herbs, with the company now having in excess of 1,200 acres (486 hectares) under cultivation.

The operation also includes properties in northern Victoria, which allow for supply continuity throughout 12 months of a year.

While baby leaf varieties, salad mix, wild rocket, baby spinach and various varieties of lettuce are the business' core lines, they also produce a huge range of herbs and a number of other vegetables.

"We are constantly looking



at what we grow and what opportunities exist in the marketplace," Mr Turner said.

"We also have three organic farms that are fully accredited, and this is an expanding area for us."

#### **Industry involvement**

Despite the responsibility of managing the expanding business, Mr Turner is also on the board of the Vegetable Growers Association of Victoria and Deputy Chairman of the Vegetable IAC.

Mr Turner provides the IAC an important representative committee which advises Horticulture Australian Limited (HAL) on where levy funds should be invested—with the essential perspective of a non-grower; someone whose expertise stems from an extensive business knowledge within the industry.

Joining the IAC, Mr Turner said, added a new dimension to being in the industry.

"It gets me involved in the industry and allows me to see what is going on, what the key issues are and what is driving decisions," he said.

"I think the IAC is making good progress too, and things are beginning to take shape. Those involved have growers' interests at heart and are extremely capable."

Being what he described as a professional produce person, Mr Turner believes his role with both the VGA and IAC is to provide an alternative point of view.

"I do my best to provide a different point of view. I can provide some business perspective and apply some experience in the industry that is perhaps a benefit to the standard growing opinions."

Mr Turner also encourages individual growers to take a business perspective with their own operation

"Not enough growers view their operation as a business," he said.

"That doesn't mean that you can't have some of those traditional family values in your business, but they must be balanced with keeping a focus on profit."

"Growers need to ask questions, and continually look at whether opportunities exist in the market."

"They need to look at what they grow and ask themselves; Where do I send these? How much do I get for them? Is there another way of presenting them? And is there an opportunity to grow something else?"

Despite playing down his role and stature in the industry, upon meeting Roger Turner you quickly gain an appreciation for his business acumen and knowledge of the fresh produce industry. With carefully considered opinions and an understanding of the big picture, he is an asset to the Australian vegetable industry. And lucky for us, he has no plans to return to those grey, dim skies.



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## 36 EnviroVeg

# Erom the

Hills Fresh

## Managing for a grower Steve

Steve Newman is a sixth generation grower from South Australia. His family business, Hills Fresh, is nestled in Gumeracha, in the Adelaide Hills.

With a temperate climate, as well as a strong family involvement, the business produces vegetables all year round. Spanning some 70 acres across two farms, Hills Fresh produces key lines of lettuce, broccoli, cauliflower and leeks. "We have really found the Adelaide Hills to be a niche area for what we grow and we want to stay here as long as possible as the climate is perfect for what we do," said Mr Newman.

As Operations Manager of the business, Mr Newman's forwardthinking approach is evidence that managing for a sustainable environment can bring its own rewards. As an early adopter of the EnviroVeg Program, Mr

Newman cites the benefits of joining as two-fold. "We got involved in the

environmental side before we had to," he said.

"We wanted to be proactive in making sure we were doing the right thing before we became regulated."



sustainable environment is a key principle for forward-thinking South Australian Newman, writes Darcy Boyd.

"We found that we were doing a lot of it before EnviroVeg came along, but it's given us a guide to managing some of our issues on-farm."

#### **Unique challenges**

Having a niche business has also created some unique challenges for Mr Newman, with heavy rainfall and the topography of the farm's surroundings causing several issues in the past.

"We are very conscious of runoff, given that the catchment drains into the Adelaide area," he explained.

Mr Newman also identifies erosion and the loss of top soil as key concerns associated with heavy rainfall on his land. In identifying these problems, the innovative grower has created native grass headlands around the property that act as support for the soil and also as a buffer to stop direct run-off.

As well as capturing what surface water is available, Hills Fresh has also previously enjoyed groundwater from aquifers.

However, in recent months a moratorium set down by the local catchment management authority has restricted landholders from using this resource and expanding their business further until a decision is made on its future.

Regardless of the outcome, Mr Newman remains pragmatic about the issue.

"Water is going to become increasingly scarce into the future so we are really looking at how we use water and how we can increase efficiency in the coming years," he said.

#### **Beneath the surface**

With the future in mind, Hills

than what it is now," explained Mr Newman.

"We are now in the third year of the compost trials and we have found we have better irrigation, better plant health, improved infiltration and better growth."

"We look at it from the ground up; if we get healthier soil, we get healthier products and that will make it easier to control pests."

Soil is our most important asset and our philosophy is to keep the soil as good for the next generation, if not better, than what it is now.

Fresh has been working with the South Australian Research and Development Institute's (SARDI) Compost for Soils trials in a bid to put sustainable practices in place to ensure the farm's soil is as healthy and productive as possible.

"Soil is our most important asset and our philosophy is to keep the soil as good for the next generation, if not better, Mr Newman is also working with SARDI on the IPM diamond back moths project, run by Greg Baker, in a bid to find ways to reduce the pest's presence on his farm.

As well as aiming to improve the efficiency of his soil, Mr Newman said it was important to try and do it in a way that made good economic sense, and for Hills Fresh this had been achieved by refining the application of compost use and finding that applying less compost on a more frequent basis worked best for the business.

#### Sustainability success

The implementation of Controlled Traffic Farming (CTF) has also proved beneficial for Hills Farm, with improved filtration in growing areas, healthier soil structure and evident fuel savings being among the positive results outlined by Mr Newman.

"We want sustainability. We have taken the whole farm approach and we look at the big picture," he said.

"We are looking at what works for others and we have incorporated these practices into our business."

While Mr Newman has been proactive in his approach to environmental management, he said that utilising the EnviroVeg Program from 2004 assisted with tackling some of the distinctive challenges facing his business.

"We wanted to be able to show that we were doing something right before we were told what we should be doing," he said.

"We want to make the change, to minimise our impact on the environment, and the program has given us something to say this is what we are doing."

## EnviroNews

## A feast of information

Vegetable growers tuck into dinner with a difference during the latest EnviroVeg events.

A series of EnviroVeg dinners have given growers food for thought.

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The events, which took place in February and March, were designed to provide vegetable growers with the latest information to improve environmental management practices and also outline practical solutions to environmental challenges facing the industry.

Growers were invited to the events in Wanneroo, Western Australia; Carnarvon, Western Australia; Werribee, Victoria and Bowen, Queensland. The dinners were also attended by guest speakers.

AUSVEG Marketing Manager and Communications Coordinator William Churchill

Your vegetable levy @ work

said: "EnviroVeg has been developed as the industry's own environmental management program, which places EnviroVeg in a unique position to best service the needs of Australian growers looking to manage their farms in ways that are sensitive to the environment."

Mr Churchill added: "Growers care passionately about the environment as it is the source of their income and their livelihoods. The EnviroVeg Program offers growers the chance to not only improve environmental practices onfarm, but also to improve the profitability of their businesses and make them more sustainable long-term."



#### Latest EnviroVeg Manual coming soon

The latest EnviroVeg Manual is available soon, packed with the latest information on environment management relevant to vegetable growers.

This will be the third version of the manual, which provides practical information to help growers implement a 'plan, do, check and review' cycle with respect to environmental improvements on their farms. In the same way as the previous version, the manual will be divided into nine management topics: property

and business

management; soil and nutrition management; water and waterway management; pest management; chemical management; biodiversity management; waste management; air quality management and energy management.

Each section contains the latest material and the reference section in each of the management topics has also been updated to enable growers to use these as a point of reference to source further information.

The updated EnviroVeg Manual will also expand to incorporate new material relating to Natural Resource Management Bodies. Featured Grower Case Studies will also provide relevance and show how the manual can be used to improve environmental practices.

Version 3 of the EnviroVeg Manual will be sent to existing members of the program upon its release.

If you would like to receive more information on the EnviroVeg Program or to receive a copy of EnviroVeg Manual Version 3, please contact AUSVEG Environment Coordinator, Darcy Boyd -Tel: (03) 9822 0388 or email darcy.boyd@ausveg.com.au



## Water woes

As question marks hang over the future of Australia's largest river system, AUSVEG brings the controversial topic to the table in a great debate.

Darling Basin'.

Concerns from growers over cutbacks to water allocations for irrigators from the Murray-Darling Basin are continuing to grow in the wake of proposals released last October.

The Murray-Darling Basin Authority (MDBA) announced plans to cut back water allocations by between 22 per cent and 29 per cent–and by up to 45 per cent in some regions.

The plans will return up to 4,000 gigalitres of water allocations back into the river system.

#### The Great Debate

This contentious topic will be at the forefront of a highlyanticipated event at the 2011 AUSVEG National Convention, Trade Show and Awards for Excellence, which takes place from 14-16 April at the Sebel-Citigate Hotel in Brisbane.

The Great Debate on Saturday, 16 April will see two experts go head-to-head on the issue of 'Water Usage in the MurrayExpressing their significantly different perspectives on the proposals will be Dr Arlene Harriss-Buchan from the Australian Conservation Foundation, who leads the organisation's work on the Water for the Future program, and Dr Jennifer Marohasy, a biologist and expert in water science, who is concerned that public policy on environmental issues is increasingly driven by moral crusading rather than objective science or need.

The debate is expected to highlight the substantial challenges associated with the MDBA's controversial proposal, as well as offer an insight into the thinking behind it.

More information on water and waterway management can be found in the EnviroVeg manual.

See Page 12 for more information about the National Convention.



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## "Fresh" Logistica impresses grower tour participants

With the opportunity to visit the world's largest fresh fruit and vegetable trade fair in Berlin, participants on the latest grower tour expressed their satisfaction at seeing high quality produce on show, writes Andrew Mahony.

Fruit Logistica showcases more than 2,300 companies, exhibiting everything from fresh fruit and vegetables to transport and logistics systems.

Spanning three days in February, the grower tour enabled participants to explore the plethora of products the event had to offer.

One highlight of Fruit Logistica was the focus on pre-packaged, ready to cook produce.

AUSVEG's Communications and Public Affairs Manager, Hugh Tobin, said that the focus on convenience for the consumer was impressive.

"There was a lot more focus on the consumer and targeting produce at them that is convenient," he said.

"All the products were wellpresented and packaged in a very appealing way."

Growers also praised the positive use of products that could be regarded as waste, particularly small carrots.

Darryl and Sharon Apap were impressed with what they saw during the trip. Mr and Mrs Apap, from near Mission Beach in Queensland, were severely affected by Cyclone Yasi, which hit just days before the tour began.

A world away from the destruction in Queensland, Mr Apap said: "It is amazing how far everything travels but still looks fresh."

"I was surprised the markets are producing such good quality bananas that are travelling such a long distance."

Mr Apap said the event provided some important perspective on the industry.

"It broadens your vision," he said.

"You need to get your blinkers off and see what others are doing around the world."

Mr Max Baker, a grower from Kindred, Tasmania, said the tour gave him food for thought.

"It was a fantastic trip and a real eye-opener to see how growers in Europe are doing things," he said.

"When you see something like this it makes you aware that there are things you might be able to incorporate into your own business at some point." "It is always nice to have that extra bit of knowledge stored up top."

Fruit Logistica plays an important role in displaying innovation in the fruit and vegetable industries.

One aspect the growers were impressed by was the way the products were packaged for the consumer's convenience.

Mr Apap said: "All the innovative products we saw were directed at making it as easy as possible for the consumer."

Mr Baker added: "There were all sorts of pre-sliced vegetables, which is something you don't see a lot of here."

Also as part of the Berlin tour, the growers attended the Berliner Grossmarkt-a wholesale market that expands across 330,000 square metres and consists of more than 300 regular retailers.

Following the stop in Germany, the tour then moved on to the second and final country-the Netherlands.

This part of the trip saw visits to John Deere and

Bayer CropScience, as well as glasshouse vegetable production areas, which account for roughly 50 per cent of the Netherlands' fruit and vegetable market.

#### THE BOTTOM LINE

- The latest grower tour visits Fruit Logistica in Berlin–the world's largest fresh fruit and vegetable trade fair.
- Growers praised the quality produce and were impressed with the innovative ways in which products were packaged to meet consumer needs.
- The tour continued to the Berliner Grossmarkt, which showcased 300 retailers, and then to glasshouse vegetable production areas in the Netherlands.

For further information Hugh Tobin Communications and Public Affairs Manager Phone: (03) 9822 0388 Email: <hugh.tobin@ausveg. com.au> Project number: VG10702

I think it's really important to have some older guys around to help young growers learn the ropes, to offer tips and give advice.

## Young grower David Babun

Young grower Mr David Babun manages his family's 30-acre property situated just north of Carnarvon, an area renowned for vegetable growing. Like so many other fresh food producers around Australia, Mr Babun has been dealing with severe floods and the devastation left behind.

Though not in the same realm as the tragic flooding that inundated huge parts of Queensland and Victoria, the mid-December floods that hit Carnarvon caused significant crop loss and damage to infrastructure, severely impacting on local growers.

Q&A

"Everything that was in the ground was pretty much washed away," Mr Babun said.

"We have had a pretty tough year dealing with pests, and the floods were really just the final blow."

"It's hard enough in the industry without having

something like this to deal with." Despite some heavy losses in his zucchini crop, Mr Babun said that because of the time of year, losses were not as heavy on his property than if the floods had occurred mid-season.

"It could have been much worse, and other growers in the region have probably suffered more than I have," he said.

This resilient attitude is typical of growers right across the country. Mr Babun is the third grower in an ongoing series of features in *Vegetables Australia* on up-and-coming leaders in the industry. Below he answers our questions and shows that the passion is just as strong in the next generation of growers.

#### Was growing vegetables what you always wanted to do?

Well I'm actually a cabinet maker by trade, but I've been on the farm my whole life and when I finished my qualification at 19, I decided growing was the path I wanted to take. This year will be my eighth and I'm really enjoying the challenge.

Growing is probably the major industry in Carnarvon, being

on the river and having access to water means the conditions are usually pretty good, and the growing community is quite close. But there are other career opportunities in Carnarvon and a lot of people are working in the mines. But for me, growing was always the most appealing option.

In 2010 you attended the AUSVEG-led Young Grower Study Tour to New Zealand. What prompted you to attend

#### and how did you find the experience?

Through the growers association in Carnarvon, a fellow grower encouraged me to go. I was originally planning to take part in 2009, but I was too busy and couldn't afford to take a break. Last year I was a bit more on top of things and I'm definitely glad I managed to squeeze it in.

It was a really enjoyable experience and a great chance to see how they do things differently over there. They obviously have vastly different conditions in New Zealand, but it was still good to see different methods and how they go about it.

#### Despite the differences in what you witnessed to your own operation, would you recommend the experience to other growers?

Definitely, I think most of the

other growers on the trip found ideas that they could take back to their own farm. I was a little different because of where we are, and what we grow, but either way I would highly recommend it to others. Even just the chance to meet other growers was worth the trip, and it's great to see another side of the industry.

#### What are some of the best aspects of being a young grower in the vegetable industry?

The lifestyle is probably the best part of being in the industry. Growing fruit and vegetables is more than just a job. I think it's really important to have some older guys around to help young growers learn the ropes, to offer tips and give advice. There is a lot to learn and you need that experience on your side.

I really enjoy the work, and I'll probably be growing until my back gives up on me and I can't really grow anymore.



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Who: David Babun Age: 26 Grows: Zucchinis, bananas, melons Situated: Carnarvon, Western Australia

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SINCE

## Tools for Profitable Practice Change

New research reveals how growers can gain invaluable insight into water and nutrient levels beneath the soil with the help of some innovative tools, writes Karen Shaw.

Understanding what is happening to vegetable crops beneath the soil can take much of the guess work out of farming. And recent research shows there are tools available that make this information accessible to growers Australiawide.

That is the message from a three-year study that investigated a range of measuring and predictive tools that help farmers monitor water and nutrient needs at the rootzone of their vegetable crops.

Project Leader and Principal Horticulturist at the Gatton Research Station, Mr Craig Henderson, said most growers were doing a fantastic job, but it was great to be able to use tools–whether online or simple measuring devices-to help show scientifically what was going on under the soil.

The project was a collaboration between Horticulture Australia

Limited (HAL), the Queensland Department of Employment, Economic Development and Innovation (DEEDI), the National Centre for Engineering in Agriculture and NSW Industry and Investment.

The research team worked with about a dozen farmers in Queensland's Lockyer Valley and NSW Riverina districts monitoring crops such as sweet corn, broccoli, lettuce and beans, and using different tools to evaluate what growers needed to maximise production.

Despite recent floods, much of Queensland has suffered severe drought over past years, so water scarcity has been a big issue for vegetable growers.

"We wanted to look at ways growers could evaluate how best to use their precious water resources to improve production and minimise expense," Mr Henderson said.

For example, using an online

crop modelling tool for sweet corn crops suggested increasing plant numbers from 65,000 per hectare to 95,000.

"Changing the planting arrangement meant fewer unmarketable second cobs at harvest, and also improved conversion of irrigation water to profitable yield by up to 20 per cent," Mr Henderson said.

Other trials focussed on drip irrigation, looking at installation and planting arrangements and also maximising system usefulness.

"Using drip irrigation to fertilise or add chemicals when needed was shown to improve sweet corn crop yield by 25 per cent," Mr Henderson said.

"But we also found that growers could use something simple like a tensiometer, a low-cost tool that measures fairly accurately the moisture content of the soil and how hard the plant works to extract water from it."

There are root-zone monitoring tools, which are invaluable for measuring salts and fertilisers both good and bad—in the soil.

"We trialled a couple-one that needed to be installed about half a metre below the surface-which might be good for long-term crops such as fruit trees, but not so practical for lettuce that's only in the ground for a couple of months," Mr Henderson said.

"We want to continue experimenting with a device called the FullStop wetting front detector that's buried and built around a funnel that collects soil water after rain or irrigation, which can then be analysed for its salt and nitrate content. Other devices called soil solution extraction tubes remove samples of soil water for analysis. The beauty of both devices is that over time any changes to what's in the water can be tracked." "We know that beans don't like salt around their roots, so for growers having tools like these that test what's happening at the root-zone, and that we know work, is really helpful."

Work carried out with a capsicum grower using recycled water revealed some pleasing results. Root-zone monitoring showed there was no nutrient runoff, or leaching into nearby water catchments-an outcome that supported current on-farm practices.

"We also did some work on a cabbage farm that had a drip irrigation system," said Mr Henderson.

"Root-zone analysis showed

We wanted to look at ways growers could evaluate how best to use their precious water resources to improve production and minimise expense.

that some plants were missing out on water because they were too far from the drip line. Just planting rows a few centimetres closer to the drip line ensured the water reached where it was needed and improved productivity."

In comparison, Riverina growers face a different problem–many of their soils are high in nutrients.

Mr Henderson explained: "We found that by analysing exactly what was in the soil gave farmers confidence to reduce the amount of nitrogen applied, which in turn helped reduce costs."

"Our research also showed that growers were interested in learning more about an online crop water use tool, which is available to farmers in Queensland and northern NSW at this stage. For others with complex problems, employing an agronomist or consultant to help with advice was a better alternative."

"What's really been highlighted in the research is there are many tools available, but it's about finding what works for individual farmers and is applicable to their needs. We will continue publishing information about what's out there and hold more workshops to spread the word."

"Most growers are on the right track, but if there is something that can help improve productivity–even by tweaking something quite small–that's got to be a good thing."

#### THE BOTTOM LINE

- A new study investigated tools that monitor vegetable crop rootzones and measure what's happening beneath the soil with water and nutrient levels.
- For growers, this knowledge helps tweak onfarm practices and improve productivity, however, the tools need to be tailored to individual farm needs.
- For further information about tools available to vegetable growers visit these sites: www.qld.gov.au www.cropwateruse.dpi.qld. gov.au
- www.fullstop.com.au/ www.thescientistsgarden. blogspot.com Project number: VG07023





## Discovering more about CTF

Mr John McPhee from the Tasmanian Institute of Agricultural Research (TIAR) has been studying the viability of Controlled Traffic Farming for more than 25 years. As interest in the innovative practice continues to gain momentum in the industry, he speaks with *Vegetables Australia* about the benefits and challenges of implementing such a system.

n two separate study projects, John McPhee and his team from the Tasmanian Institute of Agricultural Research are developing, refining and measuring the benefits of Controlled Traffic Farming (CTF).

Their aim is to give growers a better understanding of the challenges of implementing such a CTF system, and what benefits it may offer.

Controlled Traffic Farming (CTF) is defined as a farming system that uses technologies such as Global Navigation Satellite System (GNSS) for steering guidance, ensuring all paddock traffic is confined to the same wheel tracks year after year.

According to Mr McPhee, the economic and environmental benefits offered by CTF include: reduced soil erosion; improved soil structure and organic matter; improved water use efficiency; improved crop productivity and quality; reduced energy and fertiliser use and improved timeliness of cropping operations. "While it is still early days in the application of CTF to vegetables and potatoes, all of these benefits have been demonstrated in research and commercial practice in a range of cropping industries," he said. Mr McPhee first became

place in vegetable production. Early on-farm attempts to develop this theory with Peter Aird, a consultant with Serve-Ag, showed promise but also revealed a number of challenges that indicated that CTF could only become viable

Because the harvesters were incompatible to GPS equipment, they would temporarily disrupt their CTF work until the crops were out of the ground, but then after the harvest they would return to the original traffic lines.

involved in CTF more than 25-years ago in north Queensland.

After moving to Tasmania in the early nineties, he was convinced the practice had a when technologies like satellite guidance became cheaper and more available.

"I have always believed that the potato and vegetable industries would benefit from CTF," Mr McPhee said.

"From a machinery and tillage point of view, these industries feature a lot of big machinery and intensive tillage operations."

"This means that CTF should be well-suited to the soil problems experienced by potato and vegetable growers."

A major stumbling block, Mr McPhee said, was the vastly different types of equipment used by growers. Making them all compatible with CTF is a challenge.

"Unlike the grains industry, for example, where the equipment suite is quite small, the vegetable industry has not only many different harvesters, but many different planters as well," Mr McPhee said.

"I think at last count, we found that across 11 different crops, there were 20 different harvester combinations."

#### Seasonal CTF

The search for solutions to this problem led Mr McPhee to Europe, where he has since



returned with a group of growers as part of an International Study Tour.

"In Europe, we discovered a number of growers practising what they called Seasonal CTF, which basically meant ensuring all of the operations that took place in the paddock, from after the harvest right up to just before the next harvest, were all conducted on the same traffic line." Mr McPhee said.

"Because the harvesters were incompatible to GPS equipment, they would temporarily disrupt their CTF work until the crops were out of the ground, but then after the harvest they would return to the original traffic lines."

"Over a period of years these growers were starting to see small benefits and I guess it has made me realise that not everything has to be perfect all of the time."

#### On trial

Vegetables such as broccoli and broad beans are being incorporated into a trial at the TIAR facility at Forth in the state's north west.

This project—due for completion in 2014—is facilitated by Horticulture Australia Limited (HAL), with funding from the National Onion and Potato levies, and matched funding from the Australian Government. Mr McPhee said that the project had two major elements. "The first aspect of the project

is looking at the soil, yield and water saving benefits," he said.

"But another major component is about demonstration. CTF is still a long way from being a widespread practice."

"This project will build awareness and demonstrate some of the essential factors that need to be considered before GPS equipment can be utilised."

The project has been established at a two-hectare paddock at the TIAR Vegetable Research Facility at Forth in north west Tasmania.

The paddock consists of approximately half CTF and half conventional farming practices and is arranged to provide two replications of each farming system.

#### Key results produced to date

- 13 per cent yield increase in a recently harvested onion crop.
- Fewer tillage operations required in CTF environment when compared to the conventional area, resulting in fuel savings of up to 80 per cent.
- Water infiltration tests indicate that the CTF leads to a significantly higher amount of water retained in the soil.

- A better understanding of what aspects growers need to consider before implementing a CTF system.
- A greater awareness of the obstacles that affect growers using CTF, such as rear tyres slipping on narrow wheel tracks.

#### **Essential economics**

A second project funded by the National Vegetable levy, with matched funding from the Australian Government, is focusing on building a working model that growers can use to accurately measure the effects of CTF in terms of a soil's quality, expected yield, input costs savings and water retention.

Despite being in the early stages, Mr McPhee believes that creating this economic model can provide growers with a realistic comparison of how they would benefit from moving to a CTF system.

"It is important that we have a model that can accommodate growers of varying size, and who grow different crops," he said.

"They need to be able to evaluate if the benefits will have a positive impact on their bottom line."

Mr McPhee also cited the importance of growers being able to estimate expected results when conditions or variables change. "This model will be able to show growers how they will be affected, for example, if they only achieve a two per cent yield increase. If this occurs, this model can estimate whether a CTF system will still have a positive impact on their profitability."

#### THE BOTTOM LINE

- In two separate studies John McPhee and his team from the Tasmanian Institute of Agricultural Research are developing, refining and measuring the benefits of Controlled Traffic Farming (CTF).
- To evaluate what benefits can be obtained by using a CTF system, an on-farm trial has been established in a two-hectare property, consisting of approximately half CTF and half conventional farming practices.
- A second study is focused on producing an economic model that can estimate expected results from CTF.

#### For more information contact: Mr John McPhee

Vegetable Research, Development and Extension Centre Tasmanian Institute of Agricultural Research University of Tasmania Phone: (03) 6421 7674 Email: <john.mcphee@utas. edu.au> Project number: MT09040

## Soil solutions to help you rise from the rain

Welcome to the first in a new series of articles dedicated to covering soil and nutrition issues, written by Rohan Davies, Research and Product Development Manager at Incitec Pivot Fertilisers.

As well as answering your questions on nutrition in this new series of columns, I am also looking forward to bringing you seasonal advice to assist you in optimising your nutrition programs.

For many growers around the country, the issue of greatest concern has been the extraordinarily wet conditions. Floods, flood damage, lost topsoil, lost crops and weather damaged crops have been widespread over eastern Australia since last November.

Among the many questions being asked, farmers will be wondering:

• What has happened to nutrient levels where soil has been removed or deposited?

• Has the rain led to significant leaching or denitrification?

 Has the rain resulted in increased mineralisation of plant available nutrients? Incitec Pivot Fertilisers is fortunate to have a very experienced team of agronomists who are keen to support growers and advisers through the recovery phase.

At times like these, one of the best places to start is by looking at what has happened with your soils – the foundation of your crop.

A soil test on blocks to be cropped will assist you in managing your soil nutrient levels accordingly.

There may be vast differences compared with last year, as

well as between blocks, or even within blocks.

Topsoil removal, even as little as two centimetres, can have a significant negative impact on the paddock's nutrient profile.

On the other hand, deposits of silt can have a positive or a negative impact on nutrient levels. The productive capacity of these soils needs to be assessed.

Land that has had floodwater over it, or been waterlogged for more than three to four days at a time, may have suffered losses of nitrogen through leaching and/or denitrification.

Not knowing your nutrient levels can slow down your rate of recovery significantly. A soil test can also lead to improvements in fertiliser efficiency (and a better bang for your buck), while potentially producing a better long-term environmental outcome.

Ensure that soil samples are sent to a quality assured laboratory (with National Association of Testing Authorities accreditation) that performs well in the Australasian Soil and Plant Analysis Council lab proficiency scheme so that you can rely on your results.

The agronomy team from Incitec Pivot Fertilisers is here to help. We look forward to working closely with growers and advisers in the coming months to optimise nutrition programs and do all we can to aid the path to recovery.



#### Soil nutrition questions

Please send your soil nutrition questions to *Vegetables Australia* writer Lisa Higginson. Email: lisa.higginson@ausveg.com.au Phone: (03) 9822 0388



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## MECHANISATION SPECIAL he economics

Industry Economist, and leader of the Vegetable Industry Development Program mechanisation could prove profitable.

#### Why look at mechanisation?

abour costs are the largest single cost faced by Australian vegetable growers. The latest data from the vegetable farm surveys conducted by the Australian Bureau of Agriculture and Resource Economics and Science (ABARES) shows that labour accounts for between 26% and 41% of total cash costs of production, depending on the vegetable produced.

Fresh, above ground vegetables are likely to be at the higher end of this range and root crops at the lower end. Clearly, the introduction of laboursaving equipment can lower this cost element, however, reducing the use of human labour in harvesting represents a particular challenge.

Vegetable growers are aware of the benefits of reducing labour input. Machines are widely used in many vegetable operations. Carrots are Australia's largest fresh vegetable export and carrot exports have been expanding, indicating world competitiveness.

Carrots, together with onions and potatoes (also highly mechanised), accounted for 63% of fresh vegetable exports in 2010. Vegetable growers who export carrots are highly mechanised through all stages of production.

If other vegetable growers

have not taken up machinery to replace labour it is often because the cost of financing the labour-saving machinery outweighs the benefits of reduced labour costs.

There are other economic considerations that growers will also take into account. Vegetables do not mature at a standard rate, so mechanical harvesting can reduce useable yields per hectare. Mechanical harvesting may also require a

reasons for continuing the high use of labour in vegetable operations, there are some compelling economic reasons as to why the vegetable industry needs to revisit the issue of mechanisation. In a classic economic sense, vegetable growers are price takers in the marketplace. Some premium can be extracted for early innovators, but the gains are usually short-lived as other vegetable growers

Removing labour from operations not only has the benefit of reducing cost outlays but also in freeing up management time from labour issues.

major change to farm outlay and significant changes in other aspects of vegetable growing.

Given the capital outlay, there may be a concern that the machinery will not work as expected, and that the investment may be rendered obsolete in a short timeframe through the introduction of improved machines that will penalise early adopters of new technology.

#### The economic problem

While there are rational

adopt the new innovation. The lack of pricing power means that in order to extract higher profitability from their operations, vegetable growers either have to lower costs or increase output.

#### Output response

Expanding output by increasing scale or raising yields through better on-farm practices is an option that many growers have undertaken. Output expansion can assist in lowering unit costs by spreading costs over

a larger number of units. From an individual viewpoint this is a sensible business response, but from an industry perspective problems are created.

Supply expands and prices are driven down as growers seek to lift their rates of return. The shorter cycle of vegetable growing and the ease and flexibility in expanding production compounds the problem. Gainers are the people down the supply line. A cursory look at movements in food items in the consumer price index underscores the result.

#### **Demand solution**

Expanding demand would be of assistance, but that in itself does not guarantee profitability.

The under consumption of vegetables in relation to national health standards and the growing obesity problem in Australia create opportunities for substantial growth in consumption. However, the benefit of vegetables in assisting the adoption of a healthy lifestyle is not something that has just emerged. Expanding demand requires a massive cultural change and large licks of money on marketing to compete for the consumer dollar against other less healthy products. To that end, funds available to the vegetable industry are not likely to be sufficient enough to have substantial results.

The key to profitability becomes costs. Any reduction in the

Top eight fresh vegetable exports Calendar year \$M



Percentage increase in retail prices over the last 21 years



Source: Consumer Price Index: ABS Cat. No. 6401.0

## of mechanisation

#### Economics sub-program, Ian James, discusses how making a move to

cost of inputs is beneficial to growers, as it travels straight to the bottom line. Removing labour from operations not only has the benefit of reducing cost outlays but also in freeing up management time from labour issues.

#### Why mechanise?

There is a compelling reason why the vegetable industry may wish to consider more research into mechanisation to reduce labour costs-globalisation is engulfing the vegetable industry. Supply is now global and costs are local.

Australian vegetable growers can have higher production costs than overseas producers, but still remain competitive due to the higher logistic costs associated with foreign supply. To remain competitive in the absence of import imposts such as tariffs and phytosanitary controls requires the gap between local and foreign production costs to not be too wide.

An improvement in the logistics of globally moving goods, both in terms of costs and quality, is underway and the vegetable industry is beginning to rationalise worldwide.

Australian vegetable growers will not be immune to these developments. We are already seeing some evidence of the pressure these developments are having on Australian growers in processed vegetables and fresh garlic. While much needed reforms to labelling laws and 'buy Australian' campaigns will help, if the price differential between the Australian and overseas vegetable is too great, the domestic market for Australian vegetable growers will shrink. Any research that can deliver lower costs for vegetable

growers should be embraced.

#### Mechanisation – a packaged approach

The vegetable industry has invested funds into projects that aim to reduce labour costs through mechanisation, but for mechanisation to be successful in delivering better profit outcomes a holistic approach is required. For instance, it is well-known that mechanical harvesting of above ground field vegetables is often not profitable due to the wastage rate. Adapting farm outlay and development of new varieties, which enable more uniform development of vegetables, enhances the economics of mechanical harvesting. A programmed approach towards research and development in the area of mechanisation would reap benefits to growers.

#### THE BOTTOM LINE

- Latest data from the Australian Bureau of Agriculture and Resource Economics and Science (ABARES) shows that labour accounts for between 26% and 41% of total cash costs of production for vegetable growers.
- Mechanisation can be a successful way to reduce labour costs and deliver better profit if growers are open to adapting farm outlay.
- Globalisation is engulfing the vegetable industry and any research into mechanisation that can deliver low costs to growers should be embraced.

For more information lan James is Project Leader of the Economic sub-program of the Vegetable Industry Development Program. Project Number: VG08040







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## Around the states

#### Western Australia

## vegetablesWA

The growers of Western Australia extend our sympathies to fellow vegetable growers in the eastern states who have suffered losses as a result of the floods. Unfortunately, the west coast has certainly not been immune to the ravages of this sunburned country, which have wrought so much damage elsewhere.

Before Christmas, the important Carnarvon growing region was also devastated by the worst flood event in many years, which has had a significant impact on many growing families. The Carnarvon Growers Association and vegetablesWA have been active in assisting growers to respond and the state government has offered grants to help growers, including to replace lost topsoil, but the impact has been severe.

Following this tragedy, the Carnarvon area has subsequently been inundated with Spur Throated Locusts, which have also done significant damage, particularly to seedlings.

The metropolitan growing region has not received any significant rainfall since the second driest winter on record. In late January, a serious meeting was held by vegetablesWA at Canzirri's for growers to hear from the WA Department of Water about licence allocations. A large number of growers attended to hear the key message that there were no plans to reduce allocations at this stage, however, following the lack of recharge to the aquifers last winter, the situation was so tight that the department would be very vigilant in undertaking their compliance and enforcement roles.

Growers were also able to raise a range of concerns about water and future land planning with the department.

WA growers are again being offered assistance of up to \$1,000 by vegetablesWA to cover the costs of attending the 2011 National Convention. Anyone seeking to take up this offer is urged to contact Hayley Wilson at the office as soon as possible on (08) 9481 0834. The vegetablesWA marketing program has had some exciting developments. vegetablesWA organised the inaugural meeting of the WA Produce Marketing Group, which seeks to foster marketing collaboration across a range of previously separate marketing programs by different WA organisations.

Members discussed their various marketing programs and opportunities for collaboration. Moving forward, the group will work together to compile lists of events, campaigns, research and other useful information to share.

The group also confirmed its terms of reference and agreed to expand the membership to include fruit, avocados, mushrooms and other groups that work to promote produce to WA consumers. We are excited about the potential impact that combining our efforts may have in driving consumer demand and prices for WA produce.

Uptake of the Vegetable Irrigation Scheduling System (VISS) continues to increase, particularly as growers see the benefits of improving their water use efficiency in this very dry season, as well as using the system as a record-keeping and planning tool. Growers interested in discussing this free tool provided by vegetablesWA should contact Field Extension Officer Charlotte Butler on 0427 373 037.

vegetablesWA also recently teamed up with the NSW Irrigators Council to provide information on VISS and presentations from four leading east coast irrigators to share experiences from their innovative irrigation techniques and the results, which helped them improve productivity, increase water efficiency and boost profitably. Growers reported that they picked up a number of useful ideas. The Gingin forum was hosted at the Dobra family's Loose Leaf Lettuce and the forum in Harvey was also very well attended.

#### Jim Turley

Executive Officer vegetablesWA Phone: (08) 9481 0834. Email: <pga-vga@ vegetableswa.com.au>

#### South Australia



#### First and foremost

First and foremost, heartfelt sorrow and sincere feelings of grief go out from us at Grow SA, and on behalf of the South Australian vegetable industry, to all those who have suffered so terribly with the recent, shocking and tragic weather events-not only those in the vegetable and horticultural industry, but right across all areas of the Australian community.

#### **Looking Forward**

Early March will see Grow SA

host an eight-week program with a focus on attracting new entrants into the vegetable industry. Growing Opportunities, as the title suggests, will enable job seekers who experience barriers to enter skilled employment in the vegetable industry with nationally recognised pre-vocational training, support and assistance targeted to an Australian Apprenticeship pathway.

The Grow SA greenhouses in Virginia and on adjoining land will be the central training point for the majority of the program. Hydroponic and traditional growing systems, identification and application of chemicals, identification of plant pests, disease and disorders, maintenance of farm property and structures and postharvest operations are some of the skills and course content that participants will address. Several key vegetable industry employers in the Virginia area will open their doors to the program, enabling participants to gain a first-hand insight to the 'real' industry mode of operation, while themselves being able to observe potential new employees.

#### Please not us!

With the horrific and tragic weather events that this great nation has witnessed over the past months, the South Australian vegetable industry has so far, and touch wood, escaped the wrath of the 'weather Gods'. The south east vegetable and potato growers were the recipients of a band of heavy rain, and while some did in fact have loss, most would be counting their blessings having seen what their counterparts endured in other states. In Virginia, a handful of glass/ greenhouse growers suffered flooding and a high loss of produce at the point of harvest. It would appear that South Australia, at the point of scribing this article, has the least affected 'food bowl' in Australia and is able to supply at full capacity to assist in filling the nation's fresh market vegetable requirements.

#### Denis Leonard

Chief Operating Officer Grow SA Phone: (08) 8282 9200 or 0428 316 707 Email: <denis.leonard@growsa. com.au>

#### Victoria



The New Year brought people together not only on the land, but from communities across the eastern states, as a result of the devastating floods and heavy rainfall. Unpredictable weather patterns turn drought into flooding and this makes one realise that Australia can be both a cruel and kind country for all inhabitants.

Reflecting on the events of the past year, it is remarkable

that the Honorary President of VGA Vic, with assistance from a part-time executive officer, has made so much of his valuable time available to attend meetings, not only in Melbourne but in other Victorian vegetable growing areas, and on behalf of the industry to lobby state government.

This year is developing into another bumper year of activities, starting with grower meetings in conjunction with AUSVEG, Victorian DPI Horticulture Industry Network Project (HIN) and the HAL Vegetable Industry Development Program (VIDP).

VGA Vic is introducing a new communication note called 'IN THE FIELD', supporting our two IDOs in providing a regular

flow of industry information and direct 'on farm contact' with Victorian vegetable growers.

Contacts: Helena Whitman IDO West, Tel: 0407 772 299 and Slobodan Vujovic IDO East, Tel: 0422 583 784.

An important occasion for vegetable growers will be the forthcoming National Vegetable Expo, scheduled for 5 and 6 May 2011 at Werribee. This biennial event is a major drawcard for growers to view different crop varieties and provides industry suppliers with the opportunity of showcasing the latest technology.

Further information is available from Expo Coordinator Claire Luppino on 0427 335 518. Mechanisation is becoming

the buzz word for vegetable

growers in the same way that IT changed the communications industry.

Our national organisation AUSVEG will be unveiling more detailed information leading up to its 2011 National Convention to be held from 14-16 April in Brisbane.

For the latest in vegetable information for Victoria, see our website www.vegetablesvictoria. com.au or www.vgavic.org.au

#### **Tony Imeson**

Executive Officer VGA Victoria Phone: (03) 9687 4707 Fax (03) 9687 4723. Email: <contact@vgavic.org. au>

#### **New South Wales**



In NSW we are gearing up for the state election on March 26. The Association has a state election strategy focused on: growing agricultural productivity and ensuring food security; growing vibrant regional communities; transport and infrastructure solutions and planning natural resources and development for a sustainable regional NSW.

Calls to action that will benefit vegetable producers include: the reinvigoration of the

management of biosecurity in NSW; a commitment to building the Blue Mountains expressway; restoring agricultural extension services; increasing investment in NSW government-funded rural productivity research and development and the development of a NSW coastal water strategy.

The rain received at the start of 2011 has made it one of the worst seasons for damage by Heliothis caterpillars. There has been huge caterpillar pressure on crops such as sweet corn, cabbage and cauliflower.

Identification of opportunities where mechanisation can improve profitability of vegetable businesses is becoming increasingly important in light of increasing labour and input costs and imports. A recent example of where mechanisation has benefitted vegetable producers is in central west NSW, where a colour sorter is now being used in sweet corn processing. This allows the whole crop to be processed and the darkened grains from caterpillar damage to be removed, rather than the crop being rejected. This has proved particularly beneficial this season as there has been up to 25 per cent damage due to caterpillars.

With the arrival of apple imports into Australia for the first time in more than 90 years, the Association and other industry organisations have been receiving a large amount of attention from the media about Country of Origin Labelling (CoOL) and support from consumers. Let's hope that this assists Australian horticultural industries through increased consumer awareness about the requirements of retailers to display CoOL, and in CoOL getting the attention it deserves by our government representatives.

#### Peter Darley Chairman

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

#### Queensland



#### Economist's attack ill-informed and offensive

Economist Saul Eslake's vitriolic attack in the media about the horticultural industry and the operation of the industry was ill-informed and offensive.

Mr Eslake's claims of 'profiteering by fruit and vegetable growers' after the widespread destruction of the Queensland/Victorian floods and Cyclone Yasi were offensive and reflected a clear lack of understanding of the industry. Clearly, Mr Eslake wants a bet each way, a free market but with controls he deems appropriate.

He seems to be implying that when supply is plentiful and prices are low, growers should just cop it sweet, however, when supply is restricted, Australia should import even more than it currently does, at the expense of local producers.

To top it off, Mr Eslake suggests that Australia's biosecurity regime should be cast aside despite the years of study and science involved in biosecurity arrangements.

The horticultural industry is highly critical of suggestions by Mr Eslake that the country's biosecurity arrangements should be dismantled for six months to enable produce to be imported while the domestic price is higher than usual.

Australia's biosecurity arrangements are founded on principles of science and in a genuine attempt to protect our nation's valuable agricultural industries from overseas pests and diseases which, should they reach our shores, would see the collapse of the local industry.

Clearly, this is in the national interest and should not be confused with protectionism.

No such protectionism exists. Indeed, Australia is already a major importer of fruit and vegetables annually.

Saul Eslake's comparison of the horticulture industry with the airline industry (Ansett and Qantas) of former days brings up a different but good analogy.

This cosy duopoly was very

similar to the one that exists now at the retail end of the fruit and vegetable supply chain.

Mr Eslake's implication that producers are 'greedy and grasping' is insulting. No individual grower alters the price of a product.

This attack is extremely disappointing given Mr Eslake's long career as an economist. His arguments were clearly designed to appeal to a particular audience, not the national interest.

#### Alex Livingstone

Chief Executive Officer Growcom Address: Floor 1, 385 St Pauls Terrace Fortitude Valley QLD 4006 Phone: (07) 3620 3844 Fax: (07) 3620 3880



#### The 'wisdom' of Saul appalls

I don't know who is making me more angry at the moment; there's no shortage of candidates.

- Tasmanian government agencies that buy their eggs and their electricity from outside Tasmania while encouraging consumers to support the 'Brand Tasmania' program;
- Coles, Woolworths and their ilk undermining the whole fabric of Australia's farming industry with their unsustainable pricing of generic milk–which is just the thin edge of the wedge; and
- Former Tasmanian economist Saul Eslake who, frankly, is talking nonsense when he talks about farmers profiteering from Queensland's spell of appalling weather. In the

same breath, he advocates importing fruit to keep prices down. He might be a respected economics commentator, but he simply doesn't know what he's talking about on this matter.

For those who did not read his comments, Mr Eslake told the *Sydney Morning Herald* that fruit and vegetable growers who had not been affected by the cyclone or flood were being "plain greedy" and "exploitative" in increasing their prices to cover any shortfall in supply caused by the weather events.

There are several problems with his assertion.

First, the market is the result of supply and demand. In an ideal market, the balance between supply and demand is what sets the price.

If other growers are making profits in this situation, and it is a supply and demand economy, so what? We seem to take the hits all the rest of the time. There is no moral dilemma in making a profit when there is a legitimate profit to be made. I understood that making a profit was the key reason for being in business. But fruit and vegetable growers are price takers. They don't set the price that wholesalers and retailers pay them for their commodities.

They have to take what they are given. If fruit and vegetable prices soar, as Mr Eslake suggests, then perhaps it is somebody else who is profiteering: the usual suspect, the middle man.

Mr Eslake, the free marketeer, should take a look at the middle men to see who's making profits at the moment. It is they who take advantage of situations like this.

As the latest supermarket price war with milk demonstrates, the major retailers operate under a different set of rules to the market. Their rules.

But the Eslake solution to alleged profiteering by Australian growers is what most alarms me.

"It doesn't have to be this way," he says.

"The government could minimise the impact of the Queensland floods and Cyclone Yasi on the prices of fruit and vegetables by allowing sufficient supplies to be imported until domestic production has recovered to normal levels."

That's a brilliant idea. Let's open the floodgates to imported produce from anybody that can rustle up a ship to get to Australia. So all the years Australia has spent protecting its farmland from imported diseases will have been wasted, sacrificed at the altar of Mr Eslake's free enterprise remedy for the supposed ills brought on by Cyclone Yasi.

Australia's biosecurity should not be compromised to get around short-term supply problems. For a few weeks, we can eat some of our more exotic fruits rather than bananas; or coleslaw instead of lettuce. We are spoilt for choice in Australia–and minor interruptions to our normal supply should not lead to panic stricken ill-informed economic rationalist nonsense like this.

#### Jan Davis

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