vegetables australia

November/December 2010

Malcolm Jackman

Taking Elders back to the top

Danny De Ieso
Standing his ground

MasterChef coup
AUSVEG National Convention

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AUSVEG HAL
Know-how for Horticulture™

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FRONT COVER:

Malcolm Jackman, CEO of Elders.

Photo by Andrew Beveridge

John Brent
AUSVEG Chaiman

In the blink of eye, 2010 will draw to a close and another new year will be upon us. At this time I would like to thank all members of the vegetable industry for contributing to what has been a very exciting and successful year for AUSVEG.

Through the great work of our CEO, Richard Mulcahy, and his hard working team at AUSVEG, we were able to make good on our promise to deliver a National Convention with an unprecedented level of both grower and industry support.

The inaugural AUSVEG National Convention was held in May on the Gold Coast and brought together 650 members from all levels of the vegetable and potato industry supply chain, including a large number of growers.

Our leading strategic partners, Elders, DuPont, Syngenta and Bayer CropScience, cannot be underestimated in the strengthening of AUSVEG, and along with the support of our other partners, have made this year one of our most successful yet.

In September, AUSVEG also celebrated its move to new offices closer to the Melbourne CBD.

These premises are part of a new beginning at AUSVEG, coinciding with the launch of a new Public Affairs Program, which will work hard to increase the vegetable industry's ability to provide a voice for growers in both federal politics and the supply-chain.

AUSVEG and the vegetable industry is building momentum toward 2011, with preparations for an even bigger National Convention—to be held in Brisbane between 14-16 April—well and truly underway. A number of other exciting initiatives will begin in due course.

Finally, I was privileged last month to join a recent study tour to the USA and in the process meet Keith Frank, Agriculture Advisor to Senator John Cornyn, a leading Republican Senator from the State of Texas. We spoke about a number of issues affecting agriculture in both Australia and the United States. This meeting will be reported on in greater detail in the near future.

On behalf of my Board of Directors, I hope you have a safe and happy festive season and wish you all the best for 2011.

John Brent
Chairman
AUSVEG

AUSVEG Chairman, John Brent (far right) and Toby Gibb (centre), member of the USA Grower Study Tour, meeting Keith Frank, Agriculture Advisor to Texas Senator, John Cornyn (left).

Richard Mulcahy
AUSVEG Chief Executive Officer

One of the major objectives of the AUSVEG Board for 2010, was the establishment of a Public Affairs programme to open communications channels with all major political parties at the federal level.

Following the success of the inaugural AUSVEG National Convention in May, this plan now has the resources to begin to have an impact.

Several weeks ago I was privileged to have a lengthy briefing session with our new Federal Minister for Agriculture, Queensland Labor Senator, The Hon Joe Ludwig. I shall report on this meeting in more detail in the near future. Many issues were covered in the two hour meeting and the Minister is clearly well-informed about and very supportive of horticulture.

In October, Hugh Tobin, AUSVEG Communications and Public Affairs Manager, attended the Griffith Murray-Darling Basin Community Information Session.

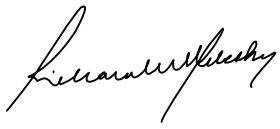
Numerous points of concern were raised at the meeting and the Federal Government has now appointed New South Wales rural independent, Tony Windsor MP, to head an inquiry into the human consequences of the proposed cuts to water use in the Murray-Darling Basin.

AUSVEG will continue to be involved with this issue to ensure growers are kept well-informed and their views well-represented at the federal level.

By the time you're reading this, AUSVEG will also have completed a series of meetings with key political figures from all major political parties in Australia. We are determined to convey the views of our constituents and as further evidence of our commitment to this cause, AUSVEG recently joined the Horticulture Taskforce (HTF). The taskforce is made up of the chief executive officers from the major horticulture organisations in Australia and through this united body, we are now better placed to represent our combined interests.

I will perform the role of Deputy Chair of the HTF, supporting the Chair, Mr Tony Russell, General Manager of Apple and Pear Australia (APAL).

Horticulture is one of Australia's most important industries, and a key part of our national economy. The establishment of this taskforce will lead to more efficient and targeted use of resources that ensure horticulture is given the consideration it deserves in decisions made at the federal level. It will also lead to a stronger voice on issues critical to the survival of the vegetable industry, including labour and food labelling legislation, food regulations and international trade agreements.



Richard J Mulcahy
Chief Executive Officer
AUSVEG

Editorial

The November/December edition of *Vegetables Australia* will be the last for 2010, and what a year it is has been.

The inaugural AUSVEG National Convention, Trade Show and Awards for Excellence were undoubtedly a highlight in 2010. The event allowed *Vegetables Australia* to secure interviews with many leaders in agribusiness in Australia, along with celebrity guests, and of course the many characters growing vegetables in Australia.

Independent Senator for South Australia, Nick Xenophon; Elders Ambassador and cricketing legend, Glenn McGrath; Major General Michael Jeffery, Horticultural Australia Limited CEO, John Lloyd, research scientist; Ian Porter and Syngenta Grower of the Year, Jim Trandos, are just some of the names who have featured in 2010.

In this edition of *Vegetables Australia* we have continued this trend by securing an interview with Malcolm Jackman, CEO of Elders. The 171-year-old organisation is synonymous with regional Australia, but has a fight on its hands to survive the current tough economic climate. Turn to page 20 to read about Mr Jackman's vision Elders.

While interviews such as these have given the magazine a new voice, it is the Research and Development (R&D) projects profiled which provide the backbone of each issue. We have profiled a number of projects that are influencing the viability of growers and we will continue to communicate how the National Vegetable Levy is being invested on your behalf.

On page 30 you will find a great example of how project leaders are maximising levy funding and bringing about a real on-farm benefit for growers. Minor-use Coordinator, Peter Dal Santo has led the push for an increase in support from product manufacturers, who are now providing a significant funding contribution to the pesticide minor-use program.

Vegetables Australia is already looking toward the January edition and kicking off 2011 with a bang.

We wish you a safe and happy Christmas and hope 2011 is a successful and profitable year.

MasterChef coup

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Malcolm Jackman

Taking Elders back to the top

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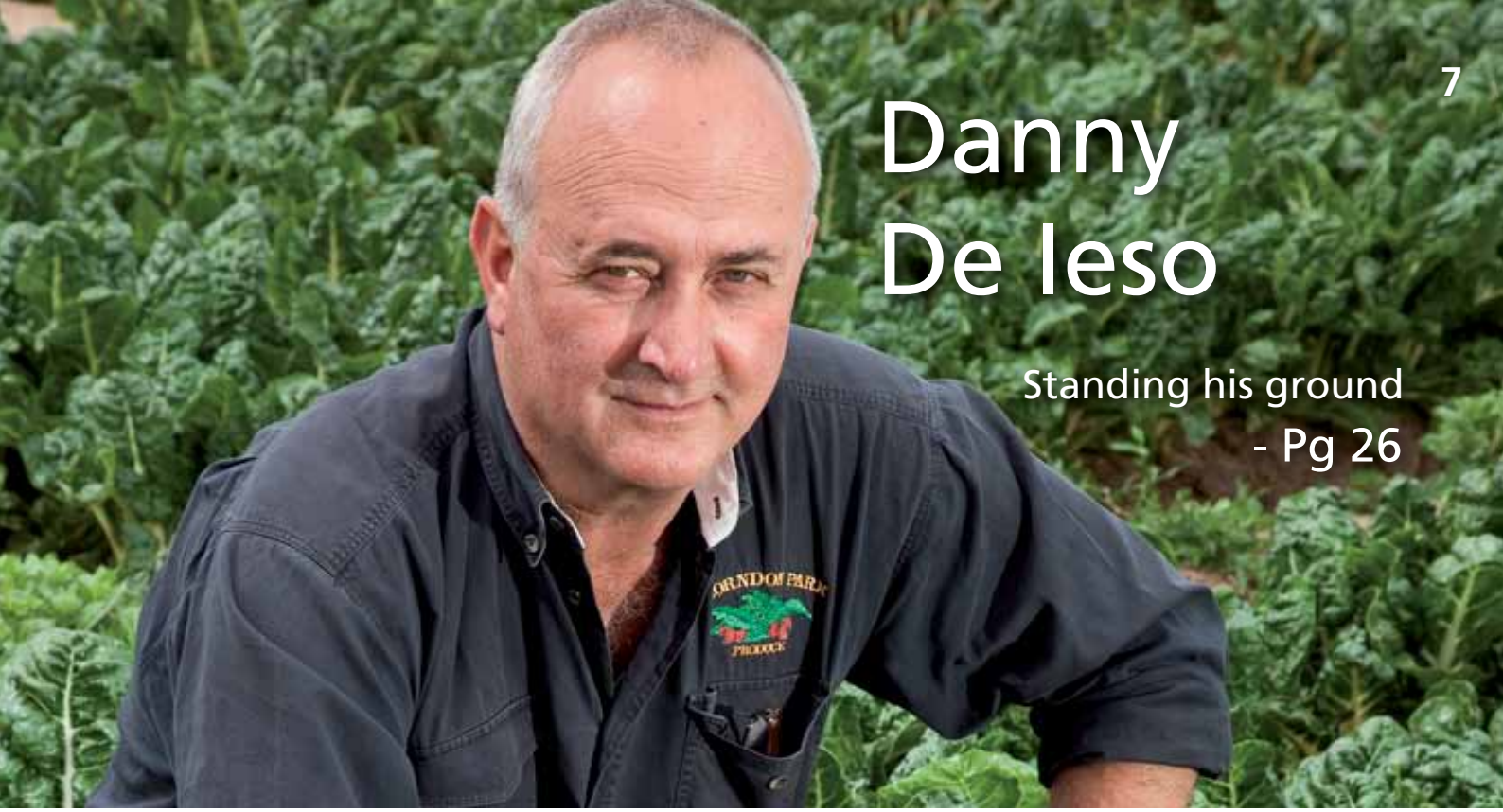

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AUSVEG celebrates opening of new premises!

1)

Growers, politicians and members from across the industry supply chain, including representatives from some of Australia's leading agribusinesses, joined AUSVEG staff and board members to celebrate the opening of AUSVEG's new offices in September.

The Honourable Joe Helper MP, Victorian Minister for Agriculture, opened AUSVEG's new premises in Glen Iris, Victoria on Tuesday, 14 September.

AUSVEG CEO, Richard Mulcahy, said the office opening enabled growers, stakeholders, politicians and key vegetable industry personnel to network whilst celebrating the opening of the new premises, which are closer to the Melbourne CBD and will enable AUSVEG to better accommodate the growing needs of the sector.

"The opening signifies another step in AUSVEG becoming a stronger and more financially stable organisation, one that is better placed to represent the interests of Australian vegetable and potato growers," Mr Mulcahy said.

In attendance were: The Hon. Paul Lennon, former Premier of Tasmania; The Hon. Josh Frydenberg MP, the Liberal Member for Kooyong; Senator John Williams, Australian National Party; Mr John Lloyd, CEO Horticulture Australia Limited; Mr John Brent, AUSVEG Chairman; Mr Luis Gazzola, President Vegetable Growers Association of Victoria; Ms Maureen Dobra, President vegetablesWA; Mr Des Jennings; President Victorian Potato Growers Council, as well as many other key industry stakeholders and growers from across Australia.

The evening was sponsored by E.E Muir & Sons, a privately owned company operated by the Muir family.

E.E Muir & Sons is a major distributor of fertilisers, chemicals, seeds and other farm supplies to the Australian agricultural industry, primarily based in Victoria, but also with branches in New South Wales and South Australia.

> "The opening signifies another step in AUSVEG becoming a stronger and more financially stable organisation, one that is better placed to represent the interests of Australian vegetable and potato growers."

The new premises has already played host to several important meetings between AUSVEG and members from the major Australian political parties, discussions with expert research scientists from around the world, and seen members of the Vegetable Industry Advisory Committee meet to discuss research and development solutions for the critical issues facing the industry.

"On July 1 this year, AUSVEG launched its new Public Affairs Unit and these new national headquarters will position AUSVEG to lobby government and represent growers and our industry at a national political level," Mr Mulcahy said.

Opening the office, Minister Helper raised the threat of locusts as an example of the important role AUSVEG plays in communicating key information to growers throughout Australia.

"It's organisations such as AUSVEG through their various publications and the weekly update that we are using to engage with thousands of landholders that will be affected by locusts," Minister Helper said.

The Minister also highlighted the important role vegetable and potato growers, and the broader horticulture industry, has to play in creating a healthier nation through nutrient-rich produce.

"The horticulture industry has an incredibly important role to play in providing a solution to the increasing health issues arising in Australia," he said.

2)

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1) [From left] AUSVEG CEO Richard Mulcahy, AUSVEG Chairman John Brent and the Honorable Joe Helper Victorian Minister for Agriculture unveiling the plaque for the official office opening.
2) The Hon Joe Helper, addresses the audience at the official opening.
3) Valerie Bonython and Richard Dickmann, Head of New Business Development, Bayer CropScience
4) [From left] AUSVEG Marketing Manager William Churchill, Ian Muir, Manager/Director E.E Muir & Sons and Richard Mulcahy
5) [From left] Richard Mulcahy; Syngenta General Manager, Paul Luxton; Josh Frydenberg MP, the Liberal Member for Kooyong; John Brent; Elders CEO Malcolm Jackman
6) Guests enjoy the networking opportunity

6)

International Grower Study Tour *to* Germany *and the* Netherlands

From 8-18 of February 2011
Including the Fruit Logistica in Berlin, Germany
Expression of interest welcomed

Travel for ten days through Germany and the Netherlands, visiting advanced growing facilities and high tech farming operations. Not only will participants be able learn about vegetable growing in a foreign environment but they will also be able to attend the World's Leading Trade Fair for the fresh fruit and vegetable industry, Fruit Logistica in Berlin.

Fruit Logistica, which will take place between 9-11 February, is considered the most important business and communication arena for international fresh produce, with key decision makers, international leaders in agribusiness, supply chain representatives and government officials from more than 2,000 companies from across the world in attendance.

The tour will kick off on Tuesday, 8 February and conclude on Friday, 18 February 2011.

International Study tours are an amazing opportunity to learn more about global industry developments and also to develop extensive networks with both Australian and international growers.

Please contact AUSVEG, Communications Officer, Elizabeth Cox on (03) 9822 0388 or email elizabeth.cox@ausveg.com.au

VGA President Luis Gazzola on the 2010 Study Tour

2010 Fruit Logistica Convention in Berlin

Luis Gazzola and Boomaroo Nurseries' Eric Jacometti at the 2010 Fruit Logistica Convention in Berlin

Leading vegetable growers set to take on global challenge

Two vegetable growers were awarded 2011 Nuffield Australia Farming Scholarship last month and will travel overseas next year to investigate innovative farming techniques.

Two growers, Scott Samwell from Mount Barker, South Australia, and Andrew Dewar from Clifton, Queensland, will travel abroad on study tours in 2011 with the aim to bring back new information that will benefit the Australian industry.

AUSVEG spokesperson Andrew White said that leadership in the vegetable industry was particularly important right now, given the challenges growers are facing in terms of imports and rising input costs.

"Growers are doing all they can to break even at the moment and are looking for an edge in any area they can get it. Unfortunately, rising input costs are one of the biggest barriers that growers are facing to stay viable and compete with their international competitors, who've much lower input costs and can undercut the domestic market," Mr White said.

"In the context of these global challenges facing growers, the research the scholars will be doing on their international study tours has the potential to provide a valuable contribution to the industry overall," he said.

Mr White said the two growers would be looking into a range of relevant topics including soil and plant interaction and summer production of vegetables using shelter crops.

i For more information contact:
Dianne Fullelove from the Vegetable Industry Development Program
Email: <diannefullelove@optusnet.com.au>
Phone: 07 3374 0453

North QLD Grown

Another locally grown produce campaign has been launched, this time in North Queensland where supermarket chain, Woolworths, will label locally grown produce with 'Nth Qld Grown'.

A new locally grown campaign launched in North Queensland follows a similiar initiative in Tasmania in September.

The logos have been designed so that customers can easily identify locally grown produce.

"This is a fantastic initiative by Woolworths to promote locally grown produce and make it easier for consumers to identify North Queensland produce in North Queensland stores," Queensland Premier Anna Bligh said.

"North Queensland agribusiness generates in excess of $3 billion in farm gate value each year and the industry is growing at 5 per cent per annum."

Mr Tony Klatt, Woolworths' Produce Operations Manager in Queensland, said the new labelling had been driven by strong feedback from shoppers.

"Our customers have made it clear they want more information about locally grown fresh food so they can choose to support the local agricultural industry when they shop," he said.

"Depending on seasonality, local produce such as: bananas, potatoes, pumpkins, fancy leaf lettuce, green beans, fresh herbs, corn, paw paws, papaya and honeydew melon can be found in our fresh fruit & vegetables departments."

Minister for Primary Industries, Fisheries and Rural and Regional Queensland, Tim Mulherin, said North Queensland farmers produced some of the best fruit and vegetables in the world.

"This initiative by Woolworths is another way consumers can identify these top quality local products grown right here in North Queensland," he said.

Growers urged to help

TNS Research is undertaking a survey in November 2010 for the Department of Education, Employment and Workplace Relations (DEEWR) on the demand for seasonal workers in the horticulture industry.

A survey conducted by TNS Research is designed to provide information on the supply and demand for seasonal labour in horticulture, recruitment and engagement models, business planning and future workforce needs.

Findings from the research will contribute to understanding the labour market requirements of the horticulture industry and to workforce planning.

The survey aims to explore:

- The level of unmet demand for seasonal workers in the horticulture industry.
- The demand for seasonal workers by region, harvest and time of the year.
- The current recruitment and business practices utilised to employ seasonal workers.

If you own or manage a horticulture business, TNS would like ask for your support by participating in an online survey.

i To register to participate in the survey or to receive more information please email growers.survey@tns-online.com.

VA 2010 Reader Survey winner announced

Armidale vegetable grower, Mr Barry Christie, has won $2000 worth of crop protection products from our generous sponsors, Bayer CropScience, to be supplied through Elders.

The broccoli grower, was recently announced as the winner of the 2010 Reader Survey giveaway.

Mr Christie was the lucky grower drawn out of a hat from those who answered our reader survey which accompanied the September/October edition of *Vegetables Australia.*

The products are sure to be an early Christmas present for the Armidale grower, who was contacted by a Bayer representative earlier this month.

Bayer CropScience

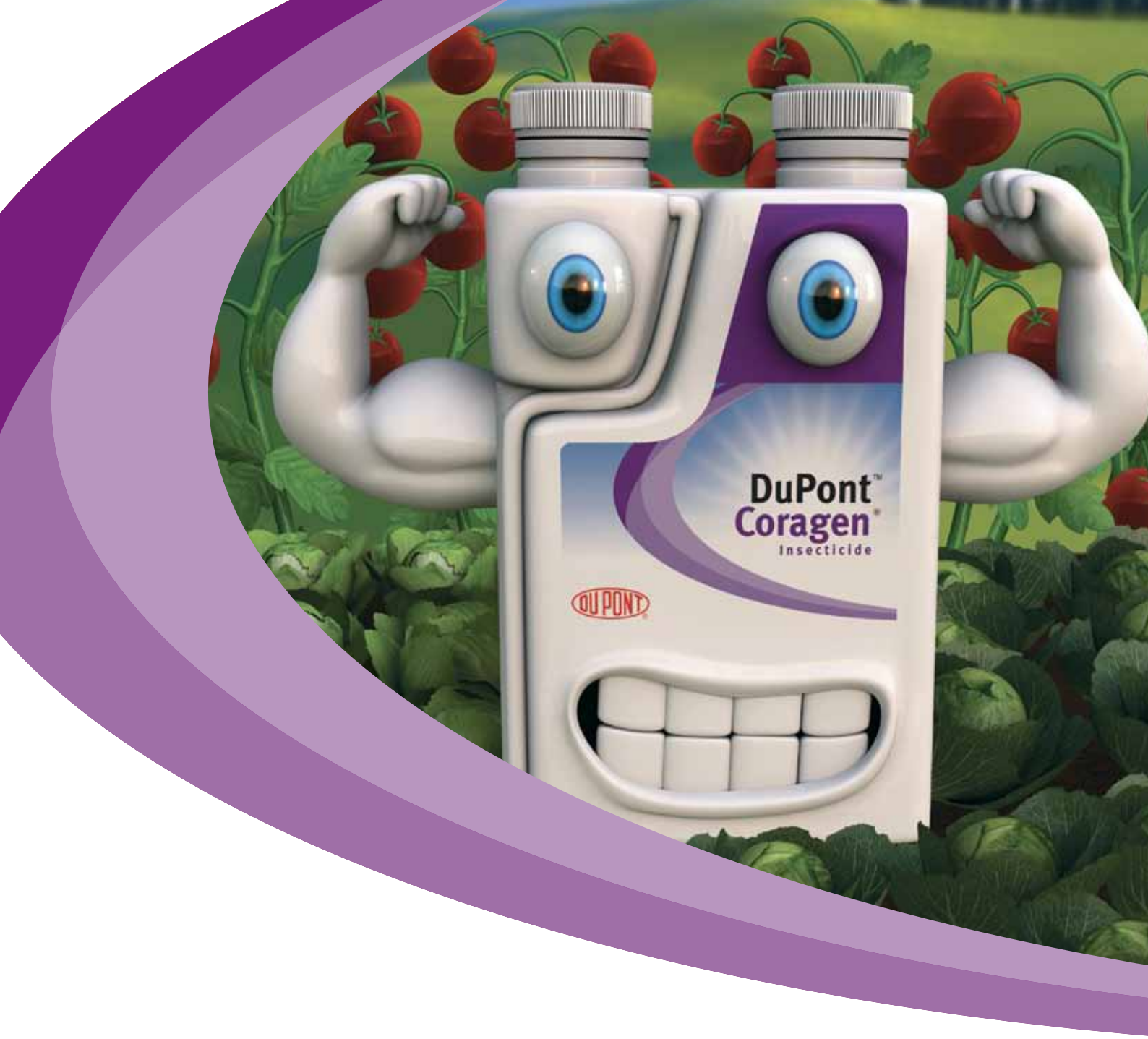
Bayer CropScience and AUSVEG renew strategic partnership

Bayer CropScience and AUSVEG have re-entered a strategic partnership that aims to provide benefits to Australian vegetable and potato growers.

As in the previous 12 months, the partnership will result in close collaboration between the two organisations on issues specific to the horticulture industry and enable growers to share in the collective expertise of both companies.

This is yet another example of Bayer CropScience working with partners to identify market opportunities and solutions that will enable growers to produce healthier crops more efficiently and more sustainably.

Bayer CropScience will be involved in a number of industry events planned to take place over the next 12 months, including the AUSVEG National Convention, Trade Show and National Awards for Excellence scheduled to be held at the Sebel-Citigate in Brisbane from April 14-17.



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New insecticide released

A new soil-applied insecticide promises benefits for vegetable growers, reducing pesticide usage and associated exposure for farm workers, consumers and the environment.

Newly released chemical, DURIVO® is said to provide long-lasting protection against an army of grubs, aphids, thrips and other pests in early season vegetable crops.

Its manufacturer Syngenta says a single treatment at seed planting protects young plants against pests for up to 40 days, eliminating the need for up to eight conventional foliar or leaf sprays.

DURIVO is applied at or before planting which may reduce potential spray exposure for workers and deliver benefits for consumers and the environment.

Syngenta also believe that besides its excellent insecticidal properties, it can produce a visible vigour effect in young plants, allowing them to express their full genetic potential.

Clyde district vegetable grower, Mr Travis Talbot, who hosted a pre-registration trial last summer, estimates DURIVO will cut up to five foliar insecticide applications from his spraying program.

"The first four weeks were fantastic; it kept Diamondback Moth, Cabbage Moth and other major pests at bay in cauliflowers for nearly a month," he said.

"To have residual control for 40 per cent of the growing period is fantastic. Those first four weeks after transplanting are vital in getting the crop established."

With his brother, Wayne, and parents, Rob and Kerrie, Mr Talbot grows cauliflowers, cabbages and lettuces on the family's 40 hectare property south east of Melbourne. Seedlings were treated with just 0.03mL of DURIVO per plant before delivery from Boomaroo Nurseries.

Spring release

DURIVO will become commercially available this spring following its recent clearance by the regulatory body, the Australian Pesticides and Veterinary Medicines Authority (APVMA).

Mr Talbot said that DURIVO offers many benefits above and beyond its insecticidal properties.

"The plants actually looked a lot healthier in the ground and there wasn't any damage to the leaves," he said.

"Cutting out those four to five sprayings saved us plenty of time."

"We were also able to water our crops pretty much straight away, instead of having to wait for the sprays to dry."

Mr Talbot also spoke of the benefit of reduced human exposure.

"We have 12 full-time staff and any time you can cut out your exposure to chemistry it's a good thing," he said.

i For more information please call the Syngenta Advice Line on 1800 067 108 or visit www.syngenta.com.au.

Above: Travis Talbot, Victorian grower
Top left: Elders' Pakenham senior agronomist, Brian Brewer, and Travis Talbot in a crop of cauliflower at his family's vegetable farm at Clyde, south-east of Melbourne.

Perfect partners

AUSVEG has welcomed VISY Fibre Packaging as a new strategic partner after a multi-year agreement was announced in October.

AUSVEG will be better placed to represent the interests of vegetable and potato growers after entering a new multi-year strategic partnership with VISY Fibre Packaging.

AUSVEG Chief Executive Officer, Richard Mulcahy, together with VISY Fibre Packaging National Sales Manager, Wayne Dunne, announced a partnership between the two companies in October, that will bring long-term benefits to Australian vegetable and potato growers.

VISY Fibre Packaging is a division of VISY, one of the world's leading privately owned packaging, paper and recycling companies. It employs over 5,600 people, operating from 110 sites.

"We are very excited about the opportunities we anticipate will arise from this new partnership between AUSVEG and VISY Fibre Packaging," Mr Mulcahy said

"Vegetable growers are striving to meet increasing consumer demand for effective, innovative and environmentally friendly packaging."

"The partnership will result in close collaboration between the two organisations on issues specific to the horticulture industry and enable growers to share in the collective expertise of the organisations."

Wayne Dunne, National Sales Manager, VISY Fibre Packaging, said he was looking forward to the benefits the partnership between the two companies would bring about.

"Investment in the Australian horticultural industry remains important to VISY Fibre Packaging, with one of our key lines being fruit and vegetable produce packaging," he said.

"Our extensive ranges of corrugated cardboard boxes provide a practical solution for almost every vegetable in the market."

"We are looking forward to working with AUSVEG and Australian vegetable and potato growers more closely to ensure our products best meet their needs."

Environmental Focus

VISY is committed to environmental management and operating sustainably. Amongst its many environmental programs, VISY works with the AFL's Carlton Football Club on environmental matters.

AUSVEG is also active on environmental management and said it will be working closely with VISY on environmental issues pertinent to the Australian vegetable growing industry, especially through the vegetable industry's EnviroVeg Program.

VISY will be involved in a number of industry events planned to take place over the next 12 months, including the AUSVEG National Convention, Trade Show and National Awards for Excellence, scheduled to be held from 14-16 April 2011 in Brisbane.

Veginsights
The Market – Q2 10
Released

To recieve a copy of The Market – Q2 10 please phone AUSVEG (03) 9822 0388

The Veginsights quarterly report, *The Market – Q2 10* is now available. Prepared by Freshlogic as part of the Vegetable Industry Development Program. It provides market definition, quantification, and insights into the vegetable market and consumer behaviour in the second quarter of this year.

The report confirms the settings for the market and provides consumer analysis. It looks at how they may have altered in the second calendar quarter of 2010. It quantifies the annual market size in values of all forms of retail vegetables at $7.05 billion and profiles the market for the three-month period ending 30 June 2010.

Photo: Toby and Greg Jess with their bean crop, which received applications of ENTEC treated Nitrophoska Special fertiliser. The Jess family saw a significant yield increase when they switched to using the treated fertiliser.

Veggie growers make the switch

A new treatment for Nitrogen fertilisers is helping vegetable growers increase their productivity.

Gympie vegetable grower, Mr Greg Jess, believes the benefits of ENTEC treated fertilisers have increased productivity in his irrigated bean crop.

Mr Jess operates a 80 hectare property east of Gympie with his wife Cheryl and son Toby, growing a wide variety of horticultural crops.

According to Mr Jess, the products have improved production outcomes while reducing risks in unpredictable seasons by slowing the process of nitrification, reducing spikes of nitrate and lowering the risk of nitrate leaching and denitrification.

"We switched to using Nitrophoska Special fertiliser a couple of years ago and when we were told it was available with ENTEC, we thought we'd see how it went," Mr Jess said.

Mr Jess said the differences in yield and quality when using ENTEC treated Nitrophoska Special in the snap bean crops, together with favourable weather conditions, were significant.

"Our hand-picked beans generally yield between 7.5 to 10 t/ha, but with the milder weather and the change in fertiliser, we have been harvesting 13-16 t/ha of packed product, which is a significant yield improvement," he said.

"We have also noticed a more even growth rate in the crop and it is visually greener than previous crops. We think this is because ENTEC keeps the nitrogen in the soils and available to the crop for longer."

Mr Jess said he has also been able to reduce his fertiliser rates due to less nitrogen being lost through leaching.

"The ENTEC treated Nitrophoska Special at planting, combined with the sidedress application of ENTEC treated area, provides a simple but effective fertiliser program," he said.

Ask the industry with Scott Mathew


Scott Mathew, Technical Services Lead from Syngenta

In my travels around Australia, meeting with growers from all over who grow a wide variety of crops, I invariably get asked a number of questions relating to disease, insect and weed control. One common topic has been the effective control of Downy mildew; this is no doubt driven by the persistent wet weather we have been experiencing on the east coast over the spring.

Q: Why do early curative fungicide labels often suggest two consecutive applications 10 to 14 day's apart?

When you apply a curative fungicide product (e.g. Metalaxyl, RIDOMIL GOLD MZ) to a crop, it is usually in high disease pressure situations when your protectant fungicide program has failed to stop a disease infection.

In these situations a significant amount of active ingredient applied (in this case Metalaxyl-M) is used to fight the disease infection that is attacking the leaf tissue, thus reducing the forward protection period to perhaps 7 days. A second application under high disease pressure situations is required to top up; the reservoir of active ingredient inside the leaf and extend the forward protection period out to 10 to 14 days. Therefore, the total length of protection you may see would be 14 to 21 days if applied after the downy mildew infection has occurred.

If you had applied the curative fungicide product (Metalaxyl-M) application prior to the disease infection occurring the forward protection may last 10 to 14 days. If you have applied the curative fungicide product (Metalaxyl-M) prior to the downy mildew infection occurring, the protection that you may see could range from 20 to 28 days (depending on weather conditions after the application).

Q: Is it better to apply a curative fungicide before or after a downy mildew infection has occurred?

In most situations if the weather conditions that are conducive to the development of downy mildew can accurately be predicted, then it is always best to apply a curative fungicide immediately prior to an infection occurring for the following reasons:

- Excellent disease control is achieved.
- Full residual activity due to the active ingredient applied not being used to fight an existing disease infection.
- The plant tissue will not be damaged by the diesease infection, resulting is less energy used by the plant as it does not have to utilise energy to fight the disease.
- Due to less energy being used by the crop it will be able to focus it's energy production on what you want, producing high yielding quality produce.

Q: What is the best way to manage downy mildew?

Good Downy mildew control is achieved through a combination of:

- Minimising the amount of over wintering inoculums on the property.
- Introducing a protectant fungicide (BRAVO Weatherstik, Mancozeb or Copper etc) program early in the season.
- Crop management to facilitate airflow and reduce the length of time leaves remain wet.
- Crop management to allow the best coverage of spray applications.
- If using curative fungicide (such as Metalaxyl-M, RIDOMIL GOLD MZ) in the event of a Downy mildew infection, apply them as soon as possible after the infection has ocurred.
- Applying any fungicide at the correct rate.

Q: What is the difference between curative and eradicant timings?

It is important to understand that CURATIVE fungicide application is an application applied after infection but before visual symptoms appear.

An ERADICANT fungicide application is an application of a fungicide after the disease symptoms become visible. It is never a preferred application timing, applied after infection but before visual symptoms appear.

Ask the industry

If you have a question that you would like addressed, please ring Syngenta on 1800 067 108 or email *Vegetables Australia*: david.oneill@ausveg.com.au.
Please note that your questions may be published.

A win-win for growers and seasonal workers

The Pacific Seasonal Worker Pilot Scheme is proving a hit with growers and seasonal workers alike. Not only are workers from Kiribati, Papua New Guinea, Tonga and Vanuatu earning a stable income which helps their struggling families and local communities, but they are ensuring growers have a reliable and experienced workforce who can return year after year, writes Cynthia Halloran.

Australian farming families are no strangers to doing it tough, constantly facing the challenges of mother nature, the rising costs of inputs and possible labour shortages.

But things may be even tougher for families in most Pacific Islands, where jobs are scarce, infrastructure like roads and power supply is poor, and school fees put education out of the reach of many.

Since August 2008, Australia has been able to alleviate this poverty cycle for some citizens of Kiribati, Papua New Guinea, Tonga and Vanuatu, who can apply to become a Pacific Seasonal Worker and be employed for a six-month season in the Australian horticulture industry.

The Pacific Seasonal Worker Pilot Scheme, a recent government initiative led by the Department of Education, Employment and Workplace Relations, is part of a strategic approach to national and regional development. It aims to assess the benefits of providing Australian horticultural regions facing local labour shortages with access to ready, reliable and returning seasonal workers from Pacific Island countries.

The advantage of the pilot to growers over more itinerant labour such as backpackers, is that the workers, having been employed on their property for a full season, are eligible to return in following seasons as experienced employees, familiar with the enterprise and its work practices.

> “If the workers come back year after year they will be familiar with the farm and they’ll be experienced”

Changing lives

Samiu Tupoumalohi is one one worker who has benefited greatly from this scheme. Mr Tupoumalohi recently returned to Tonga after leading a team of 16 workers for six months on an Ironbark Citrus & Grapes orchard in Mudubberra, QLD.

Mr Tupoumalohi worked long hours and managed to save most of his earnings. When asked what this meant to him, he said that for the first time in his life he was debt free and able to pay for his children’s education. He estimated that over 90 per cent of Tongans are in debt, and many rely on remittances from family abroad

Sam Tupoumalohi working a Ironbark Citrus & Grapes orchard in Mudubberra, QLD.

Above: Sam Tupoumalohi showing Julie Howarth from the Department of Immigration and Citizenship, how to prune the vines.

to pay basic living expenses.

"We have learned to be disciplined, to keep on picking and pruning even when we are tired. I know my wife and children back home now have money to buy food and this reminds me of why I am here and helps me work harder," he said.

Back on the citrus orchard in Mundubbera, Allen and Susan Jenkin are counting on Mr Tupoumalohi's return and that of the rest of the team. The Jenkins are big fans of the Pacific Seasonal Worker Pilot Scheme. They have already requested the Approved Employer: All-Recruiting Services, to bring Mr Tupoumalohi and his team back next year.

Susan Jenkin said her motivation is only partly altruistic, tempered by a strong streak of risk management. She welcomed the opportunity to be contributing to improved livelihoods in Pacific Island communities, while reducing the orchard's almost total dependence on backpackers to complete the harvest.

"If the workers come back year after year they will be familiar with the farm and they'll be experienced. This will cut down the constant training necessary with backpackers, making a more efficient and safer workplace," Mrs Jenkins said.

Branching out

Pacific seasonal workers have been involved in the almond and citrus industry in Swan Hill and Robinvale in Victoria; in the citrus and grape industry in Mundubbera and Gayndah, QLD; and most recently in the tomato industry in Guyra, NSW.

Discussions are taking place with growers and local councils in other areas of QLD, NSW, the NT and WA.

Labour mobility is recognised as an effective tool for poverty alleviation among people in developing countries and a complement to direct foreign aid.

The Pacific Seasonal Worker Pilot Scheme is part of this strategy, providing our Pacific Island neighbours with economic opportunities and skills development, while at the same time providing regional Australia with the reliable source of ready and returning labour. This may give horticulturalists the confidence to grow their businesses.

The pilot is intended to be a win-win strategy and one an increasing number of growers and local communities are happy to support.

i For more information please visit
www.deewr.gov.au/Employment/Programs
And follow the links to the Pacific Seasonal Worker Pilot Scheme.

Taking Elders back

Elders CEO, Malcolm Jackman speaks oldest and most respected companies

It is no secret, Elders, so synonymous with regional Australia, almost didn't survive a tumultuous period in 2009. For Mr Malcolm Jackman, only 12 months into his reign as Chief Executive Officer, it was a fight he and the 170-year-old organisation couldn't afford to lose.

While Mr Jackman admits there is still a long way to go, the former officer with the New Zealand Navy, is confident that a change of philosophy, becoming fixated on their core business, and empowering the Elders workforce, are the pillars that will return the organisation to the preeminent name in agribusiness across Australia.

Born and raised in New Zealand, it has been a long journey for Mr Jackman to the position of CEO of one Australia's most quintessential companies. After 15 years in the Kiwi Navy—a period in which he completed a BSC in Pure and Applied Mathematics and an Accounting Degree—Mr Jackman entered the business of recruitment. Climbing the ranks and working in Australia, New Zealand and America, he ended up at the helm of Manpower, one of the biggest names in recruitment globally.

From there it was on to CEO of equipment hire specialist, Coates Hire, and then finally in 2008 to the position of CEO of Elders, or what was known then as Futuris Corporation.

Mr Jackman said changing the name from Futuris to Elders was part of the overall objective to refocus the core strategy of the organisation and concentrate on its agribusiness.

"Part of the strategy of turning the company around was to make Elders the core business, so it felt logical to go back to the Elders name," he said.

"There is no denying the organisation was in trouble and part of the philosophy to turn

to the top

with *Vegetables Australia* about his vision of returning one of Australia's back to its former glory, writes David O'Neill.

that around was to get very fixated on what our core strategy is and that meant focusing back on agribusiness."

The next step according to Mr Jackman, was to simplify the organisation and revert to a more owner/operator structure.

On a personal level, and something that vegetable growers can certainly relate to, is Mr Jackman's 'work from sun up to sun down' philosophy, and doing whatever it takes to get the job done.

"Life is not a dress rehearsal, and at the end of the day, as the boss, you have to put in whatever it takes," he said.

"Saying that, I also have a very simple philosophy of delegating as far down the organisation as you possibly can."

"I believe that everybody in the organisation should understand what they are responsible for and what they will be held accountable for."

Mr Jackman said staff had to then question whether they had the authority or ability to execute what they were being held accountable for and take ownership of their individual role.

"It's about empowering people to get on and do the job, and making sure from our end, they have the authority to be able to act this way," he said.

> "We're not going to give up until Elders is back to where it should be, as the preeminent brand across all disciplines in agribusiness in Australia."

While empowering the workforce is a critical element to the company's revival, with upwards of 4000 staff spread across almost 400 locations, Mr Jackman said this was easier said than done.

"The difficultly is when you are running a large distributed branch network, how do you get someone out at Derby, or here at Pakenham, or in Port Lincoln to all have the same mentality?" he said.

"Empowering people and making them responsible for what they do on a day-to-day basis, that's the trick to getting this organisation working well again."

Mr Jackman admitted that over the past decade, the organisation had not been managed as effectively as it should have.

"The question was how do we turn Elders into a modern organisation, how do we take advantage of our size but keep the autonomy at the front end and have people accountable for what they do?" he said.

We then posed the billion dollar question to Mr Jackman; a question the Elders boss has most likely answered every day since taking over: What was his vision for taking Elders back to the top?

"At the end of the day, the business is all about people, particularly in such a big distributed branch network," Mr Jackman said.

"We have people who have worked in this business for 40 years or so, and they come with different values and different views on life to the generation Y workers we employ."

"We have 50-odd trainees with

continued over page ▶

an average age of 18, and we have something in the order of 60 people over the age of 65, so we need to treat different people different ways and get the culture right."

Mr Jackman also spoke of the need to repay the faith and loyalty of the growers in all agriculture sectors who have stuck by the company over its long and illustrious history.

"I've had phone calls from growers who tell me their family has been dealing with Elders for more than 115 years, on the same property," Mr Jackman said.

"We need to build on that. The loyalty that our customers have shown has taken us through the tough times, and there have been plenty. But I have to admit that we haven't been as good at repaying that loyalty with our performance, our service hasn't been as good as it should be."

"What we do on a day-to-day basis needs to improve and I think we can deliver on that."

While the recent problems that plagued the organisation have been significant, Mr Jackman explained that the company in its 171-year history had overcome numerous challenges that posed a threat to its survival.

"We were nearly finished last year when we had to go through the recapitalisation, and the old girl does need a bit of nursing back to good health. But we've faced tough times before and we will not give up until Elders is back to where it should be, as the preeminent brand across all disciplines in agribusiness in Australia."

While there is no quick fix or an overnight solution, with Malcolm Jackman at the helm, Elders have a no-nonsense leader and a man seemingly born for the job.

> "Empowering people and making them responsible for what they do on a day-to-day basis, that's the trick to getting this organisation working well again."

Malcolm Jackman speaks directly

What role do you see horticulture playing in the revival of Elders?

Elders has a strong base in the four major sectors of agriculture: live stock, both sheep and cattle, grains, dairy and of course horticulture. Horticulture is probably the boom industry at the minute in agriculture and will certainly become a more important part of Elders moving forward.

When you think in terms of food security and the belief that globally we will need to double global food production in the next 50 years. Unless there is a fundamental breakthrough in crop production in the other sectors, then perhaps there isn't room for expansion.

But what do we see in horticulture? Well realistically you can actually see horticulture easily doubling its production over the next 50 years.

You have been on record saying that Elders needed to get back to the farm gate; should vegetable growers expect to see more of the men and women in pink?

They should do. One of the criticisms from those in the industry is that they don't see enough of our people and I definitely feel our staff need to spend more time interacting with our customers.

In the past, we have required so much from our staff in terms of paper work and that is a head office problem.

We need to get rid of some of those head office requirements. We need to ensure our branches have a stronger sales focus and let them get out there and concentrate on selling our products.

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MasterChef coup for 2011 Convention

Celebrity chef, Callum Hann, is set to light up the 2011 AUSVEG National Convention, Trade Show and Awards for Excellence.

Growers are being urged to set aside 14-16 April, as the industry gears up for the 2011 AUSVEG National Convention. The Convention, which promises to be the must attend event of the year, will be held in the heart of Brisbane at the impressive five star Sebel-Citigate Hotel.

In a fantastic coup for the event, MasterChef star Callum Hann will feature in a special 'celebrity chef' luncheon. The luncheon will be sponsored by AUSVEG's newest strategic partner, VISY Fibre Packaging, and will also showcase fresh vegetables produced by local growers from south east Queensland.

Hann was the shows' youngest contestant and captured the hearts of millions of Australians with his honesty and genuine love for cooking. He is sure to be a major drawcard for the 2011 event.

MasterChef is credited with reinvigorating the food industry in Australia and placing the emphasis back on fresh produce and home cooking.

Both of these aspects can only be a positive for the vegetable industry and will be highlighted when Hann takes to the stage at the Convention.

Momentum building

Preparations are well-underway for April's Convention, which will build on the momentum generated from the hugely successful 2010 event. Details of the trade show exhibits will be released shortly, with booths set to be in hot demand following a sell-out this year.

Many other high-calibre speakers and celebrity guests will be announced shortly. These will include representatives from leading agribusiness, growers, researchers and others influential industry members.

> "In a fantastic coup for the event, MasterChef star Callum Hann will feature in a special 'celebrity chef' luncheon."

AUSVEG CEO, Richard Mulcahy, said that the 2011 event would surpass the high standard set at this year's Convention.

"We were overwhelmed by the support of Australian vegetable and potato growers on the Gold Coast and are determined to deliver another Convention that provides opportunities and information that will help our growers in their businesses," he said.

"We are designing a program that will ensure that the weekend will be both informative and entertaining, with a strong social component to allow growers and industry members an extensive networking opportunity."

Perfect location

Mr Mulcahy also spoke highly of the Sebel-Citigate Hotel, which he said was the perfect venue to hold such an event.

"With the city centre and Brisbane's major attractions at its doorstep, the Sebel-Citigate Hotel is a great location for the event," he said.

"We needed a venue that could accommodate a Convention of significant size but also be welcoming to each and every guest, and of course family-friendly."

Already a number of leading agribusinesses have recognised the opportunity to support an event that will truly benefit the entire industry and draw a huge number of growers from right across Australia.

"Elders, Incitec Pivot, DuPont, Toolpak Engineering, Bayer CropScience, Visy Fibre Packaging, Dow AgroSciences and Williames, have already agreed to become sponsors of AUSVEG and the Convention in 2011, and we expect to announce a number of other partners and sponsors in the coming weeks," Mr Mulcahy said.

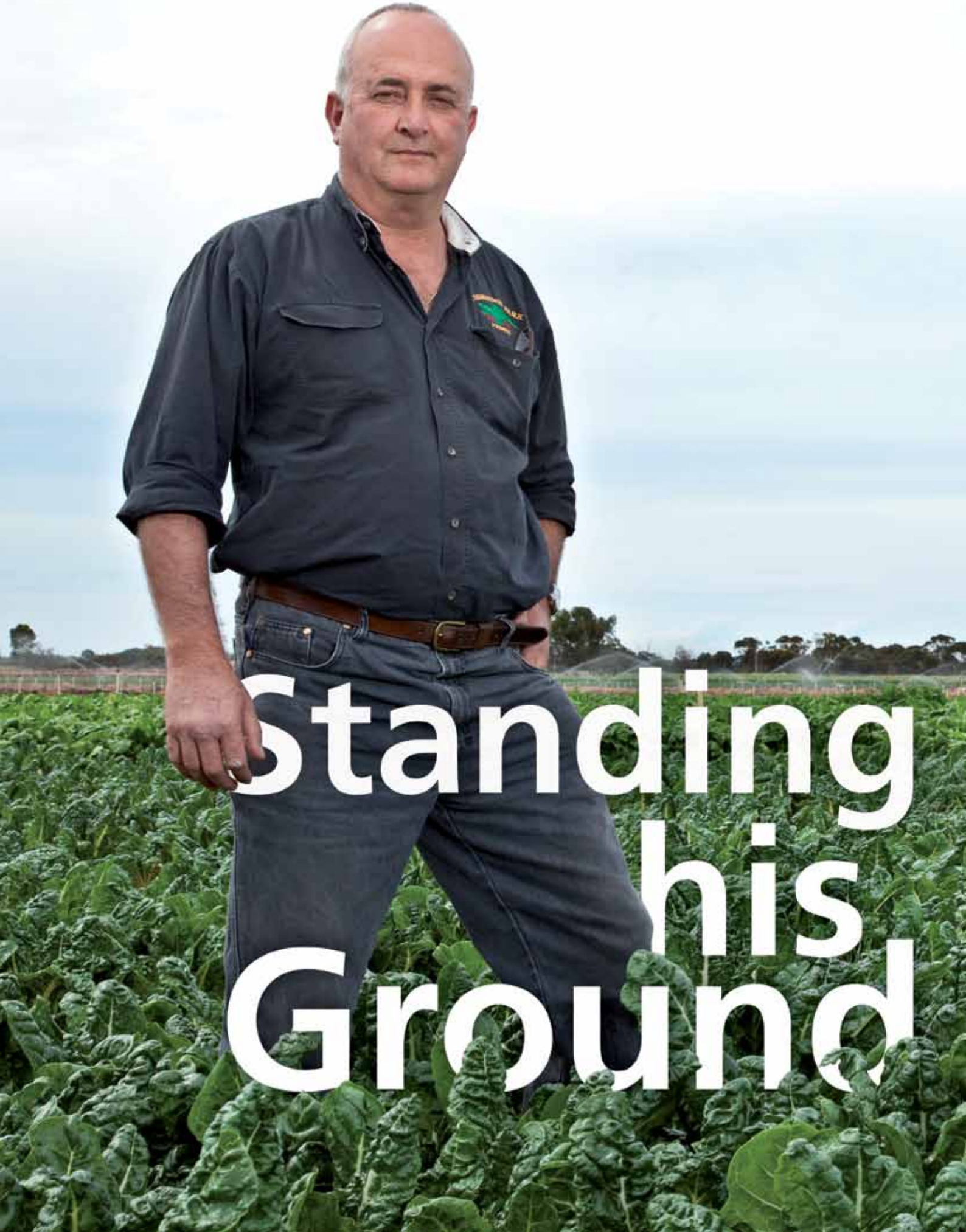
Awards for Excellence

The National Awards for Excellence will also be a highlight of the Convention. As it was in 2010, the industry's night of nights will be held at a gala dinner on Saturday, 16 April and salute winners across a number of categories.

The night will recognise the hard work and achievements of individuals and businesses that have been leaders, embraced innovation and helped to progress the vegetable industry.

A number of award categories will be announced shortly and will be accompanied by nomination forms.

Growers who are interested in receiving a convention brochure, companies wishing to display at the trade show or businesses wishing to become partners of AUSVEG, should call (03) 9822 0388 or email: convention@ausveg.com.au.



Standing his Ground

Outspoken South Australian grower and member of the Vegetable Industry Advisory Committee, Danny De Ieso, sets the record straight, writes David O'Neill.

Danny De Ieso tells it how it is.

A third-generation vegetable grower and a member of the Vegetable Industry Advisory Committee (IAC), Mr De Ieso has a history of representing growers and conveying their concerns to decision-makers.

Owner and Director of Thorndon Park Produce, situated on the Adelaide Plains, the no-nonsense grower produces a range of vegetables for fresh markets, including: silver beet, spinach, spring onions, radish, parsley and coriander.

Operating on two separate locations, the business' pack house and main property is located at Waterloo Corner, with its other property at Gawler River also producing veggies.

According to Mr De Ieso, the Adelaide Plains has some of the best growing conditions in Australia, with the climate allowing for year-round production and products of extremely high quality.

Family support

Mr De Ieso's grandfather began the family's venture into vegetable growing back in the forties, with his father carrying on the tradition after retiring from a building career.

> "You cannot understate family support, it is incredibly valuable. I am lucky that I have great support from both sides of my family."

Mr De Ieso began working life in a bank of all places, but returned to the farm because of the many benefits he saw in growing vegetables.

Thorndon Park Produce is still very much a family business, with Mr De Ieso receiving great support from his wife, sons and his parents.

Mr De Ieso's sons, Chris and Anthony are now beginning to play a greater role in the operation, with Chris gradually stepping into the management side of the business, looking after their quality assurance requirements.

"You cannot understate family support, it is incredibly valuable. I am lucky that I have great support from both sides of my family," Mr De Ieso said.

The family has been growing vegetables for three generations in Australia, but as the city has expanded, they have moved from their original location.

According to Mr De Ieso, urban encroachment is more prevalent than ever, but it's something he believes the South Australian Government hasn't considered appropriately or developed a sufficient strategy for.

"Especially here in South Australia, the Government does not seem to be interested in food security or interested in investing in the state's long-term future in horticulture," he said.

"The Government needs to commit to building infrastructure and then allow growers to pay for it over time through the cost of service."

"They cannot use legislation or zoning rules to land bank horticulture areas for future development and should instead allow growers to develop now and have an exit strategy."

"Growers should not have to do it tough because of a lack of planning on the Governments behalf."

Staunch representation

As a member of the Vegetable IAC, Mr De Ieso provides essential grower representation on the committee, which makes recommendations to Horticulture Australia Limited (HAL) on the expenditure of Research and Development (R&D) levy funds to best meet the needs of the industry.

Through honest and forthright opinions, Mr De Ieso passionately defends the position of his fellow growers, ensuring the issues critical to them are given the consideration they deserve.

"I've been involved with commodity groups and other bodies for at least ten years," Mr De Ieso said.

"I've always represented growers at different levels, and have always received good support from my fellow growers."

Even though the commitment to such roles can be time consuming, Mr De Ieso believes it is critical to have grower involvement in such committees.

"As a member of these groups and committees, you're not only representing growers, you're representing yourself," he said.

"Everyone's busy, and at times it can take away from your business, but if you don't have grower representation, you can get overlooked by government departments."

"Though people in government departments might have good intentions, they don't have the knowledge or insight that growers do, so it's extremely important that we have a presence in negotiations."

Though buoyed by the recent work of AUSVEG as the peak industry body, and acknowledging that Horticulture Australia Limited (HAL) has taken some small steps in addressing his concerns, Mr De Ieso believes there is a long way to go before the structure and the levy are functioning properly.

"Management of the levy needs to be much more cohesive and effective than it is currently. We need a clear and transparent process, and a mechanism that allows levy payers to have a greater input into the levy process," he said.

"While the levy cannot solve all the growers financial woes, it must provide value for money and an on-farm benefit that affects their bottom line."

Appointed to the IAC at the beginning of 2010, Mr De Ieso is a member of the renewed committee, which he believes now has the right mix to achieve results and encourage other growers to become involved.

"With the new IAC, we are starting to see an increase in grower interest," he said.

"The IAC needs to ensure the levy is managed effectively and that we continue to see an increase of involvement from growers."

A fair go

Mr De Ieso believes the Government needs to look more closely at the value of horticulture against other industries, and invest in it accordingly.

"We're not looking for hand-outs or subsidies, we just want a

Name: Danny De Ieso
Owner/Director of Thorndon Park Produce
Situated: Waterloo Corner and Gawler River on the Adelaide plains, South Australia
Grows: silverbeet, spinach, spring onions, radish, parsley and coriander

fair go for horticulture," he said.

"Compared to say the motor vehicle industry, vegetables don't make popular press. So it appears the Government isn't interested in investing in food security and future generations."

Mr De Ieso believes water in particular was a looming issue and one that the Government needs to address through investment in infrastructure.

"We need continuity of produce that comes with year-round production. The Government needs to invest in infrastructure that allows horticulture production areas access to water 12 months of the year," he said.

Mr De Ieso also spoke of the need for a commonsense approach to government regulations that did not provide a hindrance to growers.

"We are receiving pressure from imports that are being allowed to enter Australia. We are seeing an increase in regulations, whilst our overseas competitors don't have to adhere to the same sort of rules as we do," he said.

The vegetable industry has possibly never faced so many threats, but through the likes of Danny De Ieso, the industry is standing its ground and slowly gaining the recognition it deserves.

> "While the levy cannot solve all the growers financial woes, it must provide value for money and an on-farm benefit."

Manufacturer support increases R&D funding

Funding support by Australian chemical manufacturers is proving invaluable in the battle to register crop protection tools for Australian growers.

Each year, under the Pesticide Minor Use Program, a list of data generation projects is constructed to reflect the priorities of the vegetable industry.

Minor-use Coordinator, Peter Dal Santo, and his team then seek the crucial support of chemical manufacturers to help fund these projects and thus maximise the 'pool' of funding for projects, which also includes levy funds and matched funds from the Australian Government.

The process begins with the prioritisation of industry needs, looking at what diseases are having the greatest affect on growers and what chemicals are available to solve these problems.

For chemicals to either obtain a permit, or become registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA) for use on a specific crop, a significant amount of data is required on residue levels to support the application.

This data generation is both a timely and expensive process, one which is given a significant boost if supported by chemical manufacturers.

Mr Dal Santo said approximately 30 projects are conducted each year aiming to generate sufficient data that will result in a permit, or preferably registration.

"For the past two years, we've approached every manufacturer that has a chemical on the priority list and explored whether they are interested in supporting a project (for the purpose of registration) with funding," he said.

An estimated 90-100 trials are conducted each year, with the costs associated with field work, analysis, preparation and submission of the application, now partly funded by manufacturers.

"Ultimately they (the manufacturer) will alongside the industry, benefit from the generation of data and the subsequent registration of one of their products on a specific vegetable crop," Mr Dal Santo said.

"It means that rather than using levy funding to pay for the entire project, the costs are partly funded by the manufacturers."

Where it all began

Manufacturer support was first explored in 2007, which led to initially 10 per cent of the cost of the total trial budget, and 20 per cent of each individual study being funded as voluntary contributions, which is then matched by the Australian Government.

After long negotiations, this support increased in 2009 with six companies: Syngenta, Crop Care, DuPont, Agrichem, Dow AgroSciences and Chemtura all contributing to projects.

"For each of their studies the manufacturers provided between 20-25 per cent of the funds to conduct the study," Mr Dal Santo said.

"The studies are then allocated to a Good Laboratory Practices (GLP) accredited researcher, who will apply for a permit and forward a copy of the final report

to the manufacturers—which they will then use to register their uses with the APVMA."

Mr Dal Santo said that each year, he would continue to seek an increased contribution from manufacturers, which will bring more funds into the minor-use program.

"It generates a commitment from the manufacturer in the project and eventually results in a minor-use being registered, removing the need for the permit and benefiting growers," he said.

A change in thinking

The support of manufacturers is also adding another component to the minor-use program, with 2010 the first time companies have assumed a greater role in projects, and contributed the majority of funding.

According to Mr Dal Santo, Bayer CropScience is the first manufacturer involved in this type of project, which is a great step forward for the industry.

"Bayer were very interested in adding new vegetable crops to the labels of their recently registered insecticides, Belt (flubendiamide) and Movento (spirotetramat). These included celery, root and tuber vegetables, along with protected cropping vegetables," he said.

"Bayer, however, could not justify the costs associated with conducting all the necessary trial work for the registration, so we approached the industry stakeholders regarding the value of these insecticides to the vegetable industry."

All were in agreement that with 'Belt' and 'Movento' having a unique mode of action, excellent IPM profiles and a list of controlled insect pests, that it would benefit the industry greatly.

Mr Dal Santo said Bayer—who will conduct the trials internally and register the uses—were contributing significantly to funding the project with the balance of the funds provided by the National Vegetable Levy.

"This type project is a great step forward for the industry and will be a huge benefit to growers but will cost them very little," he said.

Mr Dal Santo said he was hopeful that negotiations for similar projects with other manufacturers would be successful and that this trend of increased voluntary contributions would continue.

> "It generates a commitment from the manufacturer in the project and eventually results in a minor-use being registered, removing the need for the permit and benefiting growers."

THE BOTTOM LINE

- The Pesticide Minor-Use Program has been given a boost through the support of leading chemical manufacturers, who have contributed funding to a number of projects designed to generate data and achieve registration of crop protection tools.
- Manufacturers are also identifying projects that they wish to conduct, seeking industry support but providing the majority of funding for them.

i For more information contact:
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Phone: (03) 5439 5916
Project Number: VG08170 & VG08170

Collaborative approach key to industry development

The new Collaborative Industry Organisations sub-program of the Vegetable Industry Development Program is now up and running. The program, which will be facilitated by existing state-based grower bodies, will allow growers to receive the latest R&D information, as well as information products developed in the other sub-programs, from a trusted source who understands the issues that have the most relevance to their businesses.

The Collaborative industry Organisations (CIO) sub-program, which was launched in September, becomes the seventh sub-program of the Vegetable Industry Development Program (VIDP).

The 'back to grass roots' approach recognises that there are existing state-based grower bodies who can provide 'frontline' coverage, capacity and delivery of industry development products and services.

The purpose of the CIOs is to support the objectives of the broader industry development program, through delivery of services and information that are products of the existing sub-programs (Economics; Knowledge Management; Consumers & Markets; People Development; InnoVeg; and IPM). Each of these sub-programs were profiled in the last edition of *Vegetables Australia.*

The CIOs will work collaboratively with the InnoVeg sub-program, as the state and regional delivery agents for communication of information and resources direct to growers.

The aim is to enable growers and growing businesses to become more market-focused, efficient and competitive.

Liaising with InnoVeg, the CIOs will be able to identify gaps in information that growers require and also the best method of delivering this information to the growers in need, such as through workshops, seminars or fact sheets.

Easy to understand

The first port of call for the InnoVeg and CIO sub-programs will be to develop a series of 'plain language' fact sheets comprising of existing Research and Development information, with the aim to make these quickly accessible to growers.

Representative bodies in each state have been charged with this responsibility by Horticulture Australia Limited (HAL).

> "It is an exciting new beginning to industry development in the vegetable industry."

Dr Alison Anderson is the Senior Policy Officer with the NSW Farmers Association, one of the grower bodies responsible for delivery of the program. She said the purpose of the program was to maximise R&D uptake on Australian vegetable farms.

"We want to be world leading vegetable growers and the best way we can do that is to make sure outcomes of the industry's R&D program are implemented in as many regions, and by as many growers as possible," she said.

The program's aim is to ensure growers in each of the key growing regions of Australia receive the latest information produced through the HAL R&D program, as well as the key information products of the other sub-programs of the broader industry development program.

"It is an exciting new beginning to industry development in the vegetable industry. I'm looking forward to working with the other state bodies and sub-programs to get information which is useable and practicable out onto farms and seeing vegetable growers implement R&D outcomes that will improve their businesses," Dr Anderson said.

Just as they will in each State of Australia, NSW Farmers Association will be working closely with InnoVeg, ensuring they are aware of what the key issues are from a NSW perspective. They will then be helping to distribute information

through one-on-one visits, seminars, mail-outs and e-communication.

"By utilising the NSW Farmers Association regional team, we will have a greater regional focus. Growers will be working with people from their area, trusted sources who they are more familiar with, and people who know exactly what their key issues are," Dr Anderson said.

"Newsletters will be sent out and workshops in every vegetable growing region will be held, reflecting the specific needs of growers in those areas," she said.

With a number of non-English speaking growers in NSW, Dr Anderson said they would also look at producing translated material and running bilingual workshops, working with Industry and Investment NSW, who have already undertaken work in this area.

Variety

Growcom's Vegetable Industry Project Manager (QLD), Margie Milgate, reiterated the need to take a holistic approach so that growers are getting information from a variety of sources and so communication is tailored to meet their needs.

"The process we are going to go through at the minute, is identifying and profiling our region, looking at how we can best get information out to growers and how they like to receive information," Ms Milgate said.

An important first step, she said, was to understand exactly what was out there already and what was needed before beginning to target growers.

"We have some mechanisms in place but we need to develop these further and look at updating our databases."

The CIOs will also assist in encouraging growers to register to access the Knowledge Management section on the new AUSVEG website (www.ausveg.com.au), which allows easy access to both the latest and past R&D reports and tools.

The CIOs comprise of: Growcom in Queensland (who will also look after the Northern Territory); Grow SA in South Australia; the NSW Farmers Association in New South Wales; the Tasmanian Farmers and Graziers Association in Tasmania; vegetablesWA in Western Australia; and the Vegetable Growers Association of Victoria in Victoria.

The project is supported by funding from the National Vegetable Levy with matched funds provided by the Australian Government.

THE BOTTOM LINE - VG10096

- A new Collaborative Industry Organisations sub-program of the Vegetable Industry Development Program has been launched.
- The program will be facilitated by existing state-based grower bodies, who communicate to growers the latest R&D information, as well as information products developed in the other sub-programs.
- The result will see growers receiving information from a trusted source who understands the issues that have the most relevance to their businesses.

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[From right] IAC Chairman, Jeff McSpedden; Alison Anderson, Senior Policy Advisor with NSW Farmers Association; and Kellyville grower, Fred Haskins

New commercial greenhouse cucumber production manual

A new practical resource has been produced by Industry & Investment NSW in conjunction with HAL and AUSVEG for Australian greenhouse cucumber growers.

A new 216-page manual entitled *Commercial Greenhouse Cucumber Production*, aims to assist Australian greenhouse cucumber growers to develop and achieve Good Agricultural Practices (GAPs) in all aspects of their business. It provides appropriate and relevant information and where available, science-based guidelines.

The A4, spiral-bound manual also gives an easy guide to the basics of growing greenhouse cucumbers and is the first comprehensive greenhouse cucumber production guide to be produced in Australia.

The authors are Extension Horticulturists Mr Leigh James and Mr Jeremy Badgery-Parker from Industry & Investment NSW. Both have extensive experience providing advice and training in the greenhouse cucumber industry.

The publication represents the final extension output of HAL Project VG00081: Development & Extension of Improved Horticultural Practices to Increase Profitability in the Greenhouse Cucumber Industry.

Taking stock

Mr James said that the manual was the culmination of a stock take of the industry, identifying what information was out there and what gaps needed to be filled.

"Many growers were treating nutrient disorders with fungicides and there was also a need for a comprehensive guide that filled the gaps of information that was missing and required by commercial greenhouse cucumber growers," he said.

The new manual completes the circle of the first 20 years of extension programs for greenhouse cucumber growers.

As a simple reference point with information in an easy-to-find format, Mr Leigh believes it will be an essential tool for growers.

"From our surveys we found there was a fair bit of information lacking before we began, not only in Australia, but internationally as well. So far the feedback has been really positive and people are telling us that it's as good as any greenhouse cucumber publication in the world," he said.

The publication is full of coloured pictures and diagrams and is designed with 13 colour-coded chapters covering all aspects of commercial greenhouse cucumber production, from disease management to optimising production.

One section entitled *Pruning and Training Cucumber Plants* provides another innovation with step-by-step colour diagrams for the different methods of training greenhouse cucumbers. The pests chapter highlights current IPM strategies and biological controls.

Although a basic, low-technology greenhouse can be used to produce cucumbers and much of the information provided in the manual is relevant to a basic greenhouse horticultural enterprise, the overall focus is on the modern greenhouse industry, also known as controlled environmental horticulture.

"There is a definite trend from those in the industry heading towards a higher level of technology, bigger greenhouses, and a more sophisticated level of operation. That's where we've targeted our publication," Mr James said.

The manual is free to commercial greenhouse cucumber growers.

For everyone else it retails for $34.95 through the I&I NSW bookshop at 1800 028 374, fax on 1800 642 065 or online through www.shop.nsw.gov.au. Catalogue number is B730.

From left: James, District Horticulturist (Vegetable Crops) I&I NSW; Jim Azzopardi, greenhouse cucumber grower, Londonderry NSW; Jeremy Badgery-Parker, District Horticulturist (Protected Cropping), I&I NSW.

THE BOTTOM LINE-VG00081

- An Australian first world class manual entitled Commercial Greenhouse Cucumber Production has been developed as a reference guide to help growers achieve Good Agricultural Practices.
- The manual, which is available free to commercial greenhouse growers, contains sections on all aspects of commercial greenhouse cucumber production.

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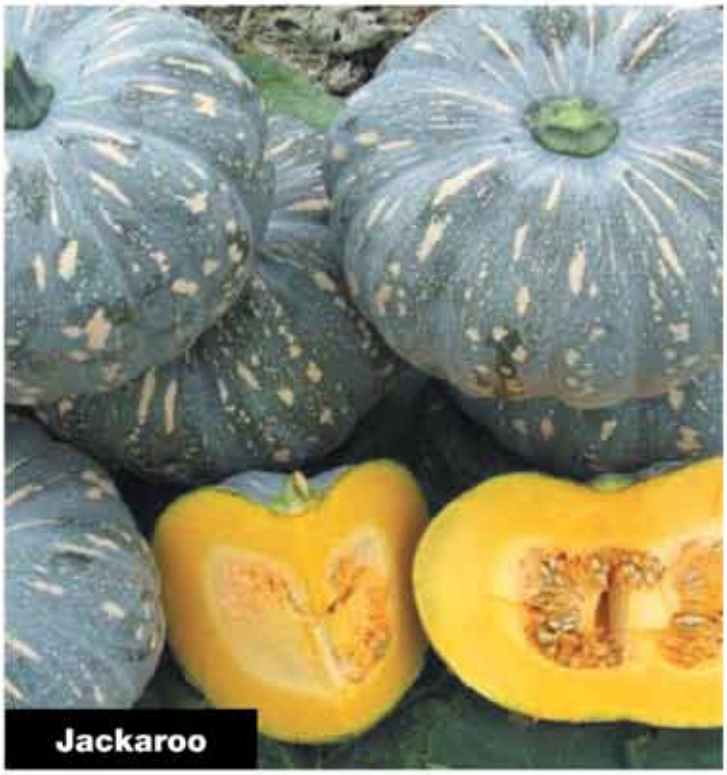
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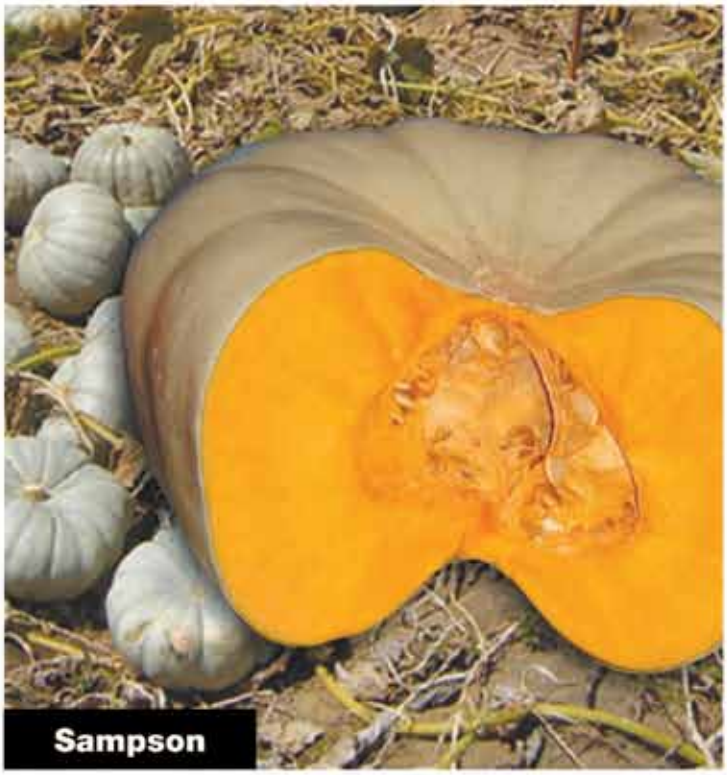
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Boosting plant immunity

Vaccinations have long been used to boost disease immunity in humans, but in future, thanks to groundbreaking research being carried out in Victoria, it might be possible to treat plants in the same way, writes Karen Shaw.

For the past two years a team of scientists at the Victorian Department of Primary Industries (DPI) has been monitoring how broccoli plants respond to a vaccination-type treatment of a naturally occurring chemical, called salicylic acid, to help prevent a disease called Clubroot *Plasmodiophora brassicae*.

Project leader, Plant Pathologist and Molecular Biologist, Dr Robert Faggian is excited by the results.

"We have found that adding a tiny dose of the chemical: salicylic acid, at seedling stage, has the potential to boost the broccoli plant's natural immune response to Clubroot, which is also called systemic acquired resistance (SAR)," he said.

"These initial trials show that the response to boost a plant's immunity to pathogens could have enormous benefit to the vegetable industry's disease management systems in future."

The technique of boosting a plant's immune response is not new. But according to Dr Faggian, it is the first time that scientists have been able to accurately quantify the response at the molecular level in a commercial vegetable species.

"We have also started developing a tool to map how the genes respond to applications of the chemical," he said.

> "This is exciting. Once the gene behaviour is better understood, this has the potential for a new, and until now, relatively unexplored area of disease management in vegetables"

"This is exciting. Once the gene behaviour is better understood, this has the potential for a new, and until now, relatively unexplored area of disease management in vegetables."

Dr Faggian works with the Future Farming Systems Research Division of the DPI and received funding for the project through the innovative science component of the National Vegetable Integrated Pest Management Disease Program.

The program is facilitated through Horticulture Australia Limited (HAL) and funded by the National Vegetable Levy with matched funds provided by the Australian Government.

The program is designed to identify new technologies and innovative science to be of future benefit to control plant diseases in vegetables.

Self defence

The ability of a plant to defend itself against pathogens has previously not been fully exploited in disease management in Australia, though there has been some trial work undertaken, Dr Faggian said.

"What's different about this new research is that we have been able to map a plant's response by looking at 26,000 genes, firstly in a weed called *Arabidopsis thaliana*, which is closely related to broccoli, with similar gene patterns."

Armed with that information, Dr Faggian said it was possible to monitor what happens when salicylic acid was added to broccoli plants.

"We know that salicylic acid is a naturally occurring part of the plant's internal protection system. We can then learn which genes are turned on and what affect this has on the plant at the cell level," he said.

"At this stage the dosage and timing of the chemical

application are critical to the success of the project, and clearly need to be carefully optimised and monitored."

"We were able to observe how the salicylic acid affected and manipulated the plant's immune system because we were able to track specific genes, known to be associated with plant defence, that were turned on or upregulated after the treatment."

Tackling Clubroot

The project targeted Clubroot, a serious soil-borne disease that affects broccoli production in Australia and overseas. Infected plants wilt, become stunted and often die. The infection can occur on roots at any stage of growth but often the symptoms are not obvious until the roots have large, knotted swellings, by which time it is too late.

"The problem with this disease is that it can survive in the soil for up to 20 years without a susceptible host and once it's found in the soil, it's very difficult to remove," Dr Faggian said.

"The beauty of introducing a technique to boost immunity with a chemical such as salicylic acid, is that it is a naturally occurring compound in the plant.

If it can be used to promote an immune response to diseases such as Clubroot in broccoli then it will be really useful for growers in future as part of an integrated pest management system.

"The real positives to come out of this work have been to understand how much of the chemical to use. Too much kills the plant and too little does nothing."

But Dr Faggian believes there is still a long way to go in terms of understanding the required dosage needed for maximum effect.

"We found there was a varied response to boosting immunity, even among individual plants," he said.

"We need to understand more about what happens in the field and in a range of conditions."

"What's exciting is that boosting a plant's immune system could have widespread application to other vegetables."

THE BOTTOM LINE – VG07010

- Research conducted over the previous two years has been monitoring how broccoli plants respond to a vaccination-type treatment of a naturally occurring chemical, called salicylic acid.
- The project focuses on a naturally occurring compound in the plant which can be used to promote an immune response to disease.
- The relatively new method of disease control promises to be a future major component of IPM of a number of diseases in various vegetable crops.

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Comparing water

Vegetable growers consistently produce a rate of return per megalitre of water upwards of three times the average of all of agriculture and the second highest return behind nurseries and cut flowers, writes industry Economist, Ian James.

Water and access to it, is a critical issue for Australian vegetable growers. The annual survey of vegetable farms undertaken by the Australian Bureau of Agricultural and Resource Economics (ABARE) consistently shows that over 90 per cent of vegetable farms irrigate in some form.

Data from the Australian Bureau of Statistics (ABS) over recent years has shown consistently higher proportions of vegetables produced using irrigation water, reaching 88 per cent of total industry production in 2007-08.

Having data on water use and the value attached to vegetable production using irrigation, is important for the vegetable industry especially in the light of policy debates over water.

Since the onset of the drought in eastern Australia in the middle of the decade, data collecting agencies have been under pressure to improve the quality of data on water use and provide some economic analysis of the contribution that water makes to agricultural production.

This is not an easy task as it is difficult to attribute an economic value to the impact that the use of water has on the value of production.

We know that water application raises productivity but we cannot be sure by how much. Many other inputs contribute to the value of production, such as fertiliser and pest control, and so it is difficult to measure the contribution of water. In addition, the use of irrigation will vary with changes in climatic conditions.

So what information is available and how does the vegetable industry perform compared to other agricultural industries in terms of the value of production derived from the use of irrigation?

> “Vegetable growers were the star performers, contributing 12 per cent of the total value of irrigated agriculture in the Basin, while using only 2 per cent of agriculture water.”

Value of industry production attributed to irrigated farms

In response to the need for more accurate information on water use, the ABS has developed new and improved methods for calculating the gross value of irrigated agricultural production (GVIAP). The first release of this improved data occurred in May this year and was updated with data for 2007-08 in July/August this year in the publication entitled *Experimental Estimates of the Gross Value of Irrigated Agricultural Production*. In 2007-08, vegetables for human consumption contributed the highest value for total irrigated production of $2.972 million, followed by fruit and nuts ($2.292 million) and dairy production ($2.289 million). These three commodity groups accounted for 61 per cent of total GVIAP.

The ABS also provided data on the value of agriculture produced per megalitre of water used over a number of years.

This data shows that vegetable growers consistently produce a rate of return per megalitre of water upwards of three times the average of all of agriculture and the second highest return behind nurseries and cut flowers. (See Table 1)

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

Surveys of water use in the Murray-Darling Basin

Due to the well-publicised problems experienced in the

Table 1: Gross value of irrigated agricultural production (GVIAP) measures 2007-08

Commodity groups	Gross Value of Irrigated Agricultural Production (GVIAP), Australia ($m)	Ratio of GVIAP to Volume of Water Applied, Australia ($/ML)
Cereals for grain and seed	318.7	334
Hay	247.6	373
Cotton	208.1	673
Rice	7.3	274
Sugar cane	451.6	523
Other broadacre crops	52.2	282
Fruit and nuts	2,291.9	4,093
Grapes	1,597.2	3,091
Vegetables for human consumption and seed	2,971.9	6,901
Nurseries, cut flowers and cultivated turf	1,171.8	18,821
Dairy production	2,288.8	2,868
Production from meat cattle	496.0	937
Production from sheep and other livestock	208.2	663
Total all commodity groups	12,311.3	1,959

Source: ABS: Experimental Estimates of the Gross Value of Irrigated Agricultural Production, 2000-01 - 2007-08

use in agriculture

Murray-Darling Basin and the controversy surrounding water allocations both the ABS and ABARE have concentrated research resources in this area. However, the economic findings apply equally to other geographic areas.

In late 2008 the ABS released the results of some of this work in a publication entitled *Water and the Murray-Darling Basin – a Statistical Profile.*

Vegetable growers were the star performers contributing 12 per cent of the total value of irrigated agriculture in the Basin while using only two per cent of agriculture water. In contrast, rice contributed six per cent of total GVIAP using 16 per cent of agricultural water consumption and cereals other than rice two per cent of total GVIAP using 10 per cent of agricultural water.

ABARE released a study last December entitled *Irrigation in the Murray-Darling Basin: Input costs, receipts and net returns in 2006-07* which looked at revenue, costs and net returns from different agricultural industries using irrigation.

Vegetable growers performed well relative to other agricultural activities, with cash receipts per hectare of $14,744. While costs were higher in vegetables the study only measured cash costs and did not include fixed operating and capital costs, which may well be higher in other agricultural activities.

Even allowing for these cost factors the rates of return per hectare were second highest for vegetables.

Table 2: Estimated receipts, costs and returns per hectare, by enterprise, 2006-07

Produce	Cash receipts ($/ha)	Cash costs ($/ha)	Returns ($/ha)
Dairy	4,636	4,741	-105
Pome fruit	17,242	9,580	7,662
Stone fruit	10,286	9,411	875
Citrus	7,920	4,634	3,287
Wine grapes	9,969	5,766	1,148
Table grapes	5,355	4,207	4,202
Vegetables	14,744	10,381	4,364
Cotton	3,696	4,982	-1,286
Rice	2,874	3,896	-1,022
Irrigated wheat	822	965	-144

Source: ABARE: Irrigation in the Murray-Darling Basin: Input costs, receipts and net returns in 2006-07.

Conclusion

This series of studies is unable to answer the question of the gains in productivity from the use of water in different agricultural activities. However, they show conclusively that when it comes to measuring the value of production derived from water usage, vegetable growers are at the forefront in extracting the best economic returns per megalitre of water used, compared to other agriculture industries. Vegetables also has the advantage over other crops in that the cropping cycle is short, providing flexibility in adjusting to changes in water availability. Of course this does not ensure profitability.

Continuation of the high value that vegetable growers extract from water usage will depend on sensible policies towards water allocation and pricing.

THE BOTTOM LINE

- Vegetable growers are at the forefront in extracting the best economic returns per megalitre of water used compared to other agriculture industries.
- Sensible water allocationand pricing remains important in ensuring positive returns for vegetable growers.
- Analysis of research into the Murray-Darling Basin showsvegetable growers compared well against other agricultural industries in terms of water use against the value of irrigated land.

Ian James is Project Leader for the Economic Sub Program of the Vegetable Industry Development Program VIDP.

Managing Sclerotinia in vegetable crops

While Australian vegetable growers continue to fight Sclerotinia with short-term fungicidal treatments, work is currently being conducted to help manage the costly disease on a long-term basis.

The National Sclerotinia Program aims to develop new management options for the integrated control of Sclerotinia and other soil-borne diseases of vegetables.

The program is led by Mr Oscar Villalta and the Victorian Department of Primary Industries, in conjunction with Peracto, the University of Tasmania and Agri-Science Queensland.

Sclerotinia is the most costly soil-borne disease of all those affecting vegetable crops, and is currently costing the vegetable industry upwards of $10 million in crop losses per annum.

The hardest crops hit are lettuce (Australia-wide) and green beans (primarily concentrated in northern Tasmania and Queensland), and as such, the strategies for control are developed by modeling these two crops.

Mr Villalta said the purpose of the study was to develop a long-term strategy to combat and manage the disease.

> "What we are developing is a long-term strategy for the industry to develop sustainable production systems."

"What we are developing is a long-term strategy for the industry to develop sustainable production systems," he said.

"The fungicides which are currently being used are short-term. That means they don't eradicate the problem, they just protect plants against infection, and it doesn't do anything to the fungus."

"Biofumigation is more of a long-term strategy by which we are growing green manure crops in between vegetable crops to try and biofumigate the soil."

The idea is that the green manure crops are grown to be broken down and incorporated back into the soil, to try and improve soil health and hopefully help defend against Sclerotinia.

Short-term strategy

While the efficiency of long-term solutions such as green manure are still being tested, it is the short-term solutions that allow growers to keep the disease at bay.

Currently, Filan™ is the most effective fungicidal treatment, and is often used by growers in conjunction with non-chemical controls such as biocontrol agents and plant-derived products.

The worry, however, is that Filan™ could be overused and thus become ineffective on the

Fungicide strategy

- Filan™ should not be overused to ensure it remains available to growers for a long time. A strategy is proposed that incorporates the use of new fungicide treatments:
- Filan™, Switch™ and Shirlan™ all have actives with good soil residual activity which can provide good protection against S. minor mycelial infection and inhibition of S. sclerotiorum apothecia germination.
- Filan™ and Switch™ also have good activity against foliar infections caused by airborne ascospores of S. sclerotiorum.
- Switch™ and Shirlan™ therefore should be considered for registration or minor use permits in vegetables.
- Filan™ could be rotated with new and alternative fungicide treatments as required depending on disease pressure.
- Correct application of fungicide treatments is critical for good disease control. Consult an expert if you are unsure.



disease if it builds up tolerance.

Mr Villalta said that there are a number of new fungicides on their way to the market that will help ensure that Filan™ does not become obsolete.

One of the new fungicides is called Switch and is anticipated to be available in the near future.

"The recommendation would be to use Switch and Filan™ in rotation, because when you use only one, that is when you run into problems," Mr Villalta said.

"For some vegetable commodities, if they grow crops in the soil treated with this fungicide, it means that the next crop can take up some of this fungicide and if the subsequent crop has no permit for use of this fungicide, the grower is affected."

Tests are also currently being conducted on another fungicide, called Shirlan, that has been found to be very effective when applied to soil. It is also hoped that Shirlan can be used in conjunction with Switch and Filan™.

"We also recommend one to be used with a minor permit so they can use that in an integrated approach, like applying Shirlan to the soil after transplanting, and then combining that with Filan™ or Switch," Mr Villalta said.

"In the future, we'd like to have three products to use, and that will be Filan™, Switch and Shirlan."

Education the key

As part of the program, workshops are being conducted throughout Australia with the aim to educate growers about the importance of alternating the use of different fungicides on vegetable crops.

Five workshops have been held so far, with one in Tasmania and two in both Victoria and Queensland.

Mr Villalta said that the next workshop would be held in New South Wales, followed by others in Western Australia and the Northern Territory.

Brochures outlining management strategies detailed above and containing important information for combating the disease are distributed at the workshops and are also posted on relevant grower websites to further raise awareness.

THE BOTTOM LINE - VG01726

- An ongoing program led by Scientists from the Department of Primary industries Victoria, is developing long term strategies to combat Sclerotinia and other soil borne diseases.
- Workshops are being held around Australia to help growers understand the importance of the correct application of fungicide treatments for effective disease control.

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Leading *the* way

Harvest Moon, a leading Tasmanian vegetable growing operation is also leading the way in environmental management, writes AUSVEG Environment Coordinator, Darcy Boyd.

Environmental management is a key concern for all vegetable growers to consider in their everyday practices. Big or small, all growers can utilise the benefits of the EnviroVeg Program and become better stewards of their land.

Harvest Moon, located in Forth on the north west coast of Tasmania, is a shining example of sustainable farming and has made managing soil health and Intergrated Pest Management (IPM) a key focus on their farm.

Harvest Moon was founded as a small eight hectare operation in 1981 by Managing Director, Mr Neil Armstrong.

As the company's operations expanded, Mr Armstrong brought in fellow Director, Mr Mark Kable to run the field operations of the company.

Today, Harvest Moon is one of the biggest fresh vegetable producers in Tasmania, spanning 1000 hectares across two properties, with a further 1000 hectares contract-grown with other local farmers in the region. Key products include: broccoli, carrots, red and brown onions, potatoes, lettuce, beans, celery and pumpkins.

Early involvement

After a number of IPM trials were successfully incorporated into the management strategies of the business, Mr Kable became increasingly aware of the benefits of improving environmental management at Harvest Moon. In line with these ongoing trials, the company joined the EnviroVeg Program in 2006, because as Mr Kable described, "It was a natural step to take in our farming operations."

Utilising information in the EnviroVeg Manual, Mr Kable found that the business could more readily incorporate environmental considerations into the business.

"It makes you much more aware of the surroundings, pastures, fence lines and river systems. It really brings it all in together," he said.

With the primary farm being located on the Forth River, and in close vicinity to the town, Mr Kable said it was imperative that Harvest Moon carefully considered the environmental implications of its operations.

"Being right on the township of Forth, we have to be very conscious of our surroundings, our neighbours and the environment," he said.

"Our two main properties are 100km apart and both have very different environmental issues and needs. Northern midlands has very fragile duplex soils that need to be handled delicately.

Whilst the north west coast's ferosol soil, means that soil movement and water runoff are the key issues."

Soil nitrate testing

To minimise the impacts on the soil and in-turn the river system, testing and monitoring of soil health is regularly conducted on the property.

"As a company we have undertaken a lot of soil nitrate testing and leaf sap analysis, so we are making sure we are only

putting on what the plant needs and not over doing it," Mr Kable said.

This approach has led to an innovative practice at Harvest Moon, with the adoption of fertiliser 'drop boxes' that significantly reduce the amount of fertiliser in application, as well as more effectively providing nutrition for the plants.

"We are changing a lot of our fertiliser spreaders, going towards pre-drilling the fertilisers and drop boxes, not using top-dress spreaders that throw it 12 metres one way and 12 metres the other way," Mr Kable said.

We are really focusing on targeting the plant, so this provides a more accurate application."

The benefits of GPS

As well as taking steps to reduce soil movement and nitrate leaching to the surrounding environments and river system, Harvest Moon is in the third year of a soil health project with Serve-Ag.

"In the Cressy region we have eight sites that incorporate GPS and these are sampled every year," Mr Kable said.

"We are monitoring all factors of soil health, trying to understand what we are doing to the soil and if it is sustainable to keep farming it into the future."

"We are also looking at what physical damage we are doing to the soil from our machinery and intensive cropping programs. This will help us to better understand our microbe flora and fauna, soil structure, and how much carbon we are chewing up every time we pass it with machinery."

Mr Kable said that Controlled Traffic Farming and minimum tillage were two areas which the company actively focuses on.

"The real challenge is incorporating green manure crops into intensive cropping programs using minimum tillage with crops such as onions, carrots or broccoli," he said.

State-wide issues

More broadly, Mr Kable sees the issue of soil health management and the effects of run-off and erosion as the key issues that are facing Tasmanian growers.

"As an industry we are very proactive, with growers working with TIAR (Tasmanian Institute of Agricultural Research) to better look after our soil health," Mr Kable said

Mr Kable cites the development of a number of specially designed implements that work on all Tasmanian farms as a positive approach taken by growers. The implements place straw drains along paddock contours to reduce water run-off and the movement of soils and nutrients, from paddock to paddock and between farms.

Finally, Mr Kable encouraged other growers to think about environmental issues affecting their farm and to develop sustainable practices.

"For our long-term sustainability in the industry I think it is critical that we address these environmental issues and secure our long term future," he said.

i To join the EnviroVeg program or for more information contact:
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Photo: Fertiliser drill being used by Harvest Moon.

EnviroNews

EnviroVeg connects with growers

EnviroVeg continues to deliver the "Managing for Healthy and Productive Soils" information sessions to vegetable growers.

Information sessions are being held to provide growers with new information to tackle the environmental challenges confronting the industry, as well as the benefits that can be achieved in managing for healthy and productive soils.

Two sessions have been held in Victoria: at Cranbourne on Friday, 22 October and then in Werribee on Friday, 29 October.

Both sessions featured Dr Ian Porter as the keynote speaker. Dr Porter is the Principal Research Scientist in Plant Pathology with the Department of Primary Industries Victoria (DPI).

AUSVEG Environment Coordinator, Darcy Boyd—who also presented about the benefits of the EnviroVeg Program at the two sessions—said that they provided growers with a range of tools that will assist them on-farm, including information on the role that soil carbon plays in maintaining healthy and productive soils.

"The sessions focused on the physical and biological characteristics of healthy soils and included practical techniques that can lead to improved yields and profitability for growers in the long-term," he said.

A number of leaders in agribusiness also presented at the sessions. These included: Mr David Richards, recently appointed to the position of Market Development Manger with DuPont; Mr Rohan Davis, Incitec Pivot; Mr Theo Jacometti, Co-owner and Director of Boomaroo Nurseries.

Mr Boyd said that growers would benefit greatly from attending the sessions and learning more about the EnviroVeg Program.

"The EnviroVeg Program offers growers the chance to not only improve environmental practices on-farm but also to improve the profitability of their businesses and make them more sustainable long-term," he said.

Upcoming seminars

A fifth seminar also centred on managing for healthy and productive soils, will take place on Friday, 19 November at the Longford RSL, 78 Wellington St, Longford, Tasmania.

Dr Ian Porter will again present alongside Environment Coordinator Darcy Boyd, with Syngenta's National Training Manager, Trevor Stebbings and AUSVEG CEO, Richard Mulcahy, also set to present.

The program will then move to Gatton, at the Foundation Building of the University of QLD, on Friday, 26 November from 3pm-5.30pm.

Speakers will include: Stephen Harper, Principle Research Scientist with DEEDI; Victor Galea, Plant Pathologist with the University of Queensland; Darren Browne, Area Sales Manager, Syngenta; Margie Milgate, Regional Networks Coordinator, Growcom; Theo Jacometti; Richard Mulcahy and Darcy Boyd.

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VGA President, Luis Gazzola, Michael Barr and VGA Executive Officer, Tony Imeson.

Beaten by the Foreigner

Foreign parasitoids are proving better at biocontrol for Silverleaf whitefly (SLW) than their Australian counterparts, writes Louise Lawrence from CSIRO Ecosystem Sciences.

Once upon a time Australian native whiteflies were managed by native parasitoids, in particular, the tiny wasp, *Eretmocerus mundus* which was responsible for 93.7 per cent of total parasitism. But since the arrival and rapid spread of biotype *B: Bemisia tabaci* Silver leaf whitefly (SLW) in Australia, the native wasp has been unable to suppress their populations.

Biotype B became a significant pest of horticulture, grain and cotton in the mid-nineties. After considerable testing, a foreign parasitoid *Er. hayati*, was introduced into Australia by CSIRO as a biological control agent. It spread well and in many regions is providing effective control of SLW. *Er. hayati* is now responsible for 85 per cent of parasitism while the native *Er. mundus* only contributes 1.2 per cent.

So why is the foreigner so much better than the native? Answers to this question should hopefully provide a better understanding of why it is sometimes necessary to introduce a foreign agent, and what to look for to find an effective one.

Reproduction in the Australian *Er. mundus* is quite quirky. Not only do they produce their offspring from unfertilised eggs but the sex of individuals is determined by a bacterium, *Wolbachia*, that lives in their tissues. The presence of this bacterium, *Er. mundus* produces mostly females. The introduced *Er. hayati*, however, reproduces sexually and produces both males and females.

Trials were conducted with both species to compare their survival and number of offspring and to see what effect exposing females to the antibiotic, rifampicin, would have. The idea being that, when the antibiotic killed the bacteria, its removal could have an effect on reproduction in the wasp. This, in turn, would provide clues as to why the two species were performing differently.

Newly emerged females were given the antibiotic in their honey and water. In both species, the antibiotic had no effect on the numbers of offspring produced. However, the picture for sex ratios was very different. Rifampicin treated *Er. mundus* produced both males

> "It is probable that the combination of a longer life and higher rate of reproduction is behind the foreign parasitoid's greater success as a biocontrol agent, hence better suppression of SLW biotype B."

and females in nearly equal proportions, whereas without the antibiotic, Er. mundus produced almost all females.

It seems that Wolbachia bacteria are causing the bias towards female progeny. Because Er. hayati don't carry Wolbachia, both mated and unmated females were unaffected by the antibiotic.

More importantly, the foreigner, Er. hayati produced more offspring and lived longer than the native, Er. mundus.

Although the trials showed that the bacterium doesn't cause a reduced life span or fewer offspring in Er. mundus, it is still unclear what does.

Nevertheless, it is probable that the combination of a longer life and higher rate of reproduction is behind Er. hayati's greater success as a biocontrol agent, hence better suppression of SLW biotype B.

This research was supported by Horticulture Australia, Endeavour Awards Australia and CONACYT Mexico.

THE BOTTOM LINE

- Researchers have examined why a foreign parasitoid is proving a better control for silver leaf whitefly than native parasitoids.
- Understanding the reasons why the introduced species is outperforming the native may reveal when it's best to introduce a foreign agent in other pest control situations, and what to look for to find an effective one.

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Q&A Young Grower Michael Rieck

Michael Rieck is a young grower already putting his stamp on the vegetable industry. A member of the young grower study group which toured New Zealand earlier this year, and managing his family property, he talks to *Vegetables Australia* about his passion for the industry.

Who: Michael Rieck
Where: Kalbar, in southern QLD
Grows: Onions, Carrots, Pumpkins for Kallium Pty Ltd
Age: 26

How did you become involved in growing?

My family's always been involved in vegetable growing and I suppose I'm just carrying on the tradition. Even when I was going to school, every Saturday I'd be working on the farm and it's something I've always really enjoyed.

Why did you attend the New Zealand Young Grower Study Tour?

One of the guys I work with, Richard Gorman, had been on a AUSVEG study tour and encouraged me to take part. I was originally hoping to attend the Israel, Berlin and Spain Study Tour but the timing wasn't right. When the New Zealand Young Grower Tour came up, I jumped at the chance.

> "A lot of the guys I work with are a lot older so it was good to meet so many other young growers."

Would you recommend it to others?

Yeah it was a really worthwhile experience. It was all young people so it was a fantastic networking opportunity. Hearing what about their problems and being able to relate to what they are going though was great. A lot of the guys I work with are a lot older, so it was good to meet so many other young growers.

Do you see yourself continuing to grow vegetables in the future?

Yeah I do. I love it and have never really considered going to uni or doing anything else. I'd love to do some courses to improve my knowledge on the agronomy side of things though, and learn more about soil biology and that side of growing.

Do you see young growers having a large role to play in increasing the use of technology in vegetable growing?

Yeah I do. ne thing we've done over the last few years is use more GPS guidance in our growing. I've tried to learn more about that and push the use of it, as I think we need to go to a more controlled traffic system of farming.

Around the states

Queensland

growcom
together we grow

Growcom calls for planning for peri-urban horticulture around new communities

The Food and Agriculture Organization (FAO) of the United Nations this month noted that by 2025 more than half the developing world's population—an estimated 3.5 billion people—will be living in cities. It called for policy-makers and urban planners in poor countries to establish urban and peri-urban horticulture as the key to ensuring safe, nutritious food, sustainable livelihoods and healthier communities.

The FAO described how valuable agricultural land has been lost to housing, industry and infrastructure and fresh food production has been pushed further out as cities grow. The cost of transport, packing and refrigeration, the poor state of rural roads and heavy losses in transit add to the scarcity and cost of fruit and vegetables in urban markets.

FAO said the challenge was to steer urbanisation from its current unsustainable path towards greener cities, growing fresh produce in and around cities and towns as a fresh, nutritious and economic alternative to urban meals, high in low-cost fats and sugars, responsible for rising levels of obesity and diet-related chronic diseases.

While the FAO was writing about the population problems of the developing world, Australian governments at all levels would do well to pay attention to these arguments in tackling Australia's own growth challenges.

For example, the Queensland Government recently announced that three new south east Queensland communities at Ripley Valley, Greater Flagstone and Yarrabilba have been endorsed by Cabinet. These planned communities are the latest of nine announced in the six months since the state's Growth Management Summit to deal with the burgeoning population.

On the government's agenda in developing the new communities are items such as affordable and 'green' housing and the need to rapidly develop infrastructure such as public transport. Protecting ecological values and vegetation also get a mention.

However, Growcom would like to see urban planners go further and develop truly sustainable communities which consider urban and peri-urban agriculture in their designs to ensure that populations can enjoy the benefits to their health and purse strings of locally produced fresh fruit and vegetables.

Friction due to a lack of foresight in urban planning is common today between existing peri-urban horticulture and local councils. The latter pays lip service to retaining their fresh food production areas while at the same time trying to placate ratepayers who have moved into rural residential areas for the 'amenity' without wanting to live near the reality of commercial farming operations. The result is ever-increasing red tape for farmers which dissuades rather than encourages food production.

The Queensland Government now has a splendid opportunity with three new communities on the drawing board to set a shining example to other states and put paid to past unmanaged urban sprawl with the development of truly sustainable communities linking rural agriculture with urban consumers for the benefit of both.

Properly planned horticultural production on the fringe of these communities will offer the benefit of high yields of nutritious food per unit of time, land and water close to the markets they would serve.

Food for thought for all regional and urban planners in the years ahead.

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Tasmania

TFGA

The Minister for Primary Industries and Water, Mr Bryan Green, and the Tasmanian Farmers and Graziers Association have announced the appointment of economist Andrew Heap as the State's first vegetable industry facilitator.

Minister Green said the new role would focus on opportunities for the development of vegetable production on the north west coast with the aim to improve the resilience and productivity of vegetable producers impacted by the closure of the McCain processing plant at Smithton.

The two-year appointment is being funded by the State Government and will be housed and managed from TFGA.

TFGA Chief Executive Ms Jan Davis said Mr Heap would audit current activities and implement priority projects indentified in the five-year Tasmanian Vegetable Industry Strategic Plan launched in 2007.

The plan seeks improve:

- Industry culture and structures
- Products and services
- Market development, marketing and PR
- Business and supply chain
- Production practices and natural resource management
- Policy and government relations

Mr Heap brings a wealth of experience and industry knowledge to TFGA and this will be an invaluable resource to explore opportunities for the future.

He was formerly Executive Officer of the Australian Macadamia Society, Policy Manager with NSW Farmers Association and General Manager of Agrimac, a macadamia processing company.

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New South Wales

Growing the Business of Farming | NSW Farmers Association

At the time of writing, we are moving closer to the projected peak locust hatching dates for key NSW vegetable growing regions in the Lachlan and Riverina. Growers in NSW have been vigilant in their on-farm monitoring and in preparing for any locust activity. The Association has been working closely with Industry and Investment NSW and Livestock Health and Pest Authorities to assist farmers in preparing for any locust activity. The Association has also highlighted the need for apiarists to be kept informed about the locust campaign, to ensure the safekeeping of their beehives.

The Murray-Darling Basin Authority's Guide to the proposed Basin Plan was released on the 8th October 2010.

In NSW, farmers are looking at losing between 27 and 37 percent of their annual water allocation.

A survey conducted by the NSW Farmers' Association and released ahead of the Guide, shows one in three farmers believe they would be forced to leave agriculture forever, and more than 30 per cent of those who believe they could stay on would either downsize and/or cut back on staff. With those responses in mind, it doesn't take much to realise this issue would have an impact beyond our farms.

The Association is attending town meetings across the state and is calling for the *Water Act* to be changed, to force the authority to give equal consideration to the socio-economic and environmental concerns in developing the Plan.

The Association has begun its role in the Collaborative Industry Organisations program, which is providing support to the Vegetable Industry Development Program.

The Association is coordinating communication activities in NSW to ensure that vegetable producers across the state are well-informed about research and development outcomes, and have the opportunity to have an active role in the National Vegetable R&D Program.

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South Australia

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Food Security

Grow SA represented horticulture at the recent Food Security Summit held in the old chamber of Parliament House in Adelaide. Organised by the Hon Robert Brokenshire of the Family First Party, the summit addressed issues facing the greater food industry in South Australia. Delegates at the meeting resolved to form the basis for representations at all levels of government. Grow SA stressed the importance of a macro view on all current issues such a water, climate change and carbon trading under a broader food security heading.

State Budget

A horror state budget aims to cut some $10 million from the Primary Industry and Resources budget with major impacts to horticulture.

Issues of major concern to the industry are:

1.The proposed shift closure at the Yamba and Ceduna Road blocks that will see these important biosecurity assets closed for the midnight shift.

This will commence in January 2011, which incidently is in the middle of the peak danger period for fruit fly incursions.

2. The shrinkage in both PIRSA Horticulture and SARDI research staff and capabilities.

Grow SA is urging government to reconsider this decision and understand that the road blocks at Yamba and Ceduna are biosecurity assets that are now much more than just fruit fly orientated, being the first line of defence for other significant threats to the State's economy. For further information on the Food Security Summit and a copy of the forthcoming resolutions please contact Grow SA in Virginia, Waikerie, Mannum or Mt Gambier on (08) 8282 9200.

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Victoria

THE VEGETABLE GROWERS ASSOCIATION OF VICTORIA VGA

VGA President, Mr Luis Gazzola has been lobbying State Government to investigate cropping lands from Pearcedale around the Westernport Bay, to the Lang Lang sand belt including East Gippsland. This area requires zoning, rating, water security and buffer zones between urban and long-term farming land.

Growers are to be consulted and included in town planning and proposed infrastructure that would include food processing and industry services support. Consultants and committees have now been established and to protect the future security of horticulture, a project entitled The Bunyip Food Bowl has been proposed. Further details will be issued through our IDO project notes.

VGA Victoria continues to provide support to the Melbourne Market Authority marketing team in the numerous promotional programs and events held in Victoria. There has been enlightening discussions with consumers about selection, preparation and cooking of fresh vegetables.

The MMA Schools program is making excellent contact with young children in all aspects of fresh produce.

The DPI Victoria Horticulture Network Program is proving a very positive project for our two Industry Development Officers in maintaining direct contact with Victorian vegetable growers.

In addition, we are now part of the Collaborative Industry Organisations Sub-Program (CIO), which is part of the Vegetable Industry Development Program (VIDP).

VGA's Annual General Meeting was held in October and provided members and guests with an interesting industry report session presented by representatives from Melbourne Market Authority, Horticulture Australia, Victorian Dept Primary Industries, Victorian Farmers Federation, AUSVEG and Victorian IDO's both east and west. The dinner speaker, Mr Jeff McSpedden, provided a most interesting industry review including a brief segment of early pioneer farming. Congratulations were then extended to re-elected President, Mr Luis Gazzola.

The annual Regional Vegetable Growers' Dinner Dance will be held on Saturday 20 November 2010 at Villa Adriana Reception Centre, Dandenong South. Further details and a form are available from the VGA Victorian office.

For the latest in vegetable information for Victoria, visit: www.vegetablesvictoria.com.au or www.vgavic.org.au

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Western Australia

vegetablesWA

Western Australian growers have had their second driest winter on record. Western Australia has a winter dominant rainfall climate, but the big dry has stretched to all of the major growing regions. A number of growers from Carnarvon and Geraldton have been participating in the activities of the state and federal government drought reform pilot.

vegetablesWA recently hosted a highly successful meeting with the new Commonwealth Minister for Agriculture, Fisheries and Forestry, Senator Joseph Ludwig. Growers at the meeting were pleased at how engaged and open to industry input Minister Ludwig was. The meeting was held at the property of Sam Calameri which was a vegetablesWA Good Practice Demonstration Site in the metropolitan region under the federal Caring for Country program. The minister and his staff were pleased to see the success of this project firsthand.

vegetablesWA has subsequently obtained additional funds under the program to extend Good Practice Demonstration Sites to the Carnarvon and south west growing regions. Building on the success of the initial project, these projects promise to help growers take up good practice to assist with both their bottom line and the environment.

The Western Australian industry also recently held its Biannual Dinner, sponsored by Landmark, with 180 industry members in attendance. Special guests included Western Australian Senator, Rachel Siewert, Greens spokesperson for agriculture, and AUSVEG Chairman, John Brent and CEO, Richard Mulcahy.

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Calendar of events

November 2010

19 November

Free EnviroVeg Information Session
Longford RSL
Longford, Tasmania
For more information:
AUSVEG Enviroment Coordinator
Darcy Boyd
Phone: (03) 9822 0388

EnviroVeg

20 November

VGA - Vegetable Industry Dinner Dance
For more information:
Phone: Tony Imeson on 0414 458 561.

26 November

Free EnviroVeg Information Session
Foundation Building of the University of QLD
Gatton, QLD
For more information:
AUSVEG Enviroment Coordinator
Darcy Boyd
Phone: (03) 9822 0388

EnviroVeg

December 2010

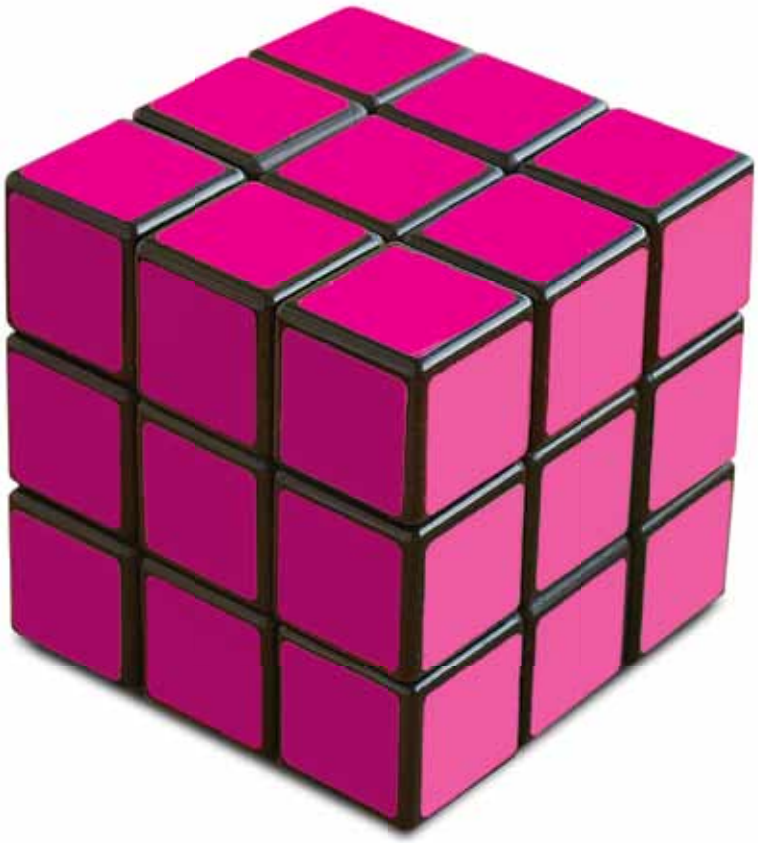
13 – 15 December

AgriPro Asia
Convention & Exhibition Center, Hong Kong
For more information:
Email: info@freshproduceindia.com

April 2011

14 – 16 April

2011 AUSVEG National Convention, Trade Show and National Awards for Excellence
Sebel-Citigate Hotel, Brisbane
For more information:
Phone: (03) 9822 0388
Visit: www.ausveg.com.au/convention
Email: convention@ausveg.com.au



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- Extended 3 yr warranty

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