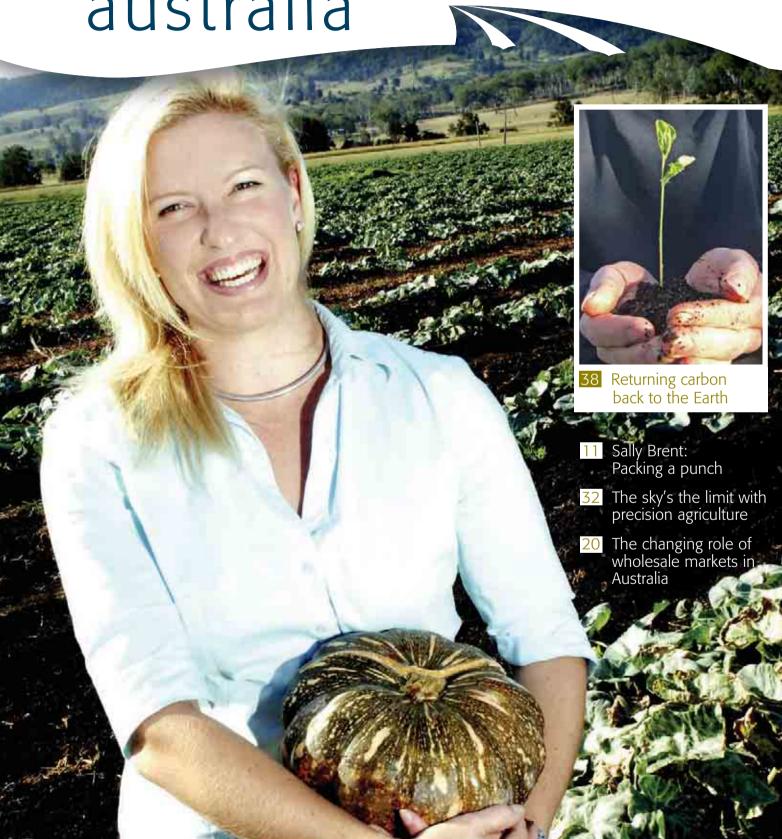
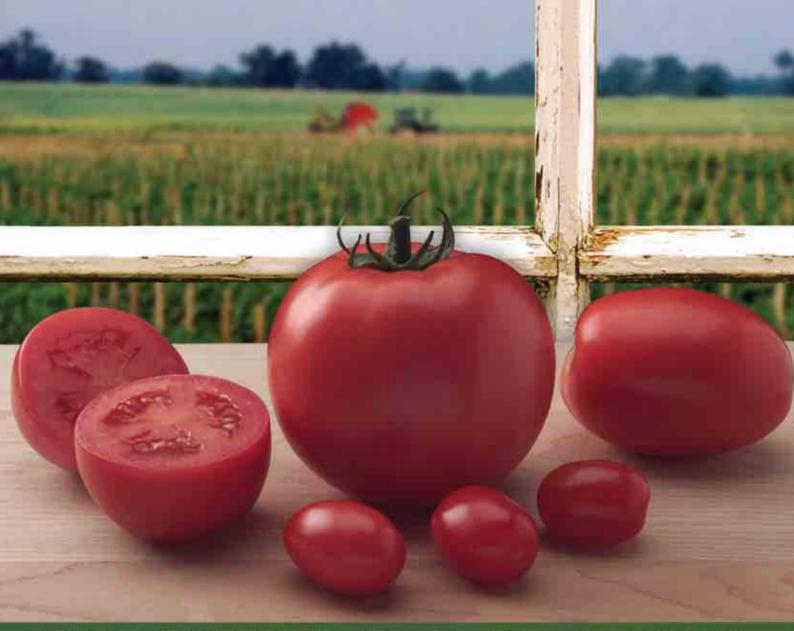
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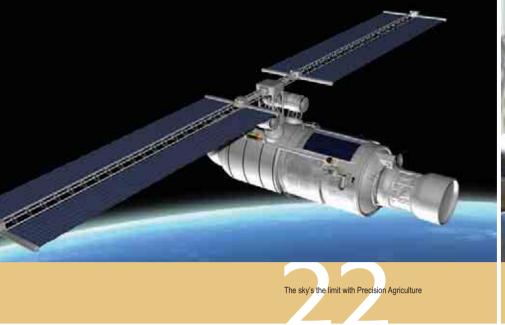


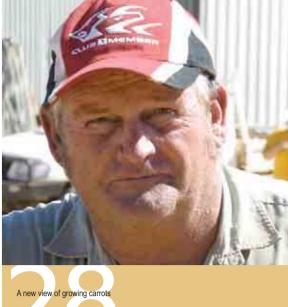
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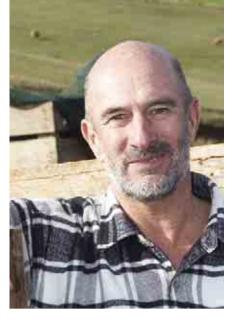




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A word from the AUSVEG Ltd Chairman

The role of any peak industry body is to provide leadership and guidance to its constituents. One of the key objectives of the Industry Partnerships Program (IPP) is to cultivate a culture of leadership, and provide the support and infrastructure to elevate the capabilities of those within the industry who value its future.

Whether at a farm level, commercial level, industry body level, or government level, it is important for the Australian vegetable industry to foster the efforts of those seeking to provide initiative and leadership. Without this spirit and enthusiasm, the industry risks becoming stagnant and irrelevant, and a wealth of opportunities for the industry will be lost.

AUSVEG is wholeheartedly committed to being a champion of this cause. As the peak of AUSVEG has spent time traveling around industry body, there is no better to way to lead than by example. By demonstrating a commitment to facilitating the advancement

of those working with us, we not only ensure the future of vegetable growers, but also the future of the entire industry and supply chain.

Paramount to this is a strong and active voice, and through a campaign of clear and careful communication with all stakeholders, we will deliver a future of which we can all be proud.

Over the last month, John Roach, CEO the country to meet with a number of growers, researchers and industry representatives. In the coming weeks, he will resume these

visits as he continues to identify a range of opportunities which will contribute to the long term advancement of industry.

81 Indiach

Michael Badcock AUSVEG Ltd Chairman

From the Editor



With the last issue of Vegetables Australia, you would have received a copy of our first reader survey. With five issues of the magazine under our belt, I was hoping that we were beginning to get an understanding of what our readers were after - and it appears we were right!

While we continue to collect responses in the mail, some themes are starting to emerge in your responses which we hope to collate and possibly apply to the magazine in the future with the aim of making Vegetables Australia even better.

Some of the more surprising outcomes were related to the number of people who read each issue of the magazine, with some readers indicating that up to ten people read their regular copy of Vegetables Australia. We were also pleasantly surprised to discover that many of you choose to keep

your copy of the magazine, retaining it as a long term reference.

In the May issue of the magazine, I hope to bring you a more thorough analysis of the feedback, along with the names of the lucky winners of our prizes.

In the meantime, enjoy reading this issue of Vegetables Australia.

Youna Angevin-Castro Editor, Vegetables Australia

Erratum: In the last issue of Vegetables Australia (p.9), Ian Young was incorrectly described as the President of the Tasmanian Farmers and Graziers Association (TFGA). He is in fact the Chairman of TFGA's Vegetable Council. Vegetables Australia apologises for any offence or confusion created by this error.

New Guide Supports R&D Program Brand

Research and development (R&D) is fundamental to the success of the vegetable industry and helps keep growers in business.

Vegetable growers, by paying the National Vegetable Levy, make a significant financial contribution to the vegetable industry Research and Development (R&D) program and they have a right to know what they are receiving for their investment. It is also important to give recognition to the significant investment the Australian government makes in the vegetable industry by matching the grower levy investment. These investments are managed by Horticulture Australia Limited (HAL) as well as those of other stakeholders that contribute voluntarily.

And without R&D providers there would be no program, and it is critical to acknowledge the part they play.

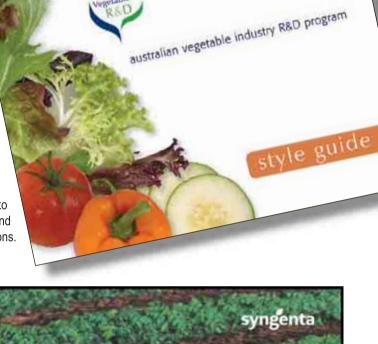
The vegetable industry R&D program has achieved outstanding results for vegetable growers in the eight years it has been running. The program is built on strong relationships between researchers, growers, government and all other sectors of the industry.

But despite this success, the value of the R&D program is often poorly recognised. To help build this recognition, a brand for the program has been established. Good recognition unifies the R&D program. It

provides those involved with a sense of achievement, makes sure R&D is meeting grower needs, and ultimately takes the vegetable industry into a prosperous future.

A new vegetable industry style guide — to guide the use of the new R&D logo — has been produced and mailed to research service providers. Researchers are asked to support this guide strongly to achieve a consistent look and feel to all industry publications.

Please contact AUSVEG if you require a copy of the Vegetable Industry R&D Program Style Guide.

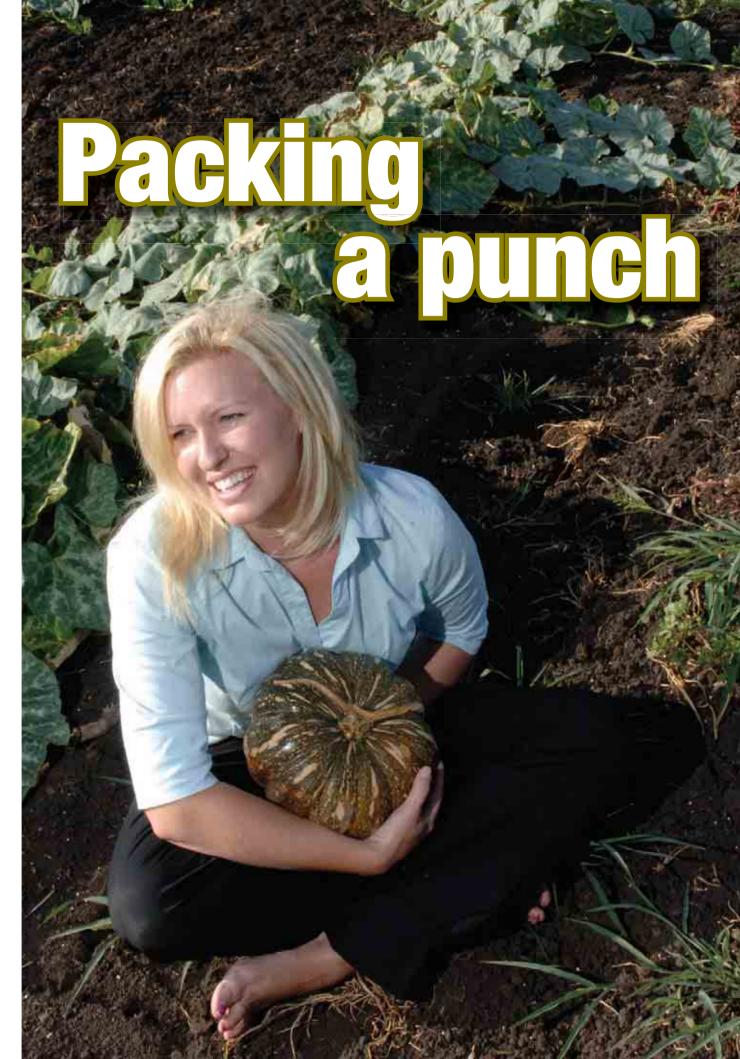




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Supporting the local vegetable industry is very important to Sally Brent of Bunny Bite Foods in Queensland's Fassifern Valley, as Jodie Powell finds out. Photographs by Ric Frearson.

Sally Brent can't remember what it's like to have more than a handful of consecutive days off each year.

Working as the general manager in her family's business, Bunny Bite Foods, at Boonah in the Fassifern Valley in South East Queensland, Sally says production is a year-round affair that requires all hands on deck.

"We have a lot of growers contacting us because they see processors as an additional avenue for their produce."

Life as a grower permeates almost every facet of Sally's life – she met her husband, Glenn Abbott, through the family business, although she didn't start her career in the industry.

"I was working in Brisbane in finance, and a little over six years ago I rang Dad and said 'I've had a gutful, is there anything going?'," Sally said.

"The accounts lady had just left, so I took that over and have become more and more involved in every aspect of the business."

Sally didn't set out to head the family company when she left Brisbane.

"I just grew into the role – I've grown with the business."

Husband Glenn grows onions, broccoli and carrots on his own farm, separate from Bunny Bite Foods and Sally jokes that he gets the worst deal of all the company's suppliers. Sally's brother, Matthew Brent is the company's operations manager. Her father, John, and uncle, Peter, are still actively involved as directors of the company.

The Brent family has a long and proud history of producing vegetables in the region.

For the past 10 years, Bunny Bite Foods has produced prepared vegetables, but the family's association with growing in the region began in 1915.

"Farming has become a 365-day-a-year affair – the processing side doesn't stop – we go five days a week with double shifts. And we have two or three days for the year and they're the religious holidays."

Sally said the progression to prepared vegetables was natural.

"We were doing a lot of carrots and decided that there must be something we could do with second-grade carrots," she said.

"My father and uncle researched opportunities overseas in 1995 and decided we would get into the fresh-cut industry with baby peeled carrots.

"Now we process onions, carrots, pumpkin, capsicum sand sweet potatoes – they're peeled, sliced, diced and sautéed."

As well as growing its own produce, the company sources vegetables from the whole eastern seaboard of Australia.

"We have a lot of growers contacting us because they see processors as an additional avenue for their produce."

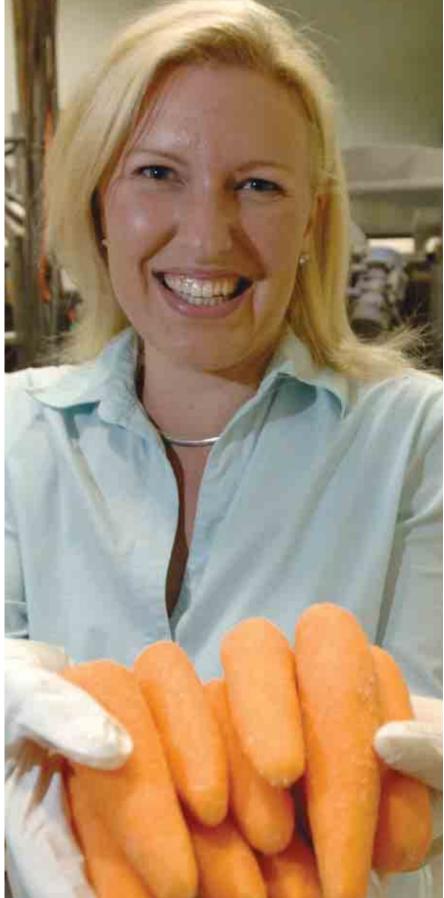


The prepared vegetable industry was a big departure from 80 years of traditional growing, and Sally said this year marked another milestone – after growing beetroot for Golden Circle for 40 years the family has decided to concentrate on other avenues.

"There's a lot of refocusing on where our farming opportunities are heading in the future." she said.

The company no longer produces for the export market, but supplies companies within Queensland and interstate.

Continued on next page



Packing a punch (continued)

Bunny Bite Foods generally has 400 acres under cultivation, but like many places in Australia water supply is an almost permanent problem and this year only about 270 acres will produce vegetables.

"This is our sixth year of drought-type conditions."

"Water continues to be an issue for us – this is our sixth year of drought-type conditions. We haven't had anywhere near as much rain here as they have had in Brisbane, and looking to go forward, water's pretty vital."

The changing demands of the marketplace have also spelt big changes for Bunny Bite Foods.

"Food standards are improving at a very fast pace," Sally said. "What would have been fine five years ago, now has to be chemically certified and sanitised."

The family business is HACCP-accredited, meaning food safety standards must be upheld, but it comes at a cost.

"You have audits and that means you need people to keep records – we have a full-time food technologist, a document controller and a quality assurance (QA) officer on the floor full-time."

The other big challenge facing the industry, Sally said, was that major supermarket chains were increasingly turning to overseas produce for their home-brand products.

"We know they're looking at their own premium-brand lines and those products will be sourced from overseas.





"It's my belief that Australian owned and grown produce should be used and people should know that they're getting their produce from here.

"There needs to be recognition of what people are getting and it needs to be promoted on the packaging so supermarkets don't get the opportunity to exploit overseas markets as much as they are and put pressure on local growers to toe the line."

Sally said one major concern for local growers was that overseas suppliers did not necessarily have to meet the stringent standards demanded of Australian companies, meaning consumers could be offered inferior vegetables.

"It stems back to price - everyone's experienced dramatic increases in growing costs, in fuel, water and labour and we are not seeing increases at the other end - if anything they want it for less than 20 or 30 years ago.

"We're not playing on a level playing field because we're dealing with countries that have subsidised farming and cheap labour.





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With the growing dominance of supermarkets as the retail outlet of choice by consumers, Youna Angevin-Castro asks the question – are central wholesale markets still relevant to the vegetable industry?

In most countries, wholesale markets remain an essential link between producers and consumers. However the characteristics of wholesale markets have changed considerably as they respond to the changing environment.

Changes in urban development are forcing many markets to change locations. Traditional inner-city locations are no longer considered appropriate and the need for larger facilities able to accommodate large transport vehicles and to avoid traffic congestion and noise pollution is forcing many markets to shift to areas on the outskirts of cities.

However, it is the increasing role of supermarkets on the retail landscape that provide wholesale markets with their greatest challenge. With large supermarket chains now sourcing their produce directly from farmers, a number of central wholesale markets across the world have recorded sharp declines in trading, compared to 20 or 30 years ago. And this trend is likely to continue, given the change in consumer shopping habits in recent years.

Are central wholesale markets being squeezed out by fierce competition from supermarket outlets? Are they still relevant on the Australian retail landscape?

lan Parker, the recent CEO of Sydney Markets Limited, and Andrew Young, CEO of Brisbane Markets Limited share their thoughts on the future of the central market system in Australia.



lan Parker, CEO* of Sydney Markets Limited

lan joined Sydney Markets Limited as Chief Executive Officer in 2004, and during his time in this role, worked closely with stakeholders, including wholesalers and growers, to develop a vision for the future and longevity of the market.

In researching possible models for the Sydney site, Ian looked at the various types of central market systems operating across Europe.

"You can basically split the central markets around the world into two categories – those operating in a socialist political environment, and those operating in a free market," lan said.

"Those operating in a socialist political environment, such as Mercabana in Barcelona, or Rungis in Paris (the biggest wholesale market in the world) are generally protected by legislation. So much so, the Parisian council protects the market by preventing people from building warehouses within 50 kilometres of the market site.

"By comparison, all markets in Australia operate in a free market environment, with the biggest influence over the central markets in a free market environment being supermarket bypass."

lan believes the burgeoning growth of supermarket retailers dealing directly with growers for the supply of fresh produce is one of the greatest threats to the central market system, as this will lead to supermarkets controlling the entire supply chain.

"In the UK, the supermarkets have dominated the sale of fruit and vegetables to consumers to the point that there are virtually no independent traders at all. The high street in the villages is dead, and people now go to massive shopping centres for their fresh produce.

"The result of this is the collapse of the central market system leading to governments become reticent to invest precious capital into a market system that is no longer relevant to consumers, who are all purchasing their fresh produce through supermarkets.

"In Europe, growers are virtually queuing outside the central markets and begging 'Let us back in', but the central markets

are saying 'We can't, because we've got no customers'."

lan believes that the potential upshot of this in Australia is that growers will soon become even more vulnerable to the demands of supermarkets.

"One of the core competencies necessary to be an effective supermarket operator is procurement. Beyond the need for excellence in procurement there is the need for the same level of competency in supply chain management, marketing, management of human resources and IT. Obviously there are a range of other skill requirements but these are must haves.

"The central markets need to get better at communicating their real relevance in today's environment and for the future," said lan.

"Suppliers constantly lambaste the supermarkets for being too aggressive, but they're locked in mortal combat with their competitors and must always seek a competitive advantage. They really have no choice but to be absolutely brutal – their survival depends on it."

Despite the threat, lan sees an opportunity for the central markets to collaborate with growers, and deliver a valuable market system.

"Growers understandably want some comfort about the future," said lan.
"The central market system is critical to Australian growers because without it they will have just two customers who will only buy produce that complies with very tight quality specifications.

"One of the issues at the moment is that medium and smaller sized growers generally have a low level of understanding of what happens beyond the farm gate, and there is a misconception that everyone, except them, is making money from the product they grew.

"If someone spent a week at Sydney Markets I could almost guarantee that during their stay they would not meet a grower, other than those who operate businesses in the markets themselves, of which there are many. Growers don't come to the markets. They rely on feedback from their wholesaler or grower representatives organisations, but they rarely gather this information first-hand. The consequence of this is that they don't understand the value that the central market system gives them, and at the same time the importance of having an alternative to the supermarkets.

"Central market wholesalers provide a great deal to growers that the supermarkets don't. They accept produce virtually 24/7, provide free warehousing, value-add the produce in a wide variety of ways, merchandise it, where ever possible talk the prices up, then sell it, carry the credit and provide virtually daily updates to their individual growers on market conditions and what other growers might be doing. The supermarkets do none of that. The central markets need to get better at communicating their real relevance in today's environment and for the future."

As far as the future is concerned, lan believes it is very bright, so long as the focus is on best practice and making sure that the markets remain a low-cost supply chain hub. Continued on next page



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Fresh face: The changing role of wholesale markets in Australia (continued)

Continued from previous page

"Sydney Markets is committed to working with wholesalers to understand where there are opportunities to increase efficiencies of this site, and then to deliver them in an appropriate manner that results in benefit to them. In turn the wholesaler's customers, the all important independent fresh produce retailer, will be sourcing produce from this market as competitively as possible."

Sydney Markets is already moving down the path of increased efficiency with the formation of a wholesaler credit co-operative to minimise bad debts and effectively manage credit processes within the market.

"Customers now receive only one invoice, rather than a multitude of invoices from a range of different wholesalers. That's a fantastic example of resource sharing, and minimising administration costs ... a perfect example of how we might move forward."

So how does lan feel about the proposed mandatory code of conduct?

"Extremely disappointed. There are other far more important industry issues to deal with than a mandatory code that is being introduced on the basis of very, very little tangible evidence to substantiate its justification.

"If there was a strong need for a mandatory code, you would find that the wholesaler community would have already acted upon it. Wholesalers covet their growers – without growers, they'd have nothing to sell!"

In short, Ian believes the future of the Australian central markets lies in communicating with growers about how the markets and the industry works, so they can work collaboratively to fine-tune their products and processes to most effectively meet the needs and demands of the consumer.

"We have arguably the best central market system in the world. If all stakeholders don't appreciate that they may not fully benefit from what it has to offer. Central markets will never be recreated once they have collapsed...there's no doubt about that."

(*Since speaking to Vegetables Australia for this article, Ian Parker has left the position of CEO at Sydney Markets Limited.)



Andrew Young, CEO of Brisbane Markets Limited

"Central markets are a marketing and distribution hub, and this role will continue into the future with wholesalers serving the retail chains, independent retailers, providores, food service businesses and exporters." said Andrew Young, CEO of Brisbane Markets Limited.

"The central markets have many strengths, which include the entrepreneurship of wholesalers.

"Markets operate on a significantly large scale that can't be ignored. Nationally, this represents \$5 billion in turnover, over 400 wholesalers across six central markets and over four million tonnes of produce of various quantities, varieties and qualities required by a diverse customer base.

"As information hubs, central markets offer marketplace intelligence, price discovery, contact with buyers and nationwide information networks. The diverse range of customers also includes retail chains, independent retailers, food service businesses, providores, secondary wholesales and exporters.

"The synergies able to be achieved through the businesses operating in a central location, particularly in relation to product supply, marketing and distribution issues, are incredibly valuable," Andrew said.

Like Ian Parker, Andrew believes that there are, at times, misconceptions about the role and operation of central markets.

"These misconceptions generally exist because of a lack of understanding, often by people who fail to comprehend how the markets work, the relationships which exist, and how effective markets are in clearing substantial volumes of product very quickly.

"More recently, we have also seen misconceptions about the position the central market system has taken on the mandatory code issue. This has been part of the political debate regarding the code, and it has served the best interests of certain pro-code parties to portray an inaccurate position."

Yet, despite the debate about the mandatory code of conduct, Andrew believes that central markets generally have a good relationship with the growers that it deals with.

"Market wholesalers have a very close working relationship with the vast majority of their grower suppliers.

"At a peak industry organisation level, historically some poor relationships exist, at least here in Queensland, but also in a number of other States. This is unfortunate and tends to reflect some of the baggage which our industry has gathered over time.

"More recently, we have also seen misconceptions about the position the central market system has taken on the mandatory code issue. This has been part of the political debate regarding the code, and it has served the best interests of certain pro-code parties to portray an inaccurate position," said Andrew.

"Brisbane Markets Limited (BML) and Brismark both have strategies in place to improve communication with growers and promote a professional image of the wholesaling sector. This includes initiatives such as our industry magazine, Fresh Source, a complaints hotline, a grower handbook, a website, sponsorship of conferences and employment of an Industry Liaison Officer."

In spite of the challenges facing the central markets. Andrew says that many wholesalers are investing time and resources into improving the structure and operations of their businesses.

"Central market wholesalers are very diverse in how they are developing their businesses. Wholesalers are investing both upstream and downstream in growing, processing and retailing activities. Many are focusing on how they add value with different services being offered to their suppliers and customers.

"Central market owners are also focusing on the future through the upgrade and redevelopment of infrastructure, and the development and provision of services to support and promote their tenants, ranging from bulk purchasing arrangements of power, telecommunications and fuel, cold storage, power generation, sale of ancillary products, distribution efficiencies and marketing."

He says central market wholesalers in Australia have been very quick to address industry demands for improved cool chain management and food safety programs, and are amongst the best central markets in the world.

"The industry must move on from the adversarial style approach to addressing industry issues," he said. ■

Andrew Young will be a guest speaker at the Australian Vegetable Industry Conference in Brisbane in May.



That's Confidor confidence.









Patrick Mitton, Food Industry Stewardship Manager, Bayer CropScience UK will be a guest speaker at the 2006 Australian Vegetable Industry Conference in May.

Crop protection protocols a priority in Europe

Patrick Mitton, Food Industry Stewardship Manager for Bayer CropScience UK, shares some insight into current crop management trends in Europe.



"Both European governments and the food supply chain have spent the last couple of decades reacting to a series of food scares. The foot-and-mouth (BSE) crisis, coupled with an insatiable appetite by the media to sensationalise risk has resulted in both legislative and food company initiatives to manage farming methods in order to reduce the likelihood of negative exposure."

These are the observations of Patrick Mitton, Food Industry Stewardship Manager for Bayer CropScience in the United Kingdom, where Patrick has spent the last six years as the company's key liaison with stakeholders in the food chain.

As the Chair of the Pesticide Working Group of Campden & Chorleywood Food Research Association, one of the UK's leading food manufacturer and processing research and training organisations, as well as the crop protection industry representative on the food groups of the European Crop Protection Association, Patrick is well-versed in the variety of crop protection issues that are currently emerging in Europe.

arisen in Europe, in which farming methods are controlled firstly by new regulations emanating from Brussels, and secondly by individual food company protocols. These systems are an attempt to add further levels of initiative to satisfy corporate responsibility in the areas of managing pesticide residues in fresh produce, minimising impact to the environment and ensuring high standards of worker welfare.

"New regulations governing traceability, combined with a trend in some European countries towards contract farming is creating

greater accountability and transparency along the food supply chain," said Patrick.

"All players are becoming increasingly interdependent on each other in delivering against both the legal and consumer expectations."

For Bayer CropScience one of the great challenges in Europe is to research, develop and sell crop protection products that not only satisfy the statutory regulatory requirements, but also satisfy the expectations of the food industry.

"Some of the major UK retailers have moved towards trying to reduce all levels of residue to an undetectable level."

"To understand the food industry expectations it has been necessary to enter dialogue with the food companies and discuss Integrated Crop Management systems that satisfy the food industry protocol landscape.

"Bayer CropScience has established its Patrick explains that a two tier structure has own European "food chain" team to support fruit and vegetable growers, food producers, fruit and vegetable importers and distributors. The members of the team work closely with partners in the international food chain and form an important link in the production process. Bayer CropScience contributes its innovative crop protection products, its research expertise, the extensive knowledge of its experts and its international network to this partnership."

> Patrick believes that the most important trend emerging from the food companies in Europe is the focus on residues of crop

protection products - with this focus rapidly starting to dominate ideas in respect of grower protocols.

"Food companies are keen to eradicate the chance of a maximum residue limit (MRL) breach," said Patrick.

"Furthermore, some of the major UK retailers have moved towards trying to reduce all levels of residue to an undetectable level." Looking to the future, Patrick predicts that the global supply of foodstuffs to Europe will inevitably accelerate the process of European food retailers wanting to determine how the crops are grown in the countries of origin.

"The result will be an expectation for growers to adhere closely to grower protocols that are designed to satisfy the expectations of the receiving European food retailers and supply chain - whether this be the global EurepGAP standard or the individual standards laid down by the individual retailer or food processor," said Patrick.

This means that all countries outside of Europe will find themselves only gaining access to the European retail market if they satisfy such requirements.

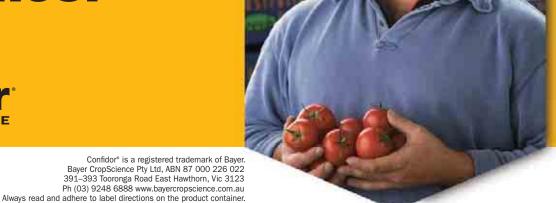
"Beyond Europe, there will be a trend towards similar standards and expectations of the food retailers and supply chain as the combined pressure for worker welfare, environmental care and safe food adapt common requirements. Success for growers will be through a close focus on end user requirements, with the complete food supply chain pulling together to satisfy the growing marketplace expectations."

Patrick Mitton will be speaking at the 2006 Australian Vegetable Industry Conference.

That's Confidor confidence.









How McDonald's is helping the fight against obesity

The health of Australians is a rising source of concern. We have never worked harder or longer. And, as Youna Angevin-Castro discovers, we have never been fatter.

According to the recently released 2004-05 Australian Bureau of Statistics National Health Survey, the proportion of Australian adults classified as overweight or obese has increased over the last ten years: for men from 52 per cent to 62 per cent and for women from 37 per cent to 45 per cent.

Similarly, childhood obesity has grown over the same period, with experts predicting that obese children have a 25-50 per cent likelihood of progressing to adult obesity if left untreated.

These figures highlight a disturbing trend in our declining national health. And while it may seem like an uphill battle to overcome this problem, the challenge is made easier by the changing philosophies of high profile food service providers, such as McDonald's.

Widely criticised as a contributor to poor dietary health in developed countries, most famously in the 2004 documentary film 'Super Size Me', McDonald's has long fought against critics who have condemned its menus as morally irresponsible and a risk to public health.

In Australia, McDonald's has taken this attack on its reputation particularly seriously, and over the past three years, the local division of the multinational company has worked hard at redesigning its menu to offer alternative options for the health conscious.

"In 2002, our former CEO, Guy Russo, attended a number of obesity summits and forums, and met with key organisations, such as Diabetes Australia and the Obesity Taskforce, to listen and learn about this growing national problem," said Kristene Mullen, Director of Public Affairs for McDonald's Australia.

The message to McDonald's was clear – obesity was a problem, and as an influential member of the community, the company had a responsibility to do something about it.

McDonald's has been widely criticised as a contributor to poor dietary health in developed countries.

In February 2003, McDonald's launched its first alternative Happy Meal, featuring a tomato and cheese toasted sandwich with sultanas and orange juice. The meal boasted less than six grams of fat per serve, and proved to be a popular alternative for McDonald's customers. Within seven months, the company made further investments in its health conscious range, and the Salads Plus menu was launched featuring eight products with 10 grams of fat or less per serve. This was soon followed by the QuickStart breakfast menu, and in 2005 the Deli Choices menu was rolled out across Australia.

In an effort to also improve the nutritional value of its core menu, McDonald's also made some key changes to its more traditional recipes. McDonald's buns now have no more than five per cent sugar, and claim to be equivalent to bread rolls bought from a supermarket. Restaurants now also use a liquid canola oil blend for its French fries, which contains no cholesterol, and is 75 per cent lower in saturated fat than the previous blend.

As well as the new menu choices, McDonald's has also altered its marketing and advertising approach to tackle growing childhood obesity. "Since 2003, we have reduced our advertising during children's television viewing times by 60 per cent, and will continue to monitor this," said Kristene.

"In 2004 we also introduced an ad featuring Ronald McDonald to encourage children to get involved in energetic and team activities.

"The message to children is that exercise is fun – it doesn't have to be an organised sport, it can just be playing on the beach or going for a bike ride with friends."

So, having recognised the need to respond to the social and physical wellbeing of the Australian population, what more can McDonald's Australia do to protect the health of Australians?

"In 2006, we plan to introduce alternative Happy Meal choices that both appeal to children, and pass the criteria of being a good nutritional choice.

"This has been one of the biggest challenges we have faced. McDonald's has enlisted the help of a panel of experts comprising school teachers, children's caterers, packaging designers and parents to generate food ideas to make sure we get this right."

Peter Bush, current CEO of McDonald's Australia will be speaking at the 2006 Australian Vegetable Industry Conference at the Brisbane Convention Centre in May.

For more information about the program, visit www.vegieconf.com.au .

McDonalds - the birth of a healthy alternative

February 2003 – McDonald's introduces an alternative Happy Meal

September 2003 – Salads Plus menu launched.

November 2003 – QuickStart breakfast menu launched, offering a new range of breakfast cereals, yoghurts, juices and fruit cups.

March 2004 – Introduction of the first stage of nutrition labelling to core menu.

May 2004 – McDonald's bun recipe changed to reduce sugar content.

July 2004 – Salads Plus menu revamped to reduce sugar in the Berrynice Yoghurt Crunch, reduce the size of muffins, introduce a low fat smoothie and a Lean Beef Burger.

September 2004 – Change to liquid canola oil blend.

October 2004 – Deli Choices menu trialled in South Australia.

Menu features a selection of seven toasted rolls with premium filling, three of which have less than 10 grams of fat per serve.

May 2005 – Deli Choices menu launched Australiawide.





Researcher profile

ordon Rogers



Improving the already popular salad mixes

Fresh cut salad mixes have had tremendous popularity in the 10 years they have been on the market. David Jarwood uncovers a new study which shows how to make them tastier and longer lasting.

Gordon Rogers and Mike Titley from Applied Horticultural Research (AHR) in New South Wales have conducted a threeyear study on lettuce, aimed at improving shelf life and quality of fresh cut salad mixes. Gordon will be presenting the results of the study during a workshop at the Australian Vegetable Industry Conference in May.

"We have seen both improved quality and increases in yield of up to 40 per cent."

Titled "The effect of irrigation type, cultivar selection and growth period on the shelf-life of minimally processed cos and iceberg lettuce", the overall objective of the project was for the eating experience to be favourable every time a consumer opened a bag of fresh cut salad mix containing iceberg or cos lettuce.

Gordon said lettuce varieties, irrigation, nutrition, establishment, and postharvest handling practices were all investigated during the project, to determine how these agronomic and environmental influences affect shelf life and quality of Iceberg and Cos lettuce.

"Since the birth of the fresh cut salad industry in Australia in 1995, Australian lettuce growers have adapted 'recipe' agronomic techniques from elsewhere in the world, especially California, without fully understanding how these techniques work locally," Gordon said.

He said that adapting new techniques and a better understanding of the existing growing



techniques had led to improvements in shelf life of between two and four days.

"The actual shelf life varies according to season, but the techniques produced shelf lives of up to 14 days," he said.

Gordon said there was also a marked improvement in quality and yield.

"Through better varieties, matching production times with locations and optimal harvest times, we have seen both improved quality and increases in yield of up to 40 per cent," he said.

A workshop on the project, which was funded through the National Vegetable Levy with a voluntary contribution from OneHarvest, will be conducted at the May conference. It will be presented jointly by Mike Titley and Gordon Rogers and will feature:

- Identification of the most productive times and shelf life for each of the main lettuce production regions in Qld and Vic.
- The identification of important new lettuce varieties including Cyclone, Challenger and Nr varieties and associated agronomic work to maximise production from these lines.
- Effective crop nutrition to maximise yields and quality.
- The effective use of trickle irrigation to produce high yielding and quality lettuce with significant water savings compared to overhead irrigation.
- · Soil moisture management.

Gordon said a training program had been established based on the results of the project.





Industry's brightest showcase

The latest and greatest in industry knowledge, services and technology will be right at the forefront at the Brisbane Convention Centre, May 10-12 this year.

The vegetable industry Trade Exhibition, which will run in conjunction with the 2006 Australian Vegetable Industry Conference, is about giving growers the edge they need in today's competitive market place.

The trade exhibition will be held right throughout the conference and will include a range of resources, such as National Vegetable Levy-funded R&D project posters, the latest in farm machinery, chemicals and vegetable seedlings – all within a stone's throw from the Vegetable Conference proceedings.

Participating exhibitor Agrichem
Australia sees the trade exhibition as an opportunity to promote their specialised range of products, and to talk directly to their customer to improve future product ranges.

"We are always looking for new and innovative solutions to meet growers' needs and direct contact with growers is invaluable for our business and future product lines," said Justin Sambell, Agrichem's National Sales Manager.

Michael Badcock, Chairman of AUSVEG, was pleased by the level of commitment displayed already by both sponsors and participants in the trade exhibition.

"It's vitally important that everybody will be together at the conference for what will be a giant step forward for our industry and I'm very pleased that existing sponsors and exhibitors have recognised this," Michael said.

"The importance of direct dialogue between all sectors of industry should not be underestimated. Growth in local and international market places will only come through stronger relationships and working together."

The trade exhibition is nearly full, with strong support from industry, service providers and suppliers.

Current trade exhibition participants include: Bayer CropScience, Terranova Seeds, Agrichem, Withcott Seedlings, Lefroy Valley, Rijk Zwan, Chep, Dow Agroscience, Nufarm, Syngenta Seedlings, Brisbane Markets, Vin Rowe Farm Machinery, Suncorp, WYMA Engineering, South Pacific Seeds, Naandan Australia, Chemtura, SprayGro Liquid Fertilizers, Aust Safe Super, APVMA, Netpro, Seminis, DAFF, FSANZ, AUSVEG, and GROWCOM.

For more information about the trade exhibition, contact ARRIS Pty Ltd. Tel: (08) 8303 6709 or visit www.vegieconf.com.au





Use of new technology such as global positioning systems, aerial photography, crop sensors and supply-chain tracking devices would enable growers to improve crop yield quality and better tailor agronomic inputs to a wider variety of conditions within their crops, according to a recently completed scoping study into the possibilities of precision agriculture within Australia.

"You could run your harvester over a field of lettuces and measure the density of the lettuce heart, and harvest only the lettuces that had sufficient density."

Put simply, the term precision agriculture describes a production-based farming system that aims to integrate the management of a whole farm, rather than individual fields, by using technology to establish the requirements for the fields, plantations or crops and tailor technology (such as automated irrigators) to tend to the crops.

"Precision agriculture is aimed at improving crops that exhibit a variety of yields due to soil or environmental conditions. It has less relevance in production systems that have uniformity in quality and yield," said the University of Sydney's James Taylor, who worked on the three month study.

"A lot of what we're suggesting here is the collection of data and imagery to see if there is a variation, if so what is causing that variation and what decisions can the grower make to change that variation into something they can make money out of," he said

The study has highlighted the use of satellite or aerial imagery as an initial method for gathering essential data on the characteristics and varieties of densely cropped areas, allowing growers to start developing an overall plan on managing their crops.

In addition to satellite imaging, the study has also indicated there is great scope for using global positioning system (GPS) technology in assisted or automatic tractor navigation, allowing the grower to stop dividing their attention between driving the

tractor and the trailing equipment, with the automated system even able to direct the tractor to drive over its own tracks.



Researcher, James Taylor, University of Sydney

"In terms of auto-steering and guidance systems, the GPS minimises your overlap and greatly reduces driver fatigue by allowing the operator to just look backwards. The auto-steer automatically steers the harvester where you're going, to minimise traffic on the field," James said.

Auto-steer has in fact proven to be popular with growers, both overseas and locally, and is expected to be one of the most readily welcomed results of the scoping study's findings.

However, James is quick to point out that although there are several recommendations in the study, they all form part of an integrated management plan and that GPS on its own is not a total solution.

One area of information gathering which James highlighted as a great opportunity for growers is the use of sensors, in conjunction with harvesting and supply chain machinery, both to gather statistical data and to tailor the machinery's activity.

"If you had a quality sensor, as opposed to a yield sensor, you could run your harvester over a field of lettuces and measure the density of the lettuce heart, and harvest only the lettuces that had sufficient density," James said.

The study has recommended focusing initial research efforts on sweetcorn and beetroot crops as they have approximately 43 per cent and 48 per cent respectively of their variable input costs associated with irrigation, fertiliser, pest control and weed control, all of which can be tailored to account variability observed in quality and yields.

The bottom line:

- · Precision agriculture aims to improve production systems through collection of imagery and data.
- · Popular applications include global positioning systems (GPS) for automated tractor navigation.
- Opportunities exist to use precision agriculture for quality management, as well as yield management.

For more information, visit www.ausveg.com.au and search under 'VG05060' or 'Technology', or contact your local Industry Development Officer.

Grower embraces precision technology

Over the last few years, sweetcorn grower Jeff McSpedden has been using soil surveys and variable rated irrigation in an effort to make better use of his resources.

"Commodity prices aren't rising, so you've got to find ways to do more with less," he said

Soil surveys, carried out for an irrigation management plan, mapped the spatial variation in soil and identified a clay hardpan at a depth of 30cm, with underlying lighter textured soil.

This soil information was combined with real-time moisture measurements to create prescription maps for variable-rate irrigation of the crops.

Last year, Jeff purchased aerial imagery which was collected using a hired plane at a cost of \$9 per hectare. This imagery was used to identify different soil and yield zones in the field.

Jeff's keen to see a pH/Lime requirement instrument developed which will help him better apply lime in areas where it is required.





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Who'd have thought the humble radish could hold so much promise in the quest to solve the puzzle of cancer? Jodie Powell finds out more.

A team of five scientists based at the Department of Primary Industries and Fisheries research station at Gatton in south-east Queensland is working on a project to tap into the impact of nutrients in radishes and other brassica vegetables on cancer cells.



Project leader and principal physiologist Dr Tim O'Hare heads the team and has designed trials to find which horticultural species in the brassica family have anticancer potential.

From the beginning of the project two years ago, the team predicted the most potent anti-cancer source would be sprouted seed, based on the expansion of the broccoli sprout industry in America.

The team had experience with Asian leafy vegetables and Tim said that since most were in the brassica family it seemed probable that at least some of them may have similar anti-cancer potential.

"The division between what is an Asian vegetable and what is a Western vegetable can get a little blurry sometimes, as initial origin may be Asian, but a vegetable is now widely grown in the west." Tim said.

"Consequently, we have also included a number of traditional western vegetables for comparison, apart from broccoli, cabbage, kohl rabi and radish.

"The project's primary thrust, however, is Asian members of the brassica family, as these have received considerably less study, especially as sprouts."

Tim said the focus was on members of the brassica family because they contained a group of phytonutrients [plant chemicals] called glucosinolates.

"When the vegetable is chewed, glucosinolates are converted to isothiocyanates, some of which have the ability to induce detoxification enzymes in humans, which can accelerate the removal of carcinogens [cancer-causing agents] from the body.

"Different vegetable species contain different glucosinolates, some of which are more helpful than others."

One group of glucosinolates is found to be particularly high in the sprouts of broccoli and radishes.

"A couple of the front-runners are traditional radish and the Japanese white radish, also known as daikon," Tim said.

"In general, sprouts tend to have much higher levels of these glucosinolates than mature vegetables and so you need to have a lot less to get the same effect.

"We've gathered good evidence that radish and white radish (daikon) sprouts may actually be of more benefit than broccoli sprouts.

"One of the reasons for this is that broccoli contains a protein that interferes with the conversion of glucosinolates to isothiocyanates, reducing potency by up to 80 per cent. Radish and daikon don't have this protein."

"When the vegetable is chewed, glucosinolates are converted to isothiocyanates, some of which have the ability to induce detoxification enzymes in humans, which can accelerate the removal of carcinogens [cancer-causing agents] from the body."

While there's always great excitement about research breakthroughs in cancer prevention or cure, Tim remains cautiously optimistic about the team's research.

But he said the evidence for glucosinolates having an anti-cancer effect was mounting.

"As far as our research goes, consumption of glucosinolates is more a protective measure against cancer rather than curative.

"What can actually be said on labels however is limited at this stage. Although general nutrient claims can currently be made, specific health claims are currently not possible, and will require extensive and expensive clinical studies before they are.

"However, this doesn't mean you can't eat them in the meantime," Tim said.

The bottom line:

- Asian brassica vegetables are found to contain high level of glucosinolates (plant chemicals).
- Glucosinolates may be linked to the removal of carcinogens in the body, and have anti-cancer properties.

For more information, visit www.ausveg.com.au and search under 'Asian Vegetables' or 'VG03086', or contact your local Industry Development Officer.









European hydroponics -

what Australia can expect of the future

For those involved in greenhouse production in Australia, an escorted tour of Holland and Belgium to witness the industry's state of art might seem like a two-week sojourn in heaven. Susan Hudson reports.

Tour participants from around Australia joined the Pathways to Production tour in October 2005 to study at the acclaimed Practical Training Centre Plus (PTC+) at Ede, and to view 'walking plant systems', where plants are tended on conveyor belts that come to the grower, instead of the other way around. They visited the only double storey automated and roboticised greenhouse in the world, where 25,000 orchids are cultivated and exported every week.

The tour was organised by president of the Australian Hydroponic & Greenhouse Association, Graeme Smith.

"We saw something of what Australia can expect in the future," Graeme said, "although some Australian growers are already on the right track and not too far behind production methods being used in Europe."

Graeme, who now runs Graeme Smith Consulting, studied at PTC+ in 2002, gaining a post-graduate diploma in greenhouse management. So he is well aware of what the highly competitive European market has to offer our growers in terms of knowledge and expertise.

"Sadly there has been a lack of formal opportunities in Australia for training in this highly specialised field of vegetable production," he said. "Though this is changing quite rapidly."

After arriving in Holland the group visited the National Greenhouse Research Centre in Naaldwijk and the Strawberry Research Centre at Meerle in Belgium, before joining a 5-day intensive training course at the PTC+ in Ede where they were tutored in the management of energy, water, fertilisers and humidity control.

They visited the only double storey automated and roboticised greenhouse in the world, where 25,000 orchids are cultivated and exported every week.

Their principal tutor, Ben van Onna, is well known to many Australian growers after attending the National Australian

Hydroponic & Greenhouse Association Conference staged in Melbourne in 2003.

The institute at Ede is unique in that, as well as classrooms, there are large greenhouses on campus displaying different crops and cultivation technologies. Students from all over the world attend this centre of excellence.

The Aussie group then spent two days at Amsterdam's Hortifair – the world's largest expo in the protected cropping industry, showcasing new and emerging technologies – where they were able to view a diverse range of goods and equipment, including glasshouses, and shade screens.

Representatives from a number of Dutch companies had also agreed to meet with the growers to talk about technology, and issues and problems affecting the European greenhouse industry generally. Growers in Holland are facing a major virus threat from the Peppino Mosaic.

Other topics discussed were labour methods, new technologies and new and old crops and the protected cropping of tomatoes, capsicum, cucumber, aubergine and strawberries generally.

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Clean, fresh water: a sweet memory? Not if we get it right for the future.

Perhaps the 21st century will be about protecting the basic essentials of life more then ever before. Susan Hudson investigates whether water is something we've taken for granted for too long.

Water is now a 'hot' topic in this droughtprone country, but while many vegetable growers are increasingly concerned about the quality, cost, and supply, a recent study showed inconsistencies in how we manage and record its use.

Some growers had little idea of how much water they used, even if they were motivated to find out.

Department of Primary Industry Victoria research scientist, Bill Ashcroft, was recently commissioned to conduct a pilot study into water usage.

Bill is a project manager based at Tatura, and he and his team chose two contrasting areas of Victoria to conduct the survey.

Over a single production season (2004-

2005) they interviewed growers at 25 sites in the Mallee (Mildura and Swan Hill) and peri-urban areas of Melbourne (Cranbourne, Mornington Peninsula and Werribee). The crops under cultivation near Melbourne were lettuce, broccoli and carrots, while in the Mallee growers were producing carrots, squash, pumpkins and zucchini.

The main thrust of the research was to collate the various ways water was being used for vegetable production, and to establish benchmarks for efficiency of water application. The research team looked at factors like how growers are managing water to maintain peak crop performance, how much they used and their sources of supply. Of all the factors investigated, security of water supply was critical – and a common objective for all.

"Most growers in our survey used fixed sprinkler irrigation and didn't see cost as a great issue," Bill said. "Although most are aware that water costs are going to rise, the major economic factor for them is still the costs associated with hiring labour."

"The quality of water was mentioned in some areas, especially where salinity has caused damage to crops."

The source of irrigation water for vegetable crops varied. Growers obtained it straight out of the mains (an expensive option), from local waterways, from creeks adjacent to farms, or from ground water (bores). Costs also varied, ranging from nil to around \$300 per mega litre.

The approaches used to manage and record water usage also varied among participating growers, and there were many inconsistencies.

"Some growers had little idea of how much water they used, even if they were motivated to find out." Bill said. "So quite obviously there is a need for some education here."

"A few growers had metering on their pumping systems, and some on the Murray had very sophisticated irrigation scheduling programs."

One grower identified the relationship between irrigation and plant disease as a priority issue.

For those who didn't, members of the project team attached a meter to pipes to measure the flow of water by detecting pulsations as it surged along for distribution to crops.

Although most growers readily agreed to participate in the research, when it came to the middle of the season many simply became too busy to collect the required information. "So there was some guessing and probable inaccuracies," Bill said.

"If accurately reported, the extent of variation in water use for the same crop. between growers and regions, suggests inefficiencies and warrants further investigation."

One grower identified the relationship between irrigation and plant disease as a priority issue, and although further details are needed, optimising irrigation and plant health (yield and quality) could be a focus for future water use studies.

Recommendations stemming from the survey were to improve consultation, training and support for growers in future benchmarking activities, and to refine the electronic database and software package used to collect and record data.

"Future studies should also take place over a longer period of time, probably spanning several seasons," Bill said. Factors such as region, crop-type and water management system will also need to be adequately represented if meaningful comparisons are to be made.

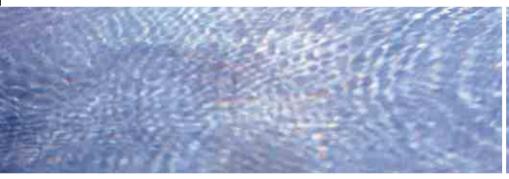
"Information collected from a wider survey could be incorporated into a central database, to provide a reference source to the industry, researchers and policy makers on water use in vegetable crops," Bill said.

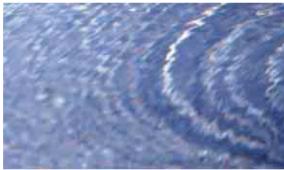
"And the development of extension activities is just as important as anything else, to educate growers on how to refine their approaches to water management and control."

The bottom line:

- A study of 25 diverse facilities in Victoria in 2004-2005 showed disparities in approaches to water conservation and use by vegetable growers.
- Findings showed that some growers weren't keeping records at all, while others used highly sophisticated equipment to keep abreast of water usage and costs.
- The study highlighted the pressing need for further research and education.

For more information visit www.ausveg.com.au and search under 'VG04015' or 'Water', or contact your local Industry Development Officer.









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A new view of

Mildura grower Gary McEwan speaks to David Jarwood about how an unconventional spin on carrot growing is proving to be a success.

> Mallee farmer Gary McEwan is flying in the face of tradition and accepted practice this season and into the unknown.

Gary runs a 1200-acre property at Nangiloc, 50 kilometres upstream along the Murray from Mildura growing carrots for juicing and citrus fruit.

Now 53 years old, he has lived on the land all his life, having been born and raised on the property and Gary has grown the juicing carrots for the past 13 years.

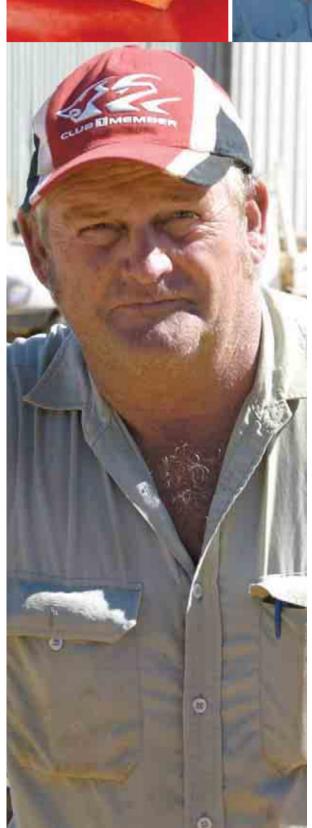
When he was born his father ran the then 56-acre property. Over the years the McEwans worked to add to their land growing a large range of vegetables - lettuces, spinach, bunch carrots, watermelons, rock melons and pumpkins - to complement the citrus fruit. They also took any opportunity to purchase more land growing the property's size to the present day of 1200 acres.

About 13 years ago Gary started to specialise on the juicing carrots.

Gary says he started focusing on the juicing carrots for economic reasons and it was less physically taxing, "I used to be 18 once and I am not anymore".

He says that non-farming people get the idea that farmers make quite a lot of money.

"They look in the supermarket and see the prices that are charged there," he said. "But what we get at the farm gate is just a fraction of that. If the supermarket is charging \$5 a kilo the farmer will be getting less than a dollar a kilo."





growing carrots

In an average year the property, which Gary runs with his father, wife, two sons and daughter, grosses a healthy amount but expenses and taxes make a huge dent in that figure. It is in a heavily irrigated area - providing some sort of drought insurance, but also financial costs.

"The irrigation certainly costs a lot to install and it is not cheap to pump the water." he said.

"Our carrots are for juicing and don't have to be the prettiest carrots around."

This is one of the reasons that Gary is conducting his own trial using a chisel plough.

Conventional wisdom recommends the use of a mouldboard plough with carrots, in order to prepare the ground properly to get straight aesthetically pleasing carrots. But using the mouldboard can be costly and time consuming.

"Our carrots are for juicing and don't have to be the prettiest carrots around," Gary said. So as a way to cut down costs and save time Gary has used a chisel plough to get this season's 400 acres of carrots into the ground.

The chisel loosens and aerates the soil and unlike many other ploughs will not invert or turn the soil, keeping organic matter and farming residues present on the soil surface through the year.

"The chisel plough may not prepare the soil as deep and loose, but it is ideal for getting the carrot seed in the ground quicker," Gary said.

"The proof will come in June when we start to pull the first carrots out of the ground."

Gary, who also grows 170 acres of citrus fruit, admits that he is always on the look out for ways to make his property in northwest Victoria more efficient.

He is mindful of the changing markets and the need to improve where possible.

Gary says globalisation has not yet had a major impact on the juicing carrot industry, but the citrus industry has seen some dramatic changes with the effects of globalisation. New markets have opened and new competitors have emerged.

His juicing carrots end up in Japan and his citrus fruit of

oranges, mandarins and grapefruit are sent to Mildura and packaged for the local markets and for export to the United States.

"The US is now a very good market for citrus, and South Africa is a new competitor," he said.

"I send the majority of my oranges, mandarins and grapefruits down to Mildura to the Mildura Fruit Company. They are the largest citrus packer in the southern hemisphere and are constantly on the lookout for new markets to open up."

Last year was one of the worst seasons for citrus in many years. It was a season of a large crop of smaller fruit, making them less attractive to buyers. It was also very windy causing marked fruit, further reducing their appeal.

But, Gary says, this year is shaping up to be a lot better.

He has found the carrots and citrus complement each other well. The carrots go in the ground from February to May.



Harvest starts in June and continues up until December. The harvest period for the citrus is roughly the same.

This means that December and January can be fairly quiet, giving Gary the opportunity to catch up with his administration and family over Christmas and New Year

"There is still plenty to do over that time, but at least I get a chance to get some other things done," he said.

Gary has spent all his life on this property and can't see that changing.

"Dad is still here and working," he said.

And you get the sense that Gary can see himself doing the same – working on the farm right up until one day he will hand it over to his two sons, who are now 23 and 18.





IPM - The way forward against lettuce aphid

The arrival of a new pest has lettuce growers across the country looking for new ways to avoid having major crop losses, David Jarwood reports.



In 2004-5 Lionel Hill of Department of Primary Industries, Water and Environment (DPIWE) and his team set up a project to show Tasmanian lettuce growers how to integrate control of all pests in commercialscale lettuce crops and to demonstrate that seedling insecticidal

drenches, although effective against aphids, did not integrate with management of other pests.

While the Confidor-treated seedlings have so far controlled lettuce aphid, the use of Confidor also kills the predators shared by both aphids and caterpillars.

Lionel said the project, funded by the National Vegetable Levy, assessed for the first time in Australia the potential for a selective-pesticide based control method for lettuce aphid.

"This project has demonstrated to growers and entomologists that there is a viable alternative to high rates of Confidor drenching on seedlings to control lettuce aphid in Australia," he said.

Lionel said the strategy of dealing with the pest in the past had not been integrated with other pest issues.

"Many growers have adopted the practice of drenching seedlings with imidacloprid insecticide just prior to planting. But while imidacloprid is toxic to a broad range of insects, including several beneficial predators such as brown lacewing, damsel bug, and ladybirds, it is not toxic to caterpillars, which are also a major pest of lettuce.

"And if predators are impaired after eating poisoned aphids they are not available to complement the soft, selective insecticides that are increasingly used for caterpillar control or to restrain other pests for which no selective insecticides are available."

In the trial, nine crops of lettuce were planted at fortnightly intervals through spring, summer and autumn near Devonport, Tasmania.

The total trial area was one hectare but only one third grew lettuce at any one time while the remainder was left unseeded. It

was surrounded by crops of onions, broccoli, potatoes, barley, canola and pasture.

The project fast-tracked the field testing and adoption of integrated pest management in a novel pest-crop combination. The assessment at this stage is that an integrated pest management approach to dealing with lettuce aphid will be effective.

principles following the appearance of lettuce aphid have been successfully marketed in Victoria from crops grown at aphid-affected area of Werribee. These crops were grown under supervision of Dr Paul Horne and Jessica Page of IPM Technologies P/L who were collaborators in the Tasmanian project. This team is also testing integrated



Lionel said he expected the results of this trial would be relevant to all of the major lettuce growing areas in Australia, although some pests present on the mainland but not in Tasmania would require modifications.

There are several major lettuce growing regions in Australia, including the Lockyer Valley in southern Queensland, Werribee in southern Victoria, the Adelaide Hills of South Australia and northern Tasmania. Despite the differences in climate and growing seasons, there are several common insect pests that damage crops. These include native budworm, thrips and several species of aphids.

Hundreds of thousands of lettuces grown according to integrated pest management

pest management for open-hearted lettuces grown in southern Tasmania. The short life (5 weeks) of these crops is a major challenge for integrated pest management, and requires careful management of crop layout and planting sequences.

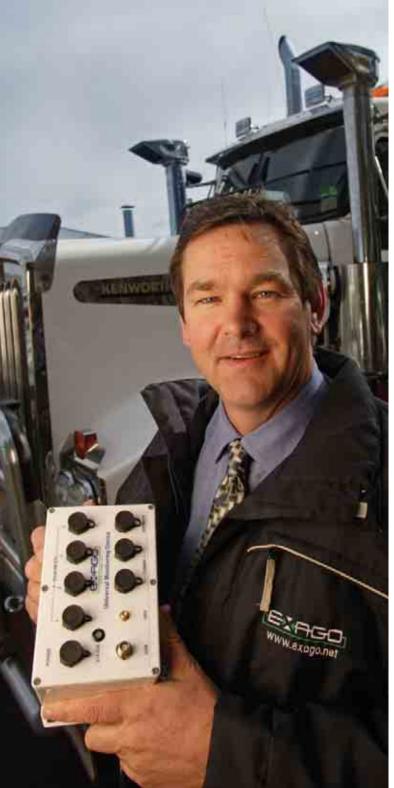
The bottom line:

- Lettuce aphid has been detected in lettuce crops in Tasmania, Victoria and New South Wales.
- Lettuce aphid is susceptible to Confidor, however an intergrated approach is favoured.
- · Commercial trials have been a success.

For more information, visit www.ausveg.com.au and search under 'VG04067' or 'Lettuce Aphid', or contact your local Industry Development Officer.

New transport monitoring system keeps freshness on track

Big Brother may be watching when it comes to perishable products as they make their way from growers to the supermarket shelf, thanks to a Melbourne-based company. By Jodie Powell.



Exago Pty Ltd has brought together a range of technology it has created to build a solution that allows key players to monitor and track the progress of perishable products along every step of their journey from the farm gate to the supermarket shelf.

The system incorporates a global positioning system (GPS) to track its progress while inside a refrigerated transport vehicle, and equipment to measure temperature fluctuations to ensure food is not spoiled before it hits the shelves.

Exago managing director Michael White said the monitoring and tracking system for perishable products gave those who used it peace of mind.

"It empowers the customer to do something when the problem starts to occur, rather than opening the back of the truck and saying `gee, what a mess'."

"We have the ability to create features which save a lot of money for transport companies and their customers," Michael said.

The system also allows greater certainty for customers so they can plan for staffing needs at various points.

"Customers know when a vehicle is going to arrive at a distribution centre because we know its position, and we use geo-fencing to create markers along the route," Michael said.

The technology is so sophisticated that it can send a notification to advise that the temperature is too cold inside the trailer in the event that someone forgets to adjust the thermostat to suit the cargo.

"We know in real time what the temperature of the trailer is so we know whether it's maintaining the correct temperature.

"We also integrate this with refrigeration units where we know whether the temperature set on the fridge is that required by the consignee.

"Our system can automatically advise if the temperature is incorrect because it compares it with an expected temperature and sends an SMS or email message to the control centre to contact the driver."

The beauty of the system is that it allows customers to tailor information collection to suit their needs and it is secure.

What sets Exago's system apart from existing technology is its ability to collect information in real time, rather than at various points along a product's journey – and real-time information collection allows those with most at risk to find real-time solutions.

"It empowers the customer to do something when the problem starts to occur, rather than opening the back of the truck and saying 'gee, what a mess'," Michael said.

The bottom line:

- A new system allows tracking of perishable products between the farm gate and supermarket shelves.
- GPS technology more accurately estimates delivery time of produce, allowing customers to arrange appropriate staffing.
- · Monitored temperatures ensure maximum freshness on delivery.

For more information visit <www.ausveg.com.au> and search for 'HG04022', or contact your local Industry Development Officer.







A positive solution for poultry litter

Carolyn Walker discovers an innovative Western Australian solution to problems associated with raw poultry litter use in horticulture that could soon be available nationally.

Australian vegetable growers are showing heightened interest in 'On Farm Stabilisation of Chicken Litter, Mortality and Crop Residue Through Composting' – a project developed by Spartel Pty Ltd using its trademarked composting technology FABCOM, combined with its ODOROV odour prevention technology.

Spartel managing director, Dr Harrie Hofstede said significant results had been achieved in the past two years, including a 90-98 per cent reduction in fly breeding, and up to 90 per cent odour emission reduction from treated poultry litter.

"Poultry litter management is a major environmental issue."

Pathogen levels have been reduced to levels compliant with the Australian Standard for Compost, Soil Conditioners and Mulches (AS 4454), and nitrogen conservation improved significantly compared to conventional litter processing. Phosphate leaching was reduced, resulting in improved availability for plant uptake, while the processed litter showed a similar crop performance to raw chicken litter.

"We have interest from around Australia and internationally, particularly Asia and the USA, due to the bird flu scare," Harrie said.

"The FABCOM technology neutralises pathogen levels while producing a valuable organic fertiliser from poultry litter and chicken mortalities. The technology can be located on poultry farms to treat chicken mortalities, preventing community exposure

by eliminating transport requirements. Poultry litter management is a major environmental issue."

The innovation developed from a rising trend that poultry litter, previously applied to land as a low cost and effective fertiliser and irrigation water saver, was being considered for incineration, following a partial ban on raw litter application during summer months due to fly breeding problems.

"Our aim was to produce a processed poultry litter product 'on farm' that was compliant with the poultry litter regulations, maintained high nitrogen levels, was free of pathogens and odourless," Harrie said.

"In 2003, we received financial support from the City of Wanneroo, several key Wanneroo vegetable growers, WA Department of Environment and Horticulture Australia. On completion of research, we received an innovation grant from National Landcare Program (January 2005) to facilitate implementation into horticulture, using trial farms."

Other stakeholders included the WA Health Department, Department of Agriculture, and the Vegetables WA (formerly WA Vegetable Growers' Association). The project has overcome environmental and public health issues while maintaining the high crop performance of raw litter.

"Industry will have safe and environmentally friendly litter for horticulture and other applications," Harrie said.

"We can now offer year-round use of poultry litter and recycling of nutrients and organic matter, without the negative public health aspects. This results in minimising the requirement of costly and environmental damaging synthetic fertilisers, and may reduce the landuse conflict between horticulture and urbanisation.

"The application of the organic matter in horticulture may also save up to 50 gigalitres of groundwater around Perth.

"Combating odour problems increases the life of farms on the rural urban fringe and has significant ramifications for the continued viability of the entire industry. This is a sustainable solution for chicken litter processing, and a significant improvement on less sustainable waste management processes."

The bottom line:

- Poultry litter is often associated with high pathogen levels, fly breeding and offensive odour emissions.
- FABCOM composting technology addresses these and other environmental issues to produce organic fertilisers from poultry litter and chicken mortalities.
- Growers can now access environmentally friendly poultry litter for on farm use all year around.

For more information, visit <www.ausveg.com.au> and search under 'VG03074' or 'Compost', or contact your local Industry Development Officer.





How sweet it is

Jodie Powell discovers that the health benefits of eating sweetpotatoes have boosted the vegetable's popularity. But consumers are also demanding varieties that are easy to peel.

Planting sweetpotato cuttings horizontally 50mm below the ground using a mechanical device is cost-effective and increases the yield of easy to peel sweetpotatoes, a Queensland-based research team has found.

Headed by Eric Coleman, the team has refined planting methods in a bid to boost the country's production of appealing, smooth-skinned sweetpotatoes.

What the team has come up with is a method of planting that boosts yields of premium-grade sweet potatoes by 30 per cent.

So far, saleable yields have improved by about 30 per cent.

Eric says that's good news for growers and consumers.

Based at the Queensland Department of Primary Industries and Fisheries at Rockhampton in the state's north, the senior extension officer has been working closely with growers to produce sweetpotatoes that are more marketable.

He said while some of the work had already been done for them thanks to the growing popularity of low-GI foods that provide diners with a sustained feeling of fullness, more needed to be done to ensure the sweetpotatoes were visually appealing and easy to use.

Hence the three-and-a-half year project to develop a smooth-skinned, easy to peel sweetpotato.

"The smooth-skinned part came into it to give it a catchy name," Eric said.

Catchy name aside, the project aimed to address a serious issue facing the industry – only about 30 per cent of sweetpotatoes produced in Australia were smooth enough to satisfy the demands of retailers and their customers.

Naturally, the waste was a worry to growers faced with a market keen to embrace sweetpotato as more than a colourful garnish to roast dinners.

"The more healthy and appealing product you put in front of consumers, the more you sell," Eric said.

Sounds simple enough, but the challenge was to create a higher yield of sweetpotatoes that were user-friendly and easy to peel.

Helped along by several projects focusing on sweetpotatoes that were running concurrently, Eric and his team began to look at isolating the different factors that affected the sweetpotato's agronomy.

Specifically, they wanted to ensure crops produced as many smooth and uniform sweetpotatoes as possible, eliminating irregularly shaped roots that made peeling a challenge.

"But
out in the
field we were
not getting smooth skins
– growers were only getting about 30
per cent of the premium grade at packout,"
Eric said.

"We wanted to get that percentage up to meet market demand."

Eric had a hunch that the way a sweetpotato was planted had a massive impact on the resulting vegetable. What the team discovered was that the first 21 days were critical in the development of the sweetpotato roots.

"We looked at different practices to make early roots develop smoothly and evenly.

"We looked at whether you put the cutting in flat or vertically, the planting depth and the irrigation regime used immediately after planting the cutting."

The team also had a theory that temperature, combined with depth of planting would have an impact on the end product.

What the team has come up with is a method of planting that boosts yields of premium-grade sweet potatoes by 30 per cent.

They found that 50mm below the surface was the optimum depth and that cuttings



"The last big experiment was irrigation — we changed our irrigation practices and in the first couple of weeks we found a 20 to 30 per cent improvement could be made to the amount of premium grade sweetpotatoes at packout."

Eric said regular irrigation during the first two weeks of the growing cycle was crucial to creating smooth, uniform sweetpotatoes.

"If you combine all that, you get a big improvement."

Already, growers have grasped the concept of horizontal planting using a mechanical planter – Eric said more than 60 per cent of the area being planted was now planted horizontally.

"The first farm we did flat planting at, the following season the fellow planted 50 acres with a mechanical planter and he had never used one before."

The bottom line:

- Consumers are demanding easy-to-peel sweetpotatoes.
- Horizontal plantings at 50 mm below the surface produce the smoothest and most even roots.

For more information, visit <www.ausveg.com.au> and search under 'VG02114' or 'Sweetpotato', or contact your local Industry Development Officer.

Maximising sweetpotato harvest

Since the project began, Eric Coleman and his colleagues have hand-picked, weighed and measured more than 14,000 individual sweetpotato roots.

Rather than simply evaluating growth at harvest as done by other research projects, they monitored the sweetpotato's growth at various points during the season.

"We looked at the sweetpotatoes at 30 days and at 60 days - the optimum growing cycle is 120 days," Eric said.

"Thirty days is critical. You can measure them and get a good feel for how it's going."

The other critical element of the project has been the involvement of growers along the way.

"We have a grower committee that we meet with every season - I talk to them about what we had planned, how it's gone and where we should go next," Eric said.

"The initial goal was to improve the yield of smooth-skinned sweetpotatoes, that's what growers said to us, so that's what we have focused on."

The right bugs 10/ We in the sing employed in

There is a new workforce being employed in

Australian horticulture that is Cutting costs and caring for the

ent at time, discovers David Jan environment at the same

The parasitoid wasp (Encarsia formosa) is a natural predator of the whitefly

Australian horticulture has a new workforce that has different requirements and conditions, and does not receive a regular payment. And the workers are so small that at first you may not see them. They are bugs - lots of 'em. The beneficial type that is.

It is all part of integrated pest management (IPM) strategies that are being put in place across the country.

Local beneficial bugs can contribute significantly to pest control and more and more growers are now managing their crops with an eye to protecting and encouraging this valuable resource.

The problem for many growers can be how they go about getting the right sort of bugs to do the right sort of jobs.

Growers could be lucky enough to have natural populations of beneficial insects on their properties, or there are certain plants that can be planted to attract them. This, however, can be a very hit and miss approach, and can take a long time to begin to see any improvements.

But now there are quick solutions with bug companies set up in most states of Australia that sell boxes of these bugs.

The bug market has grown strongly in the past few years with many outlets supplying beneficial insects such as ladybirds, lacewings, and native wasps. And the number of growers using the bugs as a way of cutting costs and reducing the use of pesticides is on the increase.

Wes Allen works for Queensland company Bugs for Bugs, a supplier and distributor of literally millions and millions of bugs a year.

Wes said the company, which has been in operation since 1981, stocked six of the main species of beneficial bugs - aphytis

wasps to counter red scale parasite, cryptolaemus for mealybugs, chilocorus beetles for combating scale, green lacewings which are a general predator for aphids, white fly, scale species and mealy bugs, and two species of trichogramma wasps that attack moths.

"During the warmer months we are dispatching orders of bugs every day," he said.

Wes said the use of beneficial bugs was a long-term proposition, rather than an overnight success.

"But most of the farmers, once they do make the plunge, keep coming back," he said.

Wes said many years of research had gone into developing the industry to ensure that a bigger problem was not created by the bug sent out to counter an established pest.

Bugs for Bugs is just one of nine companies in Australia selling beneficial insects.

The use of beneficial bugs was a long-term proposition, rather than an overnight success.

These companies are all members of the Australasian Biological Control Association, which was established in 1992 to facilitate cooperation and information exchange between companies producing beneficial arthropods for use in horticulture, agriculture and turf.

The members aim to further the knowledge of beneficial insects and mites and the role they play in pest management systems. To this end the association has produced a number of brochures, posters, two editions of The Good Bug Book and established the <www.goodbugs.org.au> web page.

Monitoring for natural enemies as well as pests is the cornerstone of a biological control focused integrated pest program - a strategy which encourages the reduction of pesticide use by employing a variety of pest control options to contain or manage pests below their economic injury levels.



Brown lacewing larvae.

Integrated pest management aims to maximise the use of biological control with other control measures, specially chemicals, playing a supportive, rather than disruptive role. Chemicals are used when needed as defined by systematic pest monitoring, with selective rather than broad-spectrum chemicals taking preference.

The advantages of integrated pest management include slower development of resistance to pesticides, reduced risk to spray operators, reduced chemical contamination of food and the environment, and reduced dependence on chemicals.

However, integrated pest management is more complex than control by chemicals alone and requires a greater understanding of the interactions between pests and beneficials, as well as the effects of chemicals. Practices and routines need to be modified and new information researched and absorbed by the practitioners.





Returning carbon to the Earth

High levels of carbon in the soil can improve agricultural productivity. Youna Angevin-Castro looks at how growers can improve carbon levels in the ground, and help save the planet from global warming too.

Global increases in atmospheric carbon dioxide have been closely linked to an increase in greenhouse gases and subsequent climate change. These increased levels can be largely attributed to industrial outputs and emissions due to human activities, and are causing grave environmental concerns. However growers may be in a unique position to help reduce levels of atmospheric carbon dioxide, as well as improve their soil quality and agricultural productivity, through a range of conservation practices which capture carbon dioxide from the atmosphere and store it in soil and vegetation.

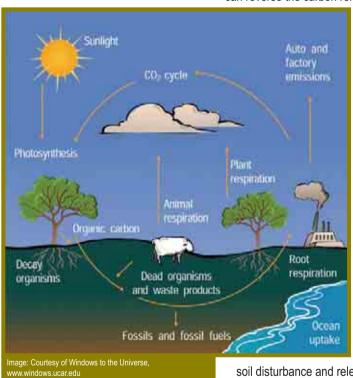
What is the carbon cycle?

The carbon cycle is a biogeochemical cycle by which carbon is exchanged between the Earth, its organisms and surrounding atmosphere. It involves a series of conversions of carbon compounds, and relies on organic processes such as photosynthesis, respiration and decomposition to maintain movement of carbon atoms through the cycle. (refer to diagram)

Creating carbon sinks

Carbon is the key to all life on Earth, and is essential to healthy soils. However, the conversion of grasslands and forests to croplands causes large amounts of carbon to be released into the atmosphere, thereby contributing to atmospheric carbon dioxide levels, as well as reducing soil quality and crop production.

Through photosynthesis, plants convert carbon dioxide into organic forms of carbon. Plants naturally deposit this carbon in the



soil through their roots and in plant residue, but when most of the crop is harvested, the opportunity to return organic matter to the soil is lost. This situation is aggravated by excessive or unnecessary tillage, which breaks down organic soil carbon and releases carbon dioxide. The net result is a depletion of carbon in the soil, or a carbon deficit.

What can growers do?

All is not lost. Certain farming practices can reverse the carbon release process by

sequestering (absorbing) the carbon from the atmosphere – creating a carbon sink. This has the result of slowing the loss of carbon from soils, and increasing the amount of carbon stored long term.

Practices may vary according to climate and soil type, and may include:

 practising no-till farming, which reduces

soil disturbance and releases carbon dioxide:

- using legumes and/or grasses in crop rotations;
- applying manure, compost and other organic compounds according to nutrient management plans;
- converting marginal crop land to perennial grass or trees;
- planting shrubs and trees as shelterbelts; and
- restoring wetlands.





Many of these land management practices improve soil quality, plant production, and water conservation, reduce erosion, enhance wildlife habitat and species protection, which result in increased biodiversity.

These practices can also help boost a farm's bottom line. For example, minimum tillage increases energy efficiency by reducing machinery use. Improved crop varieties and crop fertilisation can increase yields and soil carbon.

What are carbon credits?

Carbon credits are a global concept devised to encourage landowners to increase carbon sequestration practices by reducing land clearing, and encouraging the growth of native vegetation.

Through the planting and preservation of native vegetation and trees, long term carbon stores are sustained, and associated atmospheric changes are expected.

However, while the temptation to plant trees under a carbon credits program may be environmentally compelling for Australian growers, the raft of complex guidelines may in fact make it difficult for many vegetable growers to participate. Restrictions to land clearing may apply, and some vegetation may in fact be excluded, based on perceived conservation value. Registered carbon traders are also required to demonstrate a long term commitment to preserving trees and vegetation, making it difficult to sell agricultural land to prospective buyers who may have intentions to clear more land or subdivide the property at a later date.

This is not to say that growers should avoid carbon conservation practices, however they should make sure to be fully informed of any restrictions or requirements prior to signing up to any carbon credit programs.

"Growers who are unsure if they can commit to a formal carbon credit program, should at least try to achieve carbon neutrality," said Helena Whitman, AUSVEG's Environmental Manager.

"Through carbon neutrality, growers can ensure that their activities do not add to the environmental impact of greenhouse gas emissions, while benefiting from the advantages of a carbon-rich soil to their own crop production."

For more information about soil carbon, or to join the Enviroveg program, visit <www.ausveg.com.au> or call Helena Whitman on 0409 535 051.



December inflation figures announced

Australia's latest official inflation figures provide further evidence of the rising food costs faced by consumers, according to food and agribusiness banking specialist Rabobank.

The latest Australian Bureau of Statistics Consumer Price Index data shows the food price index rose 1.8 per cent in the December 2005 guarter compared to the previous quarter, easily outstripping the general inflation rate of just 0.5 per cent.

Rabobank's Food and Agribusiness Research (FAR) analysis says food prices were pushed up across a range of product categories as manufacturers looked to pass on rising fuel, plastic and raw material costs, and adverse weather created supply shortages in some product lines.

"Strongest price increases were evident in milk, cheese, bread and fruit and vegetables. However, bucking the general trend, the price of several major meat categories weakened during the period, while wine prices have been stable over the entire year," according to Rabobank head of Food and Agribusiness Research Dr Ben Russell.

Fruit and Vegetables

Fruit and vegetable prices increased sharply in the December quarter, up by 5.8 per cent and 6.8 per cent respectively.

Highly seasonal products, fruit and vegetable retail prices are traditionally the most volatile of all food categories, according to Rabobank.

"Fruit prices traditionally peak over the summer and Christmas period, with this year being no exception," Ben said.

Vegetable prices also increased sharply over the December quarter. Wet conditions over much of eastern Australia during spring and early summer delayed vegetable harvest in many regions and reduced yields, driving up market prices. Increased fresh potato prices during 2005 were underpinned by lower domestic production during the year, following a very large potato harvest in 2004.

It is also possible that, as with bread, reduced focus on low carbohydrate diets has led to a revival in demand for potatoes during 2005, Rabobank said.

Ben Russell, Rabobank's Head of Food and Agribusiness Research explains some of the principles that influence inflation figures.

What do inflation figures represent?

Inflation figures represent the extent to which consumer prices for goods and services increase over time. The consumer price index is the measure of inflation used by the Australian Bureau of Statistics (ABS) and the Australian government.

How are they calculated?

The CPI (Consumer Price Index) is calculated by the ABS using a standard "basket" of goods and services, covering a very wide range. Food makes up around 18 per cent by value of the overall CPI. The food CPI figures include prices for fruit and vegetables, but also dairy, bread and baking products, meat, and restaurant/take out meals. Looking particularly at fruit and vegetables, ABS purchase prices include fresh, chilled, frozen, dried, loose, packaged and canned fruit and vegetable products from both supermarkets and fresh produce markets.

More information on calculating food CPI can be found at <www.abs.gov.au/Ausstats/abs@.nsf > (go to Consumer Price Index).

Why do inflation rates vary across different commodity groups?

Because retail pricing for different food categories is driven by a range of factors that vary across different food production sectors. For example prices for beef and veal increased in the December guarter because of very strong demand for Australian beef in the Japanese market, while pork prices declined because of an increase in pork imports in that quarter. Each food industry sector is affected by different local and international supply and demand drivers and market conditions, and this is reflected, ultimately, in different rates of inflation across food sectors.

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How do you explain the large increase in inflation on fruit and vegetables in the December quarter, as reported by the ABS Consumer Price Index data?

In the December quarter of 2005, retail vegetable prices increased by 6.8 per cent, while retail fruit prices increased by 5.8 per cent. Fruit and vegetable retail prices are historically the most volatile of all food categories, as shown in the attached chart. This is driven primarily by the seasonal nature of both supply and demand. Price volatility is greatest in the shoulder periods, where supply is unable to keep pace with demand. Retail prices appear to peak in the December quarter of each year, and have increased in this quarter in every year since 2001.

With particular reference to vegetables, what are the main factors which may contribute to a rise or fall on inflation?

It is difficult to isolate the specific drivers of inflation for vegetables at any point in

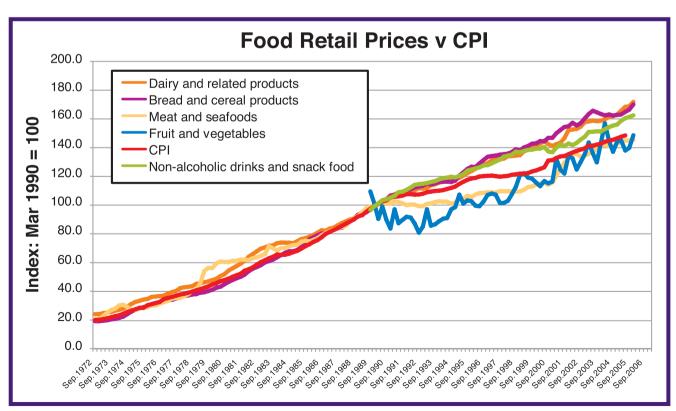
time, because of the enormous diversity in vegetable production, covering different products, geographies and seasons. However, the December guarter saw far higher than average rainfall in many regions of South East Australia, as well as significant "one off" events such as flooding and hail in some regions. This may have delayed or reduced the supply of vegetables in some markets, which would have forced prices up. Retail prices in horticulture tend to be very sensitive to supply - limitations in availability can generate large increases in retail prices, while over supply can result in sharp price falls. Perishability and wastage also impact on retail prices at various times.

How does this data impact farm gate prices?

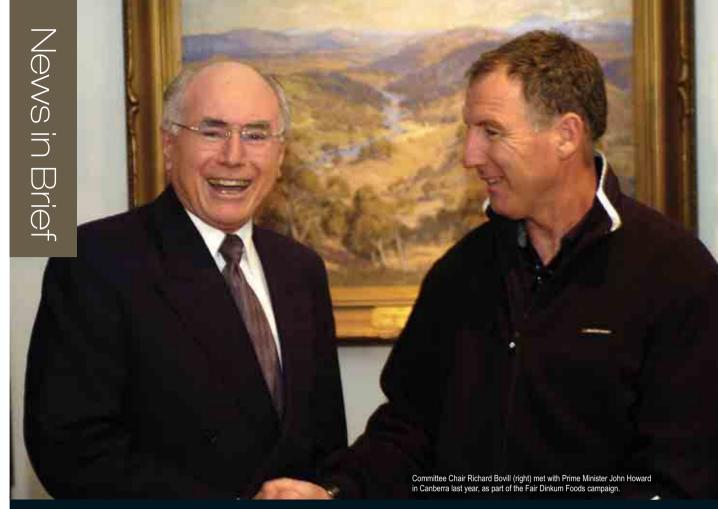
In an open and transparent market, you would expect that increases in retail prices would generally also be reflected in higher farm gate prices. However for various reasons, retail prices do not always reflect

wholesale and farm gate prices. For example, major supermarkets are increasingly developing direct supply relationships with larger growers, which removes these sales from wholesale markets. Supermarkets will also price fruit and vegetables for strategic reasons. Categories are often put on at special prices, acting as "loss leaders" to stimulate customer traffic, while at other times, fruit and vegetables are fully priced. which would produce sharp apparent price increases. A further difficulty is the lack of accurate and transparent reporting of wholesale market prices over time - it is very difficult to track farm gate and wholesale prices in horticulture over time. Prices are usually reported as ranges, while variations in quality at different times mean it is difficult to compare like with like products.

A very good study on price determination in the Australian food industry was published by the Commonwealth Government in 2004, and is available on www.affa.gov.au/content/publications.cfm



Source: Australian Bureau of Statistics



New focus on vegetable industry growth

A major new project aimed at boosting the vegetable industry's long-term growth and prosperity will draw on practical advice from a team of industry experts.

Minister for Agriculture, Fisheries and Forestry Peter McGauran says the Australian Vegetable Industry Development Group (AVIDG) will oversee funding of \$3m the Government has provided under the Industry Partnerships Program (IPP).

The Group will be chaired by Tasmanian Richard Bovill, organiser of the Fair Dinkum Foods Campaign, and brings together strong expertise and experience in the farming, retail, processing and wholesale/export sectors through:

- Michael Badcock, Chairman, AUSVEG Ltd
- Nigel Steele Scott, Chairman, Horticulture Australia Ltd
- Peter Cochrane, President, VFF Horticulture Group
- Ian Pavey, National Business Manager, Fresh Produce Coles Supermarkets
- Wendy Erhart, Managing Director, Withcott Seedlings Queensland Pty Ltd
- Terry O'Brien, Simplot Australia

 Russell Phillips, Australian Government Department of Agriculture, Fisheries and Forestry.

In August 2005, the Government announced a further \$3m to help the industry.

Minister McGauran said the Australian Government contributed \$200,000 last June to an IPP project looking at turning around the vegetable industry's fortunes.

"In August 2005, the Government announced a further \$3m to help the industry tackle the serious challenges identified during that IPP project," he said.

"The IPP project report - Setting Directions for the Future of the Vegetable Industry - outlined a vision for seven so-called 'foundation projects':

 developing a long-term, industry-wide strategic plan

- 2. improving farmers' business skills
- 3. improving leadership and industry structures
- 4. developing an information and decision support framework for industry
- 5. introducing rigorous industry benchmarking
- 6. assessing the international competitiveness of the vegetable industry
- 7. enhancing markets through points of difference and competitive advantages.

"AVIDG will help to focus these projects on industry expectations. Along with the Australian government injection of \$3m, the projects will receive support from the national vegetable levy," Minister McGauran said.

The first project, developing a strategic plan for the industry, is underway, with a draft to be presented at the Australian Vegetable Industry Conference on 10-12 May to attract industry comment.

Country of Origin Labelling on Packaged Vegetables Stalls at FSANZ Study

The FSANZ report on the feasibility of extending Country of Origin Labelling laws to cover packaged foods, released earlier this month, has fallen far short of consumer and vegetable industry expectations.

"I am extremely disappointed in the short comings of the feasibility study presented by FSANZ. The economic arguments put forward appear to be some what biased and have little regard to the social and health benefits of accurate country of origin labelling," Michael Badcock, AUSVEG Chairman said.

"The real cost of implementation would be near zero."

"The FSANZ report states that 'Information to satisfy the community's right to know would be of low value' based on the premise that manufacturers rarely receive calls asking for the information.

"Does this then mean that because people don't always ring and ask a cigarette company or a fast food outlet if their product is good for them that it doesn't matter and is not of value to know?" Michael said.

A recent Auspoll survey overwhelmingly highlighted the value that Australian consumers place on accurate labelling, with over 97% of respondents declaring that they believed accurate information is needed on where food products are grown.

"If this dismissal of social values is much of the rational, I question FSANZ's conclusion that there is a strong case that the costs of the proposed extension to country of origin labelling (CoOL) would exceed the benefits from its implementation.

"Consumers have the right to know where their food comes from. Without this they cannot make an informed decision, regardless if it is a health choice, a cost choice, a patriotic choice or one of principle," Michael said.

But consumer choice is not the only argument. John Roach, CEO of AUSVEG, argues that the cost debate used by the report to justify not extending country of origin labelling is a furphy.

The report has tried to argue that country of origin labelling is a major cost imposition upon businesses. But the additional requirements are part of the normal routine of updating existing labels.

"Changes to labels are a key marketing tool for companies in order to enhance the competitive edge," said John. "The report concedes that it is normal business practice to change labelling requirements at least every two years. By allowing manufacturers to "phase-in" CoOL, the real cost of implementation would be near zero."

AUSVEG will submit a formal response to the FSANZ study by early March.

For more information visit <www.ausveg.com.au>

Food Labelling Needs Enforcement

Australian grown labelling mix-ups in supermarkets proves that food labelling laws are not being enforced by State governments.

"Current food labels are misleading and confusing to consumers. Vegetable growers are keen to see the Australian grown labelling campaigns continue to promote Australian produce but they must be correct," Michael Badcock, AUSVEG Chairman said.

"Enforcement of food labelling laws is virtually non-existent."

"Consumers may think they are buying Australian because they see the Aussie flag, but in reality they might not be, because a sign has been put in the wrong place or removed altogether. This activity is disgusting and very 'un-Australian'," Michael said.

Late last year the Ministerial Food Council voted that clear country of origin labelling must be made on non-packaged foods. It is the responsibility of the State governments to enforce this.

"Enforcement of food labelling laws is virtually non-existent. Some states are making valid attempts but others are very poor," John Roach, AUSVEG CEO said.

"I am surprised that the Australian Consumer and Competition Commission has downplayed the issue. They need to look at it again. Current food labelling isn't just confusing, it is grossly misleading," John said.

"If food labelling laws, as set by Food Standards Australia New Zealand (FSANZ), can so easily be dismissed, then you have to wonder why so much time and effort is made to write them. State governments must be held accountable to standards, do the right thing by their constituents and enforce them," John said.

Lettuce Aphid Detected in New South Wales

The NSW Department of Primary Industries (DPI) has launched a response and surveillance program for Lettuce Aphid following the detection of the pest at a site in the Sydney Basin.

NSW DPI Executive Director, Biosecurity, Compliance and Mine Safety, Doug Hocking, said routine surveillance by the NSW DPI led to the detection of the insect in what is the first positive detection of Lettuce Aphid in NSW.

The pest, believed to have come to Australia via New Zealand, was first spotted in Tasmania in 2003. It had migrated to Victoria by May 2005. Unfortunately it is more a case of 'when' than 'if' the lettuce aphid migrates to other states as it is known to travel on winds. It was believed to have been originally carried across the Tasman Sea by unseasonable winds.

New Parliamentary Secretary appointed

The Hon. Sussan Ley MP was sworn in as the Parliamentary Secretary to the Minister for Agriculture, Fisheries and Forestry on 27 January 2006 replacing Senator Richard Colbeck.

Senator Colbeck has moved to the position of Parliamentary Secretary to the Minister for Finance and Administration.

Mrs Ley is the member for Farrer, New South Wales representing the Liberal party. She was previously the Parliamentary Secretary for Children and Youth Affairs.

2006/07 Extraordinary Vegetable R&D Project Call

Horticulture Australia Limited (HAL) will conduct an extraordinary Vegetable* Industry Call for National Vegetable Levy and Voluntary Contribution (VC) projects to enable service providers to submit proposals against the industry's newly determined priorities which will shortly be available following a number of comprehensive industry reviews.

For more information on the nature of these reviews, please visit the vegetable industry section of the HAL website.

The Vegetable Industry Call will take place from 21 March to 13 April 2006. Proposals received will be reviewed by HAL and its Industry Advisory Committee and applicants will be advised on whether they have been endorsed** for the 2006/07 program by 15 June 2006 as per all other proposals.

Please note, this Call will be for projects directly addressing the vegetable industry priorities only. Other proposals will not be considered. Equally, do not submit proposals for the Vegetable Industry Call prior to 21 March.

Vegetable industry projects submitted in the Industry Call held in November 2005 will be assessed against the new priorities prior to the Vegetable Industry Call. Advice on whether these proposals have received endorsement** will be issued prior to 21 March to provide unsuccessful applicants with the opportunity to resubmit in the extraordinary Call.

If you have any questions, please contact Simon Drum (HAL) on 03 8080 5605.

- * 'Vegetables' includes all vegetable products except the following asparagus, garlic, onions, herbs (other than fresh culinary shallots and parsley), melons, mushrooms, potatoes (other than sweetpotatoes), seed sprouts, tomatoes.
 - ** 'Endorsement' is support in principle subject to technical and financial reviews

Extension to period for comment on FSANZ Australian health claim proposal

Food Standards Australia New Zealand (FSANZ) has extended to 31 March the period for comment on new proposals for a health claims standard that would allow disease risk reduction claims on food labelling.

Currently, nutrient content claims such as 'this food is high in fibre' are allowed on food labels, as are some health maintenance claims such as 'calcium is important for healthy bones and teeth'. The only health claim allowed is about the benefit of consumption of folate by pregnant women to prevent neural tube defects in their babies. Under the proposed standards, all claims must be substantiated with scientific evidence and, in the case of high level claims, these will be assessed by FSANZ before the product goes on the market.

The report is available at http://www.foodstandards.gov.au/

Plant Breeder's Rights: Intellectual Property Issues for Horticulture Industries

Free Seminars in 2006

The Australian Centre for Intellectual Property in Agriculture (ACIPA) in conjunction with Horticulture Australia Limited (HAL) are holding a series of free seminars on intellectual property issues for growers to be held in various districts throughout 2006.

Recent developments in intellectual property, particularly in the area of plant breeder's rights, end point royalties and legalities of grower agreements are having more and more impact on the horticulture industry.

New varieties are now commonly protected by plant breeder's rights, leading to more growers having to pay tree and/or end point royalties to breeders.

Growers are also being presented with contracts that give intellectual property owners additional rights. These threaten the ability of growers to save propagating material and seed. They also often provide owners with rights to enter onto property to search and seize for breaches of intellectual property.

These free seminars will give growers the opportunity to learn about relevant intellectual property issues in particular, plant breeder's rights, end point royalties and contractual issues.

For further details please contact ACIPA on 07 37357772 or visit our website www.acipa.edu.au.

This project is being funded by ACIPA with matching funding through the Australian Government facilitated by HAL.

New South Wales

Currant Lettuce Aphid (CLA) identified in NSW

CLA has been officially identified in NSW at a site in South Western Sydney in early February this year. The pest was detected as part of regular surveillance conducted by NSW DPI officers.

The State's \$25 million lettuce industry is now under direct threat from the pest, as it can cause major losses to lettuce crops by feeding within the heart of the vegetable.

Movement controls on lettuce from the affected site are in place to ensure lettuce only moves from the property to areas where possible spread of the insect is limited.

Currant Lettuce Aphid has not been detected in any other lettuce production region in NSW.

A management group consisting of representatives from NSW Farmers' Association, the lettuce industry, seedling propagation industry, processing industry and the NSW Department of Primary Industries has been formed to develop a strategy to manage the pest.

The group has met by teleconference and is working with the NSW DPI to develop the best options for future management of Currant Lettuce Aphid in NSW.

A meeting to inform growers on technical management issues and protocol developments occurred on February 27 and representatives from NSW DPI (Dr Sandra MacDougall, Richard Walker) and other lettuce industry personnel, such as NSW IDO Alison Anderson, were present to assist growers.

NSW Department of Primary Industries researchers had been preparing for the discovery of Currant Lettuce Aphid in NSW for some time, and already have research projects underway to develop practical control measures.

NSW DPI have been working with the lettuce industry since the detection of Currant Lettuce Aphid in Tasmania in 2003 to prepare for the inevitable spread of the pest to other growing areas.

Trials involving insecticide options as well as Integrated Pest Management (IPM) are being conducted at the NSW DPI's National Vegetable Industry Centre at the Yanco Agricultural Institute.

The researchers have trial sites in Tasmania and have revealed that lady beetles and brown lacewings can control lettuce aphids. Sydney growers have been part of some of the research work.

Hydroponic lettuce growers are seeking clarity on the use of Confidor® in NFT systems as the current permit obtained by AUSVEG does not address issues relating to recirculated solutions.

Luke Jewell Senior Policy Analyst NSW Farmers Association

Growing the Business of Farming Ass



Address: Level 10, Elizabeth St Sydney NSW 2000

Tel: 02 8251 1885 Fax: 02 8251 1752 Contact: Luke Jewell

















Tasmania

New Zealand tour

It was discussed at the November Vegetable Council meeting, that a group of grower representatives visit New Zealand to obtain a better understanding of the industry in New Zealand compared to our industry in Tasmania.

Expressions of interest were sought among Vegetable Council, and we have 10 enthusiastic travellers who will depart Launceston on 5 March and return on 10 March 2006.

During this time the group will visit the Ashburton and Timaru areas, south of Christchurch, visiting organic farms, seed processors comparing trials and technologies, and direct drilling technologies that could be applicable to Tasmania. New Zealand's largest potato grower Turley & Co, and McCain processing plant are on the itinerary. Farm visits are scheduled, comparing dairy, mixed cropping and other mixed farm enterprises along with a machinery dealer and a lamb feedlot.

We have the support of Horticulture New Zealand representatives assisting with arrangements in New Zealand, and meetings will be arranged with Ron Gall, EO Horticulture New Zealand, and their grower groups.

The tour participants include Ian Young, Dale Anderson and Wallace Anderson (North West Coast), Rob Bayles (Cressy), Don Badcock (Hagley) Stephen Earley (Deloraine), Michael Hart (DPIWE) Guy Robertson (Cradle Coast NRM), Denis Leonard and Stephen Welsh (TFGA).

This group will give a presentation of their trip at the Vegetable Council meeting in March.

Brassica Futures Group (BFG)

The Brassica Futures Group's (BFG) trials to develop and demonstrate direct-seeding as a means for establishing processing broccoli crops are progressing very well. The three trial crops have emerged and

established successfully, and early concerns about weed competition and moisture management have been addressed utilising a combination of existing practices and some novel ideas as well.

An industry field day was held south of Cressy in northern Tasmania, on 24 February showcasing a 15Ha crop of direct-drilled broccoli. Participants at the field day were quite impressed at how well the crop was progressing, and in particular how well the pre-emergent herbicide trials have worked.

A second field day will be held at this site during harvesting, to investigate if establishment by direct seeding has affected the maturation uniformity. Two other field days are also planned for buttoning and harvest stages of the trial crop at Forthside Research Station in the northwest.

With the direct-seeding trials now well under way and looking promising, the BFG is turning its attention to other issues, including the investigation of mechanised harvesting and optimal planting densities and spatial arrangements.

The BFG's initiative in undertaking this whole-of-supply-chain review of processing brassica production has been warmly welcomed by key stakeholders within the industry, so much so that other commodity sectors are now interested in undertaking a similar approach as well.

Denis Leonard Executive Officer TFGA



Address: Cnr Cimitiere & Charles Streets Launceston TAS 7250

Tel: 03 6332 1800 Fax: 03 6331 4344 Contact: Denis Leonard

South Australia

Producers Unite

Adelaide Plains producers will come together in March as part of the Adelaide Plains Cup Festival to showcase their regions contribution to food and wine.

Up to 20 businesses including primary producers, wine producers and local retailers are expected to participate in Taste the Adelaide Plains on Friday March 3 at the Virginia Oval.

The event will be the first of its kind in the region for some years and will be an opportunity for the region to promote themselves in a more positive light since the November 2005 floods.

The community event is an opportunity for local food businesses from the region to come together to showcase their products through regional meals, wine tastings and sales and a night produce market.

Businesses will have the opportunity to gain experience in presenting and selling their products to consumers and will give them confidence to exhibit at future shows.

Mike Redmond General Manager Virginia Horticulture Centre



Address: Old Port Wakefield Road Virginia SA 5120

Tel: 08 8282 9200 Fax: 08 8380 8950 Contact: Michael Redmond



South Australian Farmers Federation Address: 3rd floor, 122 Frome St

Address: 3rd floor, 122 Frome St Adelaide SA 5000

Tel: 08 8232 5555 Fax: 08 8232 1311 Contact: John Mundy







Victoria

Statistics are an excellent working tool, providing the information is correctly recorded. Media reports stating that vegetables have increased in the December quarter by some 14 per cent or three times the CPI, received strong criticism from all vegetable growers. The reports alleged that growers were reaping the benefits of crop shortages and delayed picking. This information was totally incorrect when growers have been receiving similar returns over the past five to six years. What media articles did not specify, is that the statistics obtained reflected consumer price levels, and not prices at the farm gate.

There is a growing fear that vegetable imports will be allowed into Australia that do not meet the quality assurance and food safety standards that apply to Australian grown vegetables. A recent AQIS Bulletin article indicated that an extensive survey of imported vegetables had revealed that there was a high level of compliance with Australian standards. Ongoing surveys are being carried out to gather information for policy development. Although our central markets are oversupplied with a wide range of Australian vegetables there is still the window open for additional importation of vegetables. The VGA office receives regular calls from consumers enquiring about imported vegetables and whether Australian vegetables are in season. The stock answer is quite clear, "Australian vegetables are available all year round, just make sure your retailer has the correct label on the shop display".

Growers with a trading area at the Melbourne Markets are encouraged to take an interest in the preliminary design layouts of the proposed new market to be constructed at Epping. Growers' involvement and response is not an acceptance of agreeing to any move from the present site at Footscray Road. The Victorian government has made it very clear that DPI Special Projects Team will complete the design

of the market; with or without input from market stand users. It would appear more logical that all growers provide their ideas as to the best operational construction for a new market that satisfies the requirements of grower sellers. At least, whatever the outcome in 2010, growers will have been part of the project.

The VGA recommendation to all growers is to respond to surveys and attend meetings to express your personal thoughts and requirements.

Tony Imeson Executive officer VGA



Address: Mail Box 111, Melbourne Markets 542 Footscray Rd, West Melbourne VIC 3003

Tel: 03 9687 4707 Fax: 03 9687 4723 Contact: Tony Imeson











Queensland

Growcom believes the Senate inquiry into seasonal contract labour from the Pacific region may help identify the issues involved and possible benefits of the scheme that could alleviate seasonal labour shortages experienced by growers in the state.

New AUSVEG CEO, John Roach met with key industry representatives in Queensland including Growcom, Mulgowie farming company, Withcott Seedlings, Smiths Chips, Brisbane Markets Limited and QDPI&F researchers in February to progress how the implementation of the recommendations found in the Industry Partnerships Program report for the future direction of the vegetable industry will take place and reiterate the importance in unity towards the new vision.

Investigation into methods of finding an alternative to Dimethoate for fruitfly control to meet ICA protocols for entry of Qld vegetables into Victorian markets are underway with meetings in Bowen this month.

Growcom has applied to DPI&F Biosecurity to present a submission to the Domestic

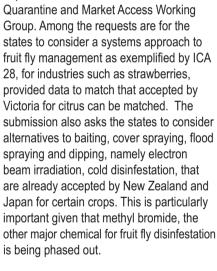
Brisbane is bracing itself for the launch of the new vision at the Australian Vegetable Industry Conference to be held at the convention centre from 10 to 12 May, with a number of key growers expected to attend who will hear from the likes of Phillip Jauncey, Managing Director of Matilda Fresh, McDonald's CEO Peter Bush and many more interesting researchers who will present key findings from the past 12 months.

Jan Davis CEO Growcom



Address: Floor 1, 385 St Pauls Terrace Fortitude Valley, QLD 4006

Tel: 07 3620 3844 Fax: 07 3620 3880 Contact: Jan Davis









Calendar of events

MARCH 2006

7 - 8 March

Fresh Potato IAC Meeting

HAL Head Office, Sydney Contact: Simon Drum

14 March

Vegetable R & D Meeting

Crowne Plaza Hotel Coogee Beach, Sydney

Contact: Jonathan Eccles

15 March

Vegetable IAC Meeting

Crowne Plaza Hotel Coogee Beach, Sydney

Contact: Jonathan Eccles

16 March

AUSVEG Board Meeting

Crowne Plaza Hotel Coogee Beach, Sydney

Contact: John Roach

16 March

AgTrain Program - Victorian Department of Primary Industries

Chemical Risk Management (1 day)

Department of Primary Industries Knoxfield 621 Burwood Hwy Knoxfield

\$176 GST FREE

A 50% FarmBis subsidy is available to eligible primary producers

For more information contact:

Karen Green

Tel: 03 9210 9229

Website: www.dpi.vic.gov.au/agtrain

19 - 23 March 2006

Veg Futures -

The Conference in the Field

Albury-Wodonga, Australia

For more information contact: Haydn Burgess, Greening Australia,

Tel: 02 6281 8585

Email:

hburgess@greeningaustralia.org.au

26-28 March.

Fine Food Queensland.

Brisbane Convention and Exhibition Centre, Brisbane, Queensland.

Tel: 03 9261 4500 **Fax:** 03 9261 4545

Email: food@ausexhibit.com.au

Website:

http://www.foodqueensland.com.au

29 - 30 March

Facilitating adoption of no-tillage and conservation farming practices

Sustainable Farming Training Centre, Tamworth Agricultural Institute, 4 Marsden Park Road, Calala, Tamworth, NSW (North West Slopes and Plains)

The broad objective of the conference is to identify the constraints to the further adoption of conservation farming and no-tillage practices in the northern grains region. Registration fee \$200.

For more information contact: Shauna Dewhurst, John Kneipp or Bob Martin

Tel: 02 6763 1100

Email: bob.martin@dpi.nsw.gov.au

30 March

AgTrain Program - Victorian Department of Primary Industries

AgVet Chemical Update Course (1 day) Department of Primary Industries Knoxfield 621 Burwood Hwy, Knoxfield

\$160 incl. GST

For more information contact: Karen Green

Tel: 03 9210 9229

Website: www.dpi.vic.gov.au/agtrain

MAY 2006

4-6 May

AgFest Rural Trade Fair

Launceston, Tasmania Tel: 03 6334 0262

Website: www.agfest.com.au

8-11 May.

Enviro 2006.

Melbourne Exhibition & Convention Centre.

The Enviro 06 conference & Exhibition is a platform for showcasing the Australian environment industry. Presented by the Australian Water Association and Waste Management Association of Australia & New Zealand in conjunction with the Mayors Asia-Pacific Environmental Summit to be held at the same time and venue as

Enviro 2006. More than 6000 people are

expected to attend.

For more information contact:

Rosalind Vrettas

Tel: 03 9741 4679

Fax: 03 9741 4856

Email: rvquitz@bigpond.com Website: www.enviroaust.net

10-12 May

Australian Vegetable Industry Conference

Brisbane Convention and Exhibition Centre, Brisbane, Queensland For more information

Website: www.vegieconf.com.au

12-13 May

Murrumbidgee Farm Fair

Yanco, New South Wales

Tel: 02 6962 0950

Website: www.murrumbidgeefarmfair. netfirms.com

28 May - 2 June

4th Annual Produce Executive Program

Monash University, Mt Eliza, Victoria

For more information contact:

Jade Neergaard **Tel:** 03 9904 4172

JUNE 2006

1-2 June

7th International Conference on Management in AgriFood Chains and Network

Ede, Netherlands

For more information:

Website: www.chainconference.wur.nl

22-23 June

AgTrain Program - Victorian Department of Primary Industries

AgVet Chemical Users Course (2 days) Department of Primary Industries Knoxfield 621 Burwood Hwy Knoxfield

\$215 (GST-free)

For more information contact:

Karen Green

Tel: 03 9210 9229

Website: www.dpi.vic.gov.au/agtrain



Contact: Kristi Lamond Tel: (08) 8303 6706 Fax: (08) 8303 6752 Email: registration@vegieconf.com.au



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